Flexus L Instance

Best Practices

Issue 01

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Best Practices for FlexusL

After purchasing a FlexusL instance, you can build environments, websites, or applications on it. This section summarizes the best practices of using application images to create FlexusL instances.

Table 1-1 Best practices

Item	Description
Setting Up an Application	This section summarizes the best practices of using application images to create FlexusL instances. Details are as follows:
	Setting Up a Website Using the WordPress Application Image
	Managing Servers Using the BT Panel
	Analyzing Website Data Using the Matomo Application Image
	 Deploying a MySQL Container Using the Portainer Application Image
	Using GitLab to Manage Teams and Projects
	Using PrestaShop to Build an E-Commerce Website
	Using Odoo to Build an ERP System
	• Using Superset to Obtain Data from MySQL Databases for Analysis
	Using Nextcloud to Build an Enterprise Web Disk System
	Pushing Local PC Desktop Streams to SRS Using OBS
Using Windows Server to Set Up a Cross- Border E- Commerce Store	Use the Windows Server image as an example to describe how to set up and manage e-commerce stores.

Item	Description
Migrating Servers Using Server Migration Service (SMS)	Use Server Migration Service (SMS) to migrate other cloud servers to FlexusL instances in the same region or across regions.

2 Setting Up an Application

2.1 Setting Up a Website Using the WordPress Application Image

Application Scenario

WordPress is an enterprise-level open-source content management system. It is usually used for enterprise website setup, cross-border e-commerce, and personal blog building. Supported By FlexusL, the WordPress application image uses Ubuntu 22.04 and is deployed using Docker. The Nginx, MySQL, phpMyAdmin, and Docker have been preconfigured in the image. You can use this application image to quickly set up a website.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 2 GiB	Select appropriate instance specifications based on your service requirements.
Image	WordPress	Select the WordPress application image.

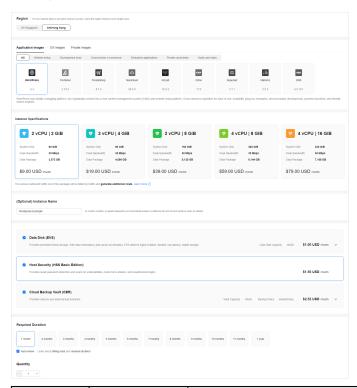
Resource	Configuration	Description
Security group	Inbound rule: Protocol: TCP Ports: 443, 80, 9000, 9001, and 3306 Source: 0.0.0.0/0	 443: Allows HTTPS traffic to a website. 3306: Allows access to MySQL databases. 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the dashboard of the application preinstalled in the image. 9001: Allows external access to the application management page.
Domain name	wpwebsite.com	 If the website is only used for personal development or testing, there is no need to add a domain name. If the website is open to the public, add and resolve a domain name for the cloud server.

Process

Procedure	Description	
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the WordPress application image.	
Step 2: Configure a Security Group	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.	
Step 3: Initialize WordPress	Log in to the dashboard, set the username and password, and install WordPress. The image application dashboard needs to be initialized only when you log in for the first time.	
Step 4: Set up WordPress	On the dashboard, perform the following operations: Configuring Domain Names Installing an SSL Certificate for Your Website Managing Appearance Managing Plugins Configuring SMTP Resetting a Password	

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.
Applicati on Images	WordPress	Select the WordPress application image.
Instance Specificat ions	2 vCPUs 2 GiB memory and 60 GiB system disk	Select instance specifications as needed.
Instance Name	Wordpress- Example	Customize an instance name that is easy to identify, for example, Wordpress-Example.

Paramet er	Example	Description
(Optional) Associate d Services	 Data disk: 10 GiB Host security Cloud backup vault: 70 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

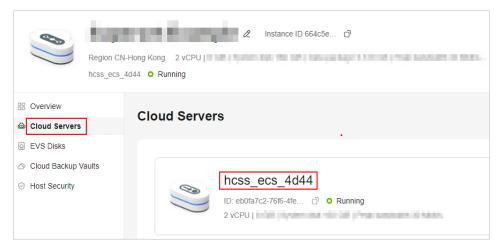
⚠ CAUTION

After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure a Security Group

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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.

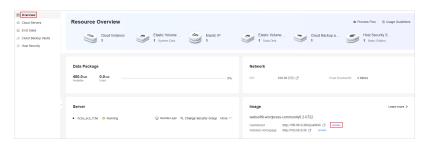
Table 2-1 Security group rules

Priori ty	Acti on	Туре	Protoco l & Port	Source	Description
1	Allo w	IPv4	TCP: 3306	0.0.0.0/0	Allows access to MySQL databases.
1	Allo w	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allo w	IPv4	TCP: 443	0.0.0.0/0	Allows HTTPS access to the application dashboard.
1	Allo w	IPv4	TCP: 9000	0.0.0.0/0	Allows external access to the dashboard of the application preinstalled in the image.
1	Allo w	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

Step 3: Initialize WordPress

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

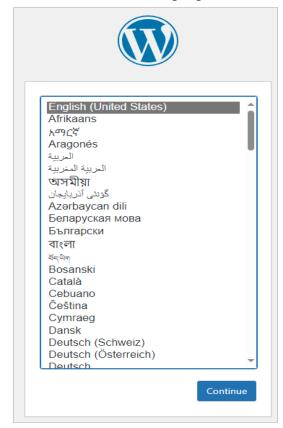
 On the Overview page, click Access in the Dashboard field in the Image area.



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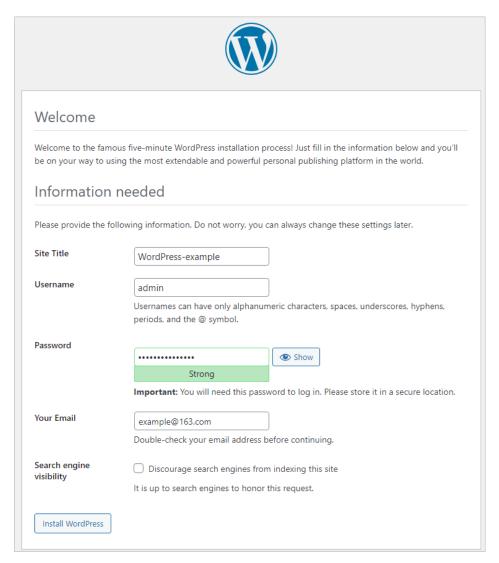
If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

2. Select the WordPress language and click Continue.

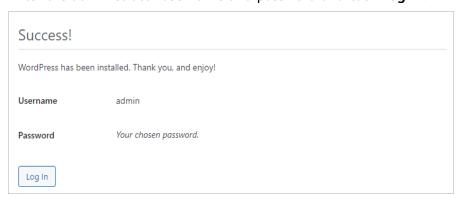


3. Set the website title, WordPress administrator username, password, and email, and click **Install WordPress**.

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. You can begin to set up a website.

Step 4: Set up WordPress

This section describes common WordPress operations. For more information, see **WordPress Documentation**.

Configuring Domain Names

Add and resolve a domain name for the website so that users can use the domain name to access the website.

- 1. If the domain name is not registered with Huawei Cloud or not hosted on Huawei Cloud DNS, the domain name cannot be resolved. Use either of the following methods to resolve the issue:
 - Contact the DNS service provider to add an A record that maps the domain name to the EIP of the FlexusL instance.
 - Use Huawei Cloud DNS servers to resolve the domain name. For details, see Migrating to Huawei Cloud DNS for Domain Name Resolution.
- 2. Add the domain name on the application O&M dashboard.
 - a. In the address bar of a local browser, enter **http://**E/P.9000 to log in to the application O&M dashboard.

The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. Reset the password and use it to log in to the dashboard.

- b. Choose My Apps and click the App icon.
- c. Choose Access and click Add Domain.



3. Apply for ICP licensing for the domain name.

To successfully access the server using a domain name, you must license the domain name. Domain name licensing provided by the ICP License Service is free of charge. For details, see ICP Filing Process.

After the domain name is licensed, you can use it to visit the website.

Installing an SSL Certificate for Your Website

If the website is only used for personal development or testing, you can apply for a free SSL certificate (provided by Let's Encrypt) whose validity period is 90 days. If your website is for commercial use, you are advised to install a commercial SSL certificate. After an SSL certificate is installed, HTTPS is used when you access the website using the domain name. The following describes the two methods for installing an SSL certificate for your website.

Preparations

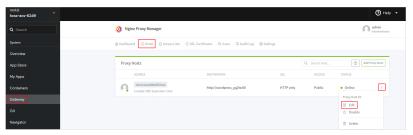
Before installing an SSL certificate, initialize the application on the management page and configure the domain name on the application O&M dashboard.

Procedure

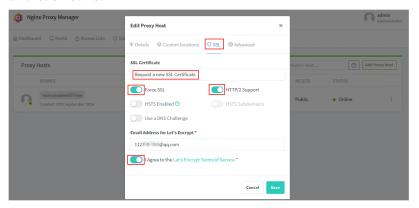
- Apply for a free SSL certificate on the application O&M dashboard.
 - a. In the address bar of a local browser, enter **http://**E/P.9000 to log in to the application O&M dashboard.

The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. Reset the password and use it to log in to the dashboard.

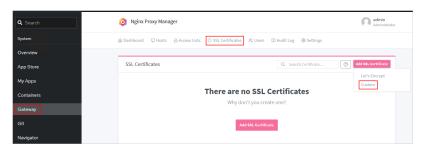
b. Choose **Gateway** > **Hosts** > **Proxy Hosts**, click the icon next to the domain name, and click **Edit**.



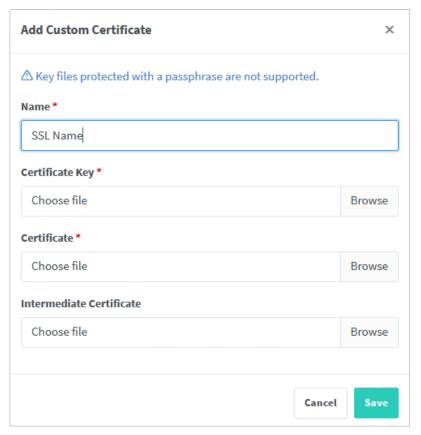
c. Select **SSL**, configure the parameters as instructed in the following figure, and click **Save**.



- Install a commercial SSL certificate.
 - If you have purchased and issued an SSL certificate, perform the following steps to install the certificate for the website. If you have not purchased and issued an SSL certificate, purchase and issue one on Huawei Cloud by referring to **About SCM and SSL Certificate Usage**, and then perform the following steps to install a certificate for the website.
 - a. In the address bar of a local browser, enter **http://**EIP:9000 to log in to the application O&M dashboard.
 - The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. Reset the password and use it to log in to the dashboard.
 - b. Choose **Gateway** > **SSL Certificates**, click **Add SSL Certificate**, and select **Custom**.



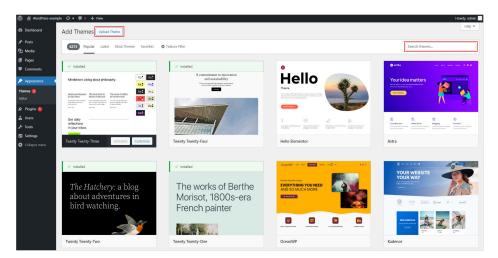
c. Enter a name for the certificate, upload the certificate key and certificate, and click **Save**.



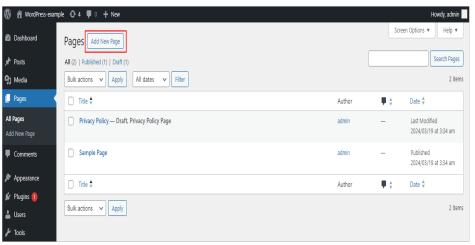
Managing Appearance

WordPress provides a wide range of themes. You can select an appropriate one for your WordPress website. You can change the WordPress theme of your website without changing the website content and structure.

- Choose Appearance > Themes on the WordPress dashboard.
 You can use the default and active themes, or add new themes.
 - Select a theme from the theme collection provided by WordPress.
 - Click **Upload Theme** and upload third-party themes.



- 2. After installing a theme, click **Activate**.
- 3. Choose **Pages** > **Add New Page** and use the fusion builder provided by the theme to flexibly set up a web page.

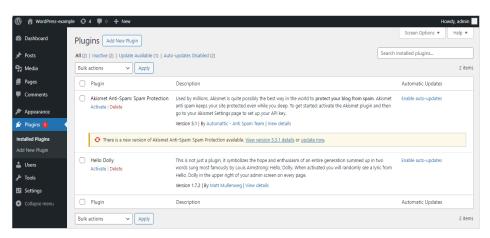


Managing Plugins

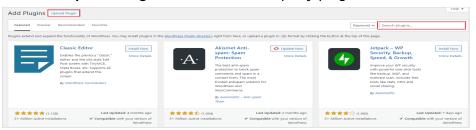
WordPress provides many plugins that add more capabilities, choices, and options to your WordPress website.

• Choose Plugins > Installed Plugins.

You can view all the plugins that have been installed and their details, such as the developer and functions.



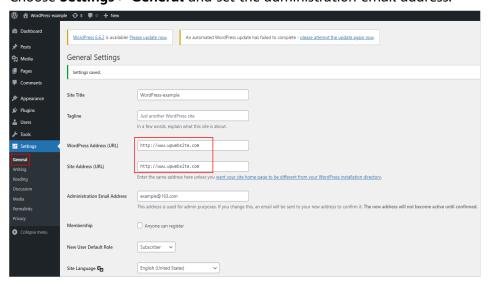
- Choose Plugins > Add New Plugin and add plugins.
 - In the upper right corner, select a filter and search for plugins from the WordPress plugin library.
 - Click **Upload Plugin** and select a third-party plugin for installation.



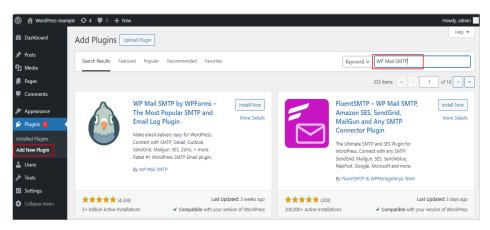
Configuring SMTP

The following uses the 163 email as an example to show how to use the WP Mail SMTP plugin to configure SMTP.

1. Choose **Settings** > **General** and set the administration email address.



- 2. Install the WP Mail SMTP plugin.
 - a. On the WordPress dashboard, choose Plugins > Add New Plugin.
 - b. Search for the keyword **WP Mail SMTP**. In the displayed result, click **Install Now**. After the installation is complete, click **Activate**.



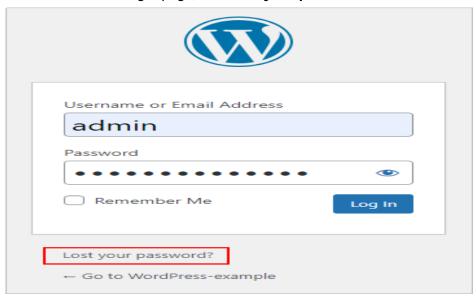
3. Go back to the dashboard, configure SMTP, and click **Save Settings**. The following uses the 163 mailbox as an example to show how to configure a mailbox. If you use another mailbox, specify corresponding parameters.

Parameter	Description
From Email	The email address that emails are sent from, which is the email address that you specify during WordPress installation by default. In this example, the value is example@163.com. You can change the value as needed. NOTE SMTP must be configured for the email address.
From Name	The name that emails are sent from, which can be your website name. The default value is the website title that you specify during WordPress installation. In this example, the value is <i>WordPress-example</i> . You can change the value as needed.
Mailer	Select Other SMTP.
SMTP Host	SMTP host IP address. Enter <i>smtp.163.com</i> in this example.
Encryption	Select SSL .
SMTP Port	Enter 465 in this example.
Auto TLS	Enable this function.
Authenticatio n	Enable this function.
SMTP Username	Keep it the same as the From Email parameter value: example@163.com.
SMTP Password	Enter the authorization code obtained when configuring SMTP for the email <i>example@163.com</i> . This is not the password of the email <i>example@163.com</i> .

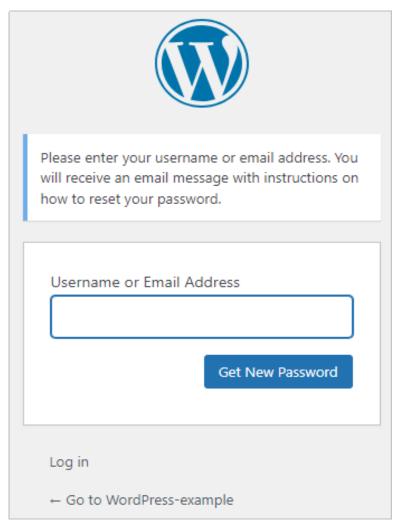
Resetting a Password

If you forgot the WordPress administrator password, you can reset the password via email (SMTP must have been configured for WordPress).

- Resetting a password via email
 - a. On the WordPress login page, click **Lost your password**.



Enter the username or email address and click Get New Password.
 Then a new password will be sent to your email.



c. On the dashboard, choose **Users** > **Profile**.On the displayed page, set a new password and click **Update Profile**.



2.2 Managing Servers Using the BT Panel

Application Scenario

The BT panel is a visualized server management software that supports more than 100 server management functions, such as one-click LAMP, LNMP, monitoring, website, FTP, database, and Java. Supported By FlexusL, the BT panel application image uses Ubuntu 22.04 and provides a web client for you to manage servers, such as website or file management, graphical monitoring, and task planning. You can use this application image to manage servers.

Resource Planning and Costs

Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 2 GiB	A BT panel application image requires at least 2 vCPUs and 2 GiB of memory. Select appropriate instance specifications accordingly.
Image	BT panel	Select the BT panel application image.
Security group	Inbound rule: Protocol/ Application: TCP Port: 80,443,8888,909 0,3306 Source: 0.0.0.0/0	 80: Allows HTTP traffic to FlexusL instances. 443: Allows HTTPS traffic to FlexusL instances. 8888: Allows access to the BT panel. 3306: Allows access to MySQL databases. 9090: Allows access to the phpMyAdmin database management tool

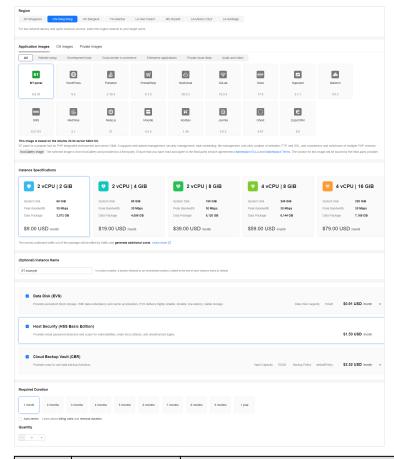
Process

Procedure	Description
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the BT panel application image.
Step 2: Configure a Security Group Add inbound security group rules to ensure that application preinstalled in the image can be accessed.	
Step 3: Initialize the BT Panel	Log in to the BT dashboard and install the basic software bundle.

Procedure	Description
Step 4: Deploy the BT Panel	On the dashboard, perform the following operations: Configuring Domain Names Installing an SSL Certificate for Your Website Managing Software Managing Files Managing Logs

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Para meter	Example	Description
Regio n	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.

Para meter	Example	Description
Applic ation Image s	BT panel	Select the BT panel application image.
Instan ce Specifi cation s	2 vCPUs 2 GiB of memory and 60 GiB system disk	Select instance specifications as needed.
Instan ce Name	BT-Example	Customize an instance name that is easy to identify, for example, BT-Example.
(Optio nal) Associ ated Servic es	 Data disk: 10 GiB Host security Cloud backup vault: 70 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.
Requir ed Durati on	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quant ity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

<u>^</u> CAUTION

After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure a Security Group

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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.

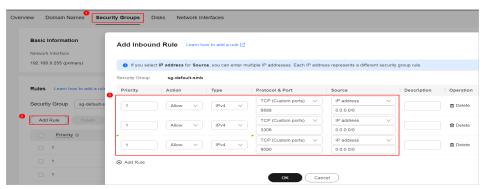


Table 2-2 Security group rules

Priorit y	Actio n	Typ e	Protocol & Port	Source	Description
1	Allow	IPv 4	TCP: 3306	0.0.0.0/0	Allows access to MySQL databases.
1	Allow	IPv 4	TCP: 9090	0.0.0.0/0	Allows access to the phpMyAdmin database management tool.
1	Allow	IPv 4	TCP: 8888	0.0.0.0/0	Allows access to the BT panel dashboard.

Priorit y	Actio n	Typ e	Protocol & Port	Source	Description
1	Allow	IPv 4	TCP: 443	0.0.0.0/0	Allows HTTPS traffic to FlexusL instances.
1	Allow	IPv 4	TCP: 80	0.0.0.0/0	Allows HTTP traffic to FlexusL instances.

Step 3: Initialize the BT Panel

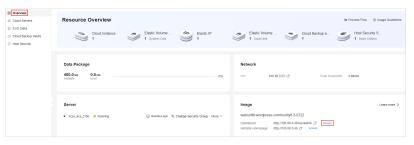
The image application dashboard needs to be initialized only when you log in for the first time.

1. Obtain the administrator username and password for logging in to the BT panel.

Log in to the server and run **sudo cat /credentials/password.txt** to obtain the username and password for logging in to the BT panel. The administrator username is **administrator**.

```
root@smb—ecs—3a7a:~# sudo cat /credentials/password.txt
======= credentials for bt =======
bt_user: administrator
bt_password: iaXqt
root@smb—ecs—3a7a:~# _
```

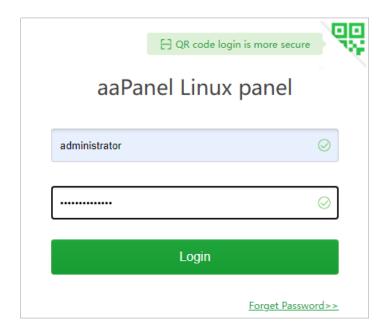
On the Overview page, click Access in the Dashboard field in the Image area.



Ⅲ NOTE

If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

3. Enter the username and password obtained in 1 and click **Login**.



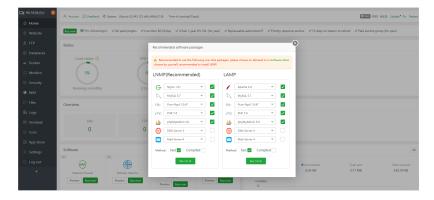
□ NOTE

If a message is displayed indicating that the username or password you entered is invalid when you attempt to log in to the application dashboard, refer to Why Can't I Access the Dashboard of the Application Pre-installed in the Application Image After Entering the Initial Username and Password?

4. Install the basic software bundle.

You can select recommended software packages and click **One-click** to install them when you log in to the dashboard for the first time.

You can also close the popup and select other software from **App Store** and install them afterwards.



Then, you have obtained a BT panel hosting server. You can use the BT panel or follow the instructions provided in **Step 4: Deploy the BT Panel** to manage software, files, logs, and databases.

Step 4: Deploy the BT Panel

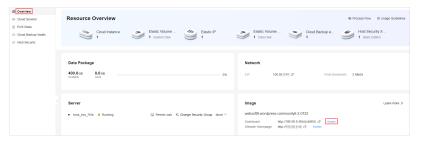
Configuring Domain Names

If you want to use a domain name to access a website, add and resolve the domain name for the website.

- 1. If the domain name is not registered with Huawei Cloud or not hosted on Huawei Cloud DNS, the domain name cannot be resolved. Use either of the following methods to resolve the issue:
 - Contact the DNS service provider to add an A record that maps the domain name to the EIP of the FlexusL instance.
 - Use Huawei Cloud DNS servers to resolve the domain name. For details, see Migrating to Huawei Cloud DNS for Domain Name Resolution.
- 2. Configure the domain name on the application management page.

If you had added a domain name to a cloud server, or removed a domain name from a cloud server and then add a new one, you need to configure the domain name on the application management page so that the domain name can be used to access the website.

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

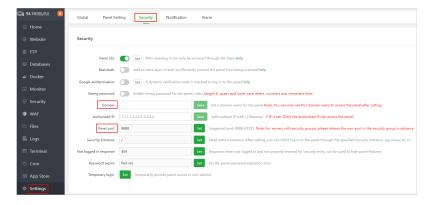


□ NOTE

If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

b. Choose **Settings** > **Security**, enter a domain name for **Domain**, for example, **www.wpwebsite.com**, and click **Save**.

The BT panel uses port 8888 by default. If you want to use the domain name to access the website directly, you need to change the port number to the default HTTP or HTTPS port (80 or 443). If you do not change the port number, you need to access the website through http://Domain-name:8888 or https://Domain-name:8888.



Installing an SSL Certificate for Your Website

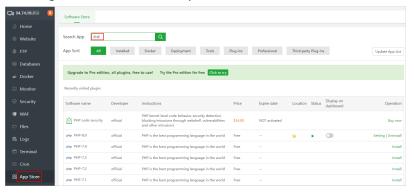
BT panel uses HTTPS by default, and you do not need to install an SSL certificate.

Managing Software

In the software store, you can install, uninstall, and manage software.

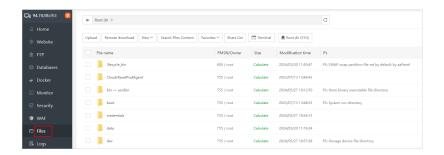
You can search for the software by name or category. A PHP extension plugin is required to enhance PHP language functions. The following shows how to install a PHP extension:

- 1. Choose **App Store** in the left navigation pane and search for PHP.
- 2. Select the PHP version, click **Install** or **Buy now** in the **Operation** column of the target software and complete the installation.



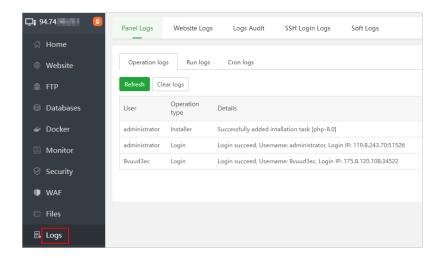
Managing Files

In the **Files** menu, you can perform a range of operations on files, including copying, pasting, cutting, deleting, renaming, compressing, refreshing, or creating a file, and creating a directory for a file.



Managing Logs

In the **Logs** menu, logs are classified by log type. You can click the tabs to view different types of logs and clear logs.



2.3 Analyzing Website Data Using the Matomo Application Image

Application Scenario

Matomo is a powerful open-source network analysis platform that has full data ownership and ensures that the business complies with General Data Protection Regulation (GDPR) and California Consumer Privacy Act (CCPA). Supported By FlexusL, the Matomo application image uses Ubuntu 22.04 and is deployed using Docker. The Nginx, MySQL, phpMyAdmin, and Docker have been preconfigured in the image. You can use this application image to analyze website data.

Resource Planning and Costs

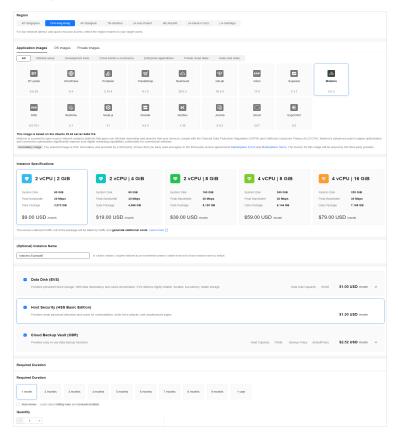
Resource	Configuration	Description	
Cloud server	vCPUs: 2Memory: 2 GiB	Select appropriate instance specifications based on your service requirements.	
Image	Matomo	Select the Matomo application image.	
Security group	Inbound rule: • Protocol/ Application: TCP • Port: 80,9001 • Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the dashboard of the application preinstalled in the image. 9001: Allows external access to the application management page. 	

Process

Procedure	Description
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the Matomo application image.
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.
Step 3: Initialize Matomo	Install and initialize Matomo.
Step 4: Use Matomo to Monitor Websites	Add tracking code to the websites you want to monitor.

Step 1: Purchase a FlexusL Instance

- Log in to the FlexusLconsole and click Buy FlexusL.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.
Applicati on Images	Matomo	Select the Matomo application image.
Instance Specificat ions	2 vCPUs 2 GiB memory and 60 GiB system disk	Select instance specifications as needed.
Instance Name	Matomo- Example	Customize an instance name that is easy to identify, for example, Matomo-Example.
(Optional) Associate d Services	 Data disk: 10 GiB Host security Cloud backup vault: 70 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

CAUTION

After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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 2-3	Security	group	rules
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Priorit y	Actio n	Туре	Protocol & Port	Source	Description
1	Allow	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allow	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

Step 3: Initialize Matomo

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

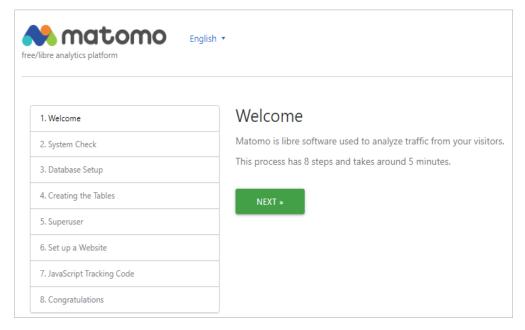
 On the Overview page, click Access in the Dashboard field in the Image area.



□ NOTE

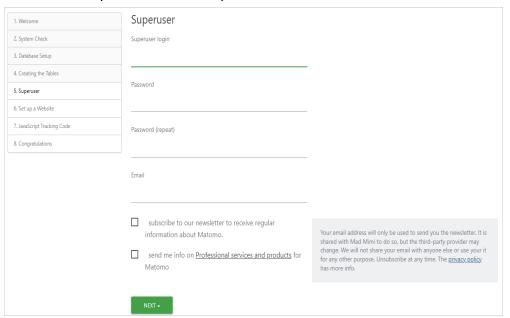
If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

2. Click NEXT.



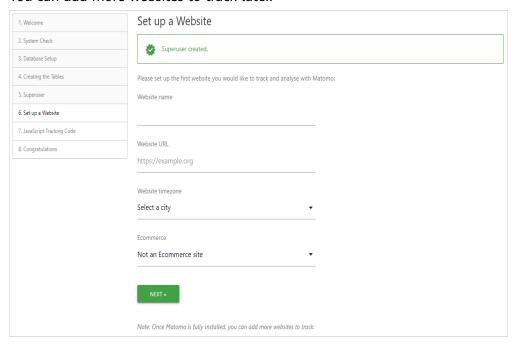
- 3. Wait until Matomo completes the system check and click **NEXT**.
 - Matomo automatically checks whether the server meets the requirements for installing Matomo and displays the check result for each item.
- 4. Set up the MySQL database and click **NEXT**.
 - The MySQL database and a default database account have been preset in Matomo. The information about the default database account is automatically obtained. Retain the default settings and click **NEXT**.
- 5. After Matomo automatically creates data tables, click **NEXT**.
- 6. On the **Superuser** page, set the username, password, and email address of the Matomo administrator, and click **NEXT**.

The super user is the user that you created when you installed Matomo. Each Matomo has only one super user who has the highest permissions. Keep the username and password of the super user secure.



7. On the **Set up a Website** page, add the name and URL of the first website you want to track and analyze with Matomo and click **NEXT**.

You can add more websites to track later.



- 8. Learn about the JavaScript tracking code and click **NEXT**.
 - To track your web traffic with Matomo, you need to make sure that some extra code is added to each of your webpages. Matomo automatically generates a JavaScript tracking code. After the installation is complete, you can check the tracking code in the **Tracking Code** admin section.
- 9. After the initialization configurations are complete, click **Continue to Matomo**.

Sign in

♣ Username or e-mail

Remember Me

Sign IN

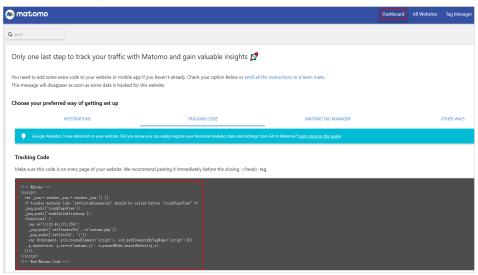
Lost your password?

10. Enter the username and password of the super user and click **SIGN IN**.

Then, you have obtained a Matomo hosting server. You can start using Matomo or follow the instructions provided in **Step 4: Use Matomo to Monitor Websites** to monitor websites.

Step 4: Use Matomo to Monitor Websites

 On the dashboard, click the TRACKING CODE tab and copy the tracking code in the Tracking Code area.



Copy the tracking code to each page of the website you want to monitor.
 Matomo can collect real-time analysis data of the website with the tracking code.

Ⅲ NOTE

For details about how to install the Matomo tracking code, see **official documentation**.

Select All Websites to view the access to the monitored websites.



2.4 Deploying a MySQL Container Using the Portainer Application Image

Application Scenario

Portainer is a graphical tool for Docker management. It offers a range of functions such as status display, quick deployment of application templates, basic operations on Docker (containers, images, networks, and database logical volumes), log display, container console operations, centralized management and operations of Swarm clusters and services, and user login management and control. Supported By FlexusL, the Portainer application image uses Ubuntu 22.04 and is deployed using Docker. The Docker and Portainer have been preconfigured in the image. You can use this application image to visualize Docker management.

Resource Planning and Costs

Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 4 GiB	Select appropriate instance specifications based on your service requirements.
Image	Portainer	Select the Portainer application image.

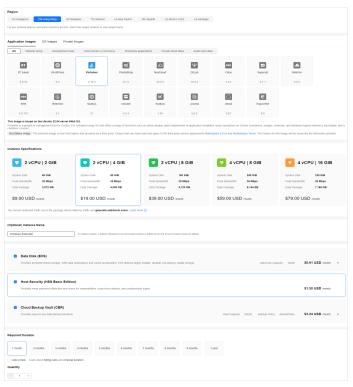
Resource	Configuration	Description
Security group	Inbound rule: • Protocol/	3306: Allows access to MySQL databases.
	Application: TCP • Port:	80: Specifies the internal forwarding port of application images.
	80,9001,3306	9000: Allows external access to the
	• Source: 0.0.0.0/0	dashboard of the application preinstalled in the image.
		9001: Allows external access to the application management page.

Process

Procedure	Description	
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the Portainer application image.	
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.	
Step 3: Initialize Portainer	Log in to the dashboard and install and initialize Portainer.	
Step 4: Use Portainer to Deploy a MySQL Container	Use Portainer to visualize Docker management (using MySQL container as an example)	

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.
Applicati on Images	Portainer	Select the Portainer application image.
Instance Specificat ions	2 vCPUs 4 GiB memory and 80 GiB system disk	Select instance specifications as needed.
Instance Name	Portainer- Example	Customize an instance name that is easy to identify, for example, Portainer-Example.
(Optional) Associate d Services	 Data disk: 10 GiB Host security Cloud backup vault: 90 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.

Paramet er	Example	Description
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

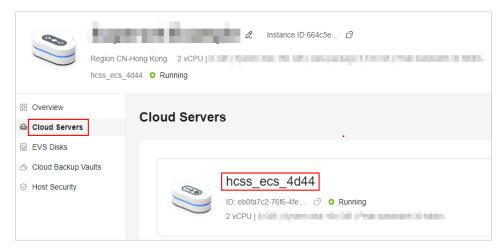


After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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 2-4 Security group rules

Prior ity	Acti on	Туре	Protocol & Port	Source	Description
1	Allo w	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allo w	IPv4	TCP: 3306	0.0.0.0/0	Allows access to MySQL databases.
1	Allo w	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

Step 3: Initialize Portainer

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

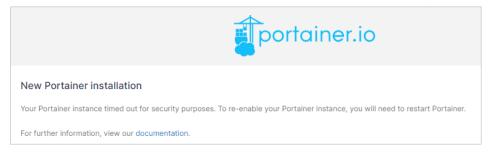
 On the Overview page, click Access in the Dashboard field in the Image area.



Ⅲ NOTE

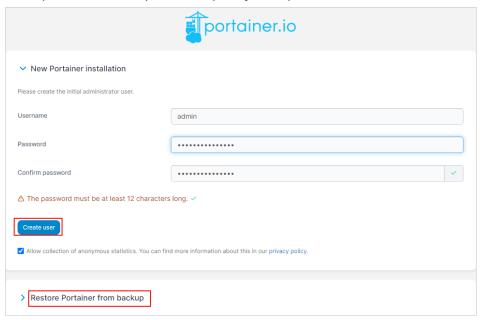
If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

If you use a Portainer application image to create, reinstall, or change the OS of a FlexusL instance, Portainer initialization has a certain validity period. If no users are created within the validity period, a message in the following figure is displayed. In this case, **log in to the server** and run **sudo docker restart portainer** to restart Portainer, and then create a user as soon as possible.

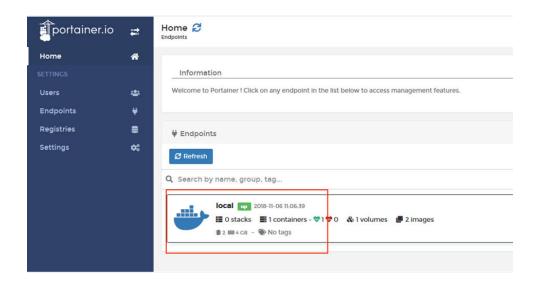


2. Set the username and password of the Portainer administrator and click **Create user**.

If you have backup data for Portainer, click **Restore Portainer from backup** and upload the backup data to quickly set up the Portainer environment.



3. Choose **Home** and click **local** to use Portainer for Docker visual management.



Then, you have obtained a Portainer hosting server. You can start using Portainer or follow the instructions provided in **Step 4: Use Portainer to Deploy a MySQL Container** to create and connect to a MySQL container.

Step 4: Use Portainer to Deploy a MySQL Container

This section uses the MySQL container as an example to describe how to use Portainer to visualize Docker management.

Step 1: Create a MySQL Container

1. Choose **Containers** in the left navigation pane and click **Add container**.

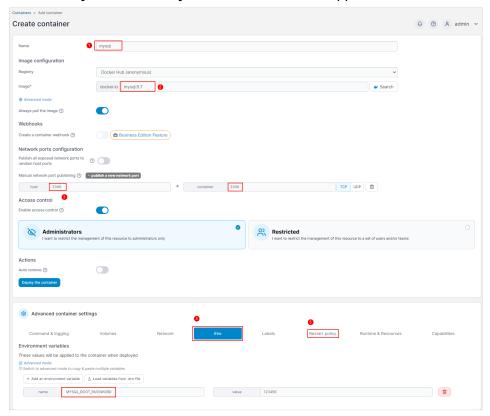


- 2. Specify MySQL container parameters.
 - 1 Name: user-defined container name.
 - 2 Image: container image name. For example, if you set this parameter to mysql:5.7, the system automatically pulls the MySQL5.7 container image from Docker Hub.
 - ③ Click **publish a new network port** and add port 3306 to ensure that the MySQL database can be accessed.
 - 4 Env: environment variables.
 - MYSQL_ROOT_PASSWORD: password of the root user of the database. This parameter is mandatory. It is used for logging in to the MySQL container. Keep the password secure.

□□ NOTE

Ensure that the MYSQL_ROOT_PASSWORD parameter name is correctly entered, or the database cannot be connected.

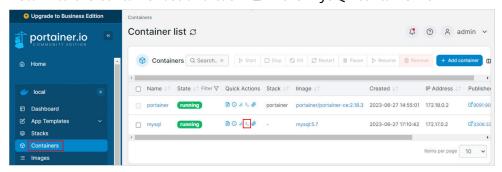
- MYSQL_DATABASE: name (such as wordpress) of the database which is automatically created in the value row after the MySQL container is created. This parameter is optional.
- ⑤ **Restart policy**: You are advised to select **Always** so that the container is always automatically restarted when it is stopped.



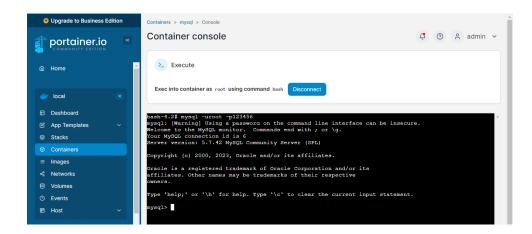
3. Click **Deploy the container** to create a MySQL container.

Step 2: Connect to the MySQL Container

Return to the container list and click \(\sum_i\) in the MySQL container row.



- 2. On the displayed page, click **Connect** to connect to the container.
- Run the following command to log in to the MySQL database: mysql -uroot -p123456, in which 123456 is the value of MYSQL_ROOT_PASSWORD.



2.5 Using GitLab to Manage Teams and Projects

Application Scenario

GitLab is a DevOps platform that provides a complete solution for software development and operations, aiming to help teams collaborate on project development. On GitLab, you can protect your applications, and manage, plan, create, validate, package, release, configure, and monitor project source code. Supported By FlexusL, the GitLab image uses Ubuntu 22.04 and is deployed using Docker. The Nginx and Docker have been preconfigured in the image. This section describes how to use GitLab to manage teams and projects.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

Resource	Configuration	Description	
Cloud server	vCPUs: 2 Memory: 8 GiB	Select appropriate instance specifications based on your service requirements.	
Image	GitLab	Select the GitLab application image.	
Security group	Inbound rule: • Protocol/ Application: TCP • Port: 80,9000,9001 • Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the application O&M dashboard. 9001: Allows external access to the application management page. 	

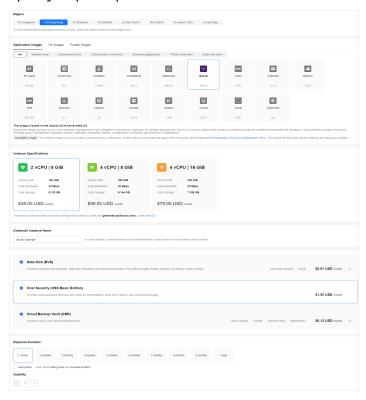
Resource	Configuration	Description
Domain name	wpwebsite.com	 If the website is only used for personal development or testing, there is no need to add a domain name. If the website is open to the public, add and resolve a domain name for the cloud server.

Process

Procedure	Description	
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the GitLab application image.	
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.	
Step 3: Initialize GitLab	Log in to GitLab and select the desired language for the management page.	
Step 4: Use GitLab	Create a project, add project members, and integrate codes.	

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.	
Applicati on Images	GitLab	Select the GitLab application image.	
Instance Specificat ions	2 vCPUs 8 GiB memory	Select instance specifications as needed.	
Instance Name	GitLab- Example	Customize an instance name that is easy to identify, for example, GitLab-Example.	
(Optional) Associate d Services	 Data disk: 10 GiB Host security Cloud backup vault: 170 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.	
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.	
Quantity	1	Set the number of FlexusL instances to be purchased.	

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

CAUTION

After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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	2-5	Security	group	rules
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Priorit y	Actio n	Туре	Protocol & Port	Source	Description
1	Allow	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allow	IPv4	TCP: 9000	0.0.0.0/0	Allows external access to the application O&M dashboard.

Priorit y	Actio n	Туре	Protocol & Port	Source	Description
1	Allow	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

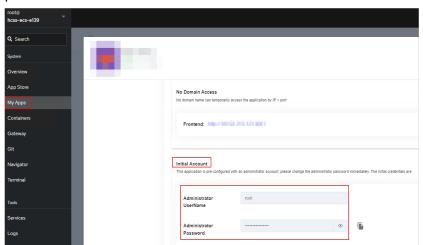
Step 3: Initialize GitLab

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

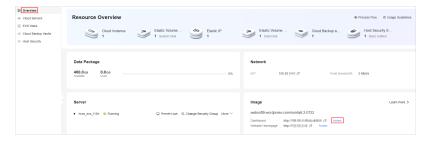
- 1. Obtain the administrator username and password for logging in to GitLab.
 - a. In the address bar of a local browser, enter http://E/P.9000 to log in to the application O&M dashboard.

The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. **Reset the password** and use it to log in to the dashboard.

- b. Choose My Apps and click the App icon.
- c. Choose **Access** and click **Initial Account** to view the username and password of the administrator.

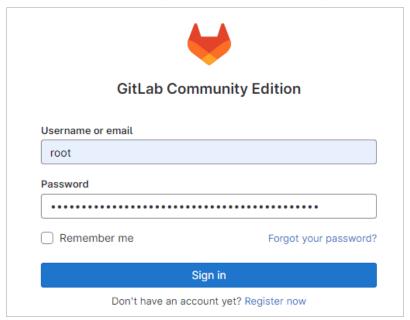


2. On the **Overview** page, click **Access** in the **Dashboard** field in the **Image** area.

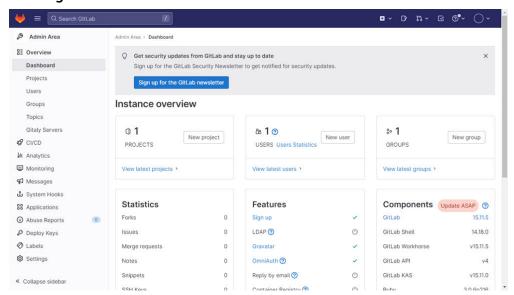


If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

3. Enter the username and password obtained in step 1.



4. Click **Sign in** to access the GitLab Admin Area.



After initializing GitLab, you will have a server that uses the GitLab application image. You can start using GitLab or follow the steps in **Step 4: Use GitLab** to create a project, add project members, and integrate codes.

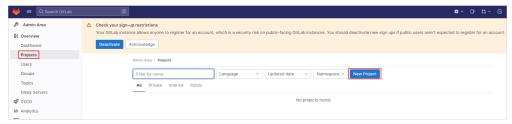
Step 4: Use GitLab

This section describes how to use GitLab to create a project, add project members, and integrate codes.

Step 1: Create a Project

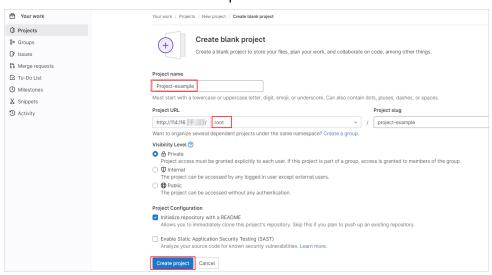
This example demonstrates that how an administrator creates a project, initializes the project, adds a development branch dev, and hides the master branch main from developers.

- 1. Click in the upper left corner and choose **admin** to access the management center.
- 2. Choose Projects and click New project.

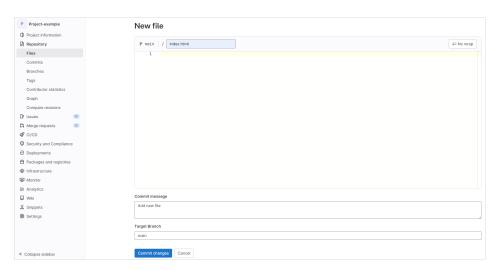


- 3. Click Create blank project.
- 4. Configure parameters for the project and click Create project.
 - Project name: Enter a project name that is easy to identify, for example,
 Project-example.
 - Project URL: It consists of the public IP address of the cloud service and the administrator account. Select root.

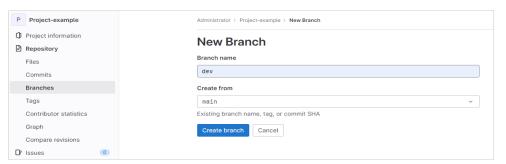
Retain the default values for other parameters.



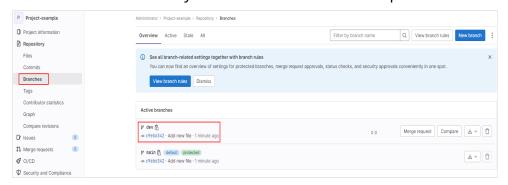
5. Choose **Repository** > **Files**, click + > **New file**, add the **index.html** file to **main**, and click **Commit changes**.



- 6. Choose **Repository** > **Branches**, click **New branch**, and configure the development branch dev.
 - Branch name: dev
 - Create from: main



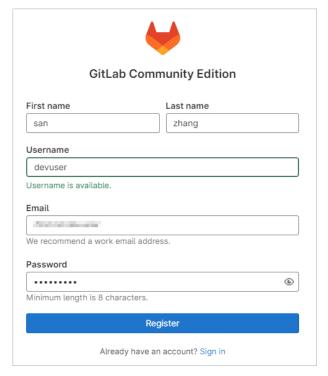
7. Click Create branch. Then you can view the created development branch dev.



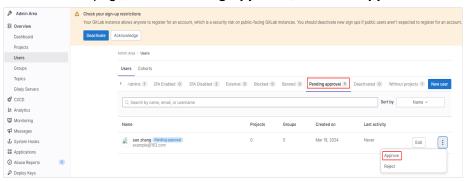
Step 2: Add Project Members

After registering an account, users cannot directly log in to GitLab. To let them log in, the administrator needs to approve their registration, invite them to be members of the project, and assign permissions to them.

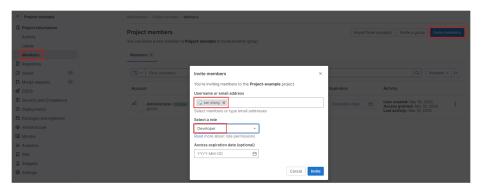
- 1. Register an account.
 - a. Visit http://public IP address of the server or http://domain name.
 - b. Click **Register now**, enter registration information, and click **Register**.



- 2. The administrator approves the registration.
 - a. Click in the upper left corner and select admin.
 - b. On the Users page, select Pending approval, and click Approve.



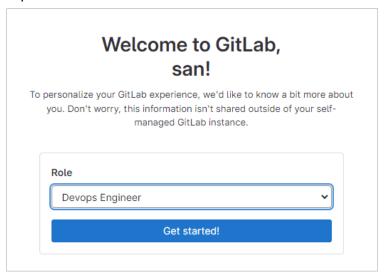
- 3. The administrator invites users to join the project team and assigns permissions to them.
 - a. Click in the upper left corner, choose **Projects > View all projects**, and click **Administrator/Project-example**.
 - b. Choose **Project information > Members** and click **Invite members**.
 - c. Enter the username or email address, assign **Developer** permission to users, and click **Invite**.



You can assign users the following five roles: **Guest**, **Reporter**, **Developer**, **Maintainer**, or **Owner**.

- **Guest**: allows users to create issues and post comments, and denies them to read or write the repository.
- Reporter: allows users to clone codes, and denies them to submit code.
- **Developer**: allows users to clone, develop, submit, and push code.
- Master: allows users to create projects, add tags, protect branches, add new members to the project, and edit projects.
- Owner: allows users to assign permissions to access projects, delete or migrate projects, and manage project team members.
- 4. Visit http://*Public IP address of the server* or http://*Domain name*. Enter the username and password to log in to GitLab.

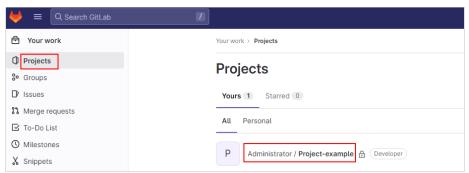
When members log in to GitLab for the first time, select a role for better experience.



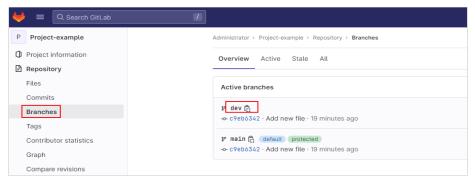
Step 3: Integrate Codes

- 1. The developers edit and submit code.
 - a. Visit http://*Public IP address of the server* or http://*Domain name* to log in to GitLab.

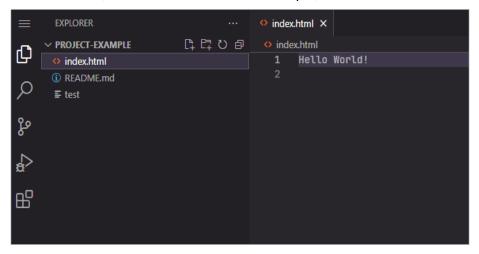
b. Choose **Projects** and click the target project name.



c. Choose **Repository** > **Branch** and click **dev**.



d. Click **Web IED**, select a file to edit. For example, edit the index.html file.

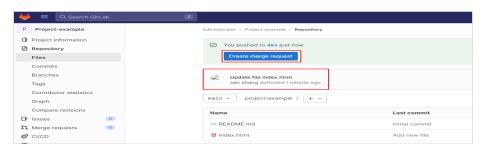


e. Choose on the left navigation pane to go to the **SOURCE CONTROL**, and click **Commit & Push**.

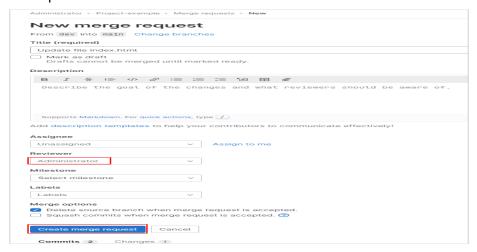
Click No when Commit to a new branch? is displayed.



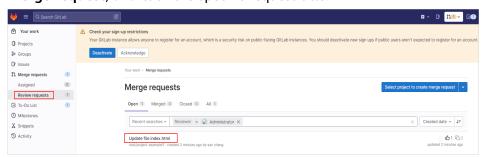
f. Choose **Repository** > **Files** on the project menu bar. You can view **Update file index.html**. Click **Create merge request**



g. Set request information and click Create merge request.
Specify the Reviewer to Administrator and retain the default values for other parameters.



- 2. The administrator reviews the merge request.
 - a. Click in the upper right corner, choose **Merge requests > New merge request**, and click the specific request title.



b. Click Merge to merge the index.html file from dev into main.

2.6 Using Odoo to Build an ERP System

Application Scenario

Odoo is an open-source ERP/CRM software that integrates a comprehensive suite of applications for managing all aspects of your business, including procurement, inventory, finance and accounting, marketing, manufacturing, human resources management, service support, e-commerce, and website building, achieving fully automated service processes. Supported By FlexusL, the Odoo application image uses Ubuntu 22.04 and is deployed using Docker. The Nginx, pgAdmin, and Docker

have been preconfigured in the image. This section describes how to use Odoo to build an ERP system.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

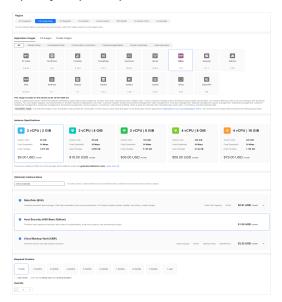
Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 2 GiB	Select appropriate instance specifications based on your service requirements.
Image	Odoo	Select the Odoo application image.
Security group	Inbound rule: • Protocol/ Application: TCP • Port: 80,9001 • Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the dashboard of the application preinstalled in the image. 9001: Allows external access to the application management page.
Domain name	wpwebsite.com	 If the website is only used for personal development or testing, there is no need to add a domain name. If the website is open to the public, add and resolve a domain name for the cloud server.

Process

Procedure	Description		
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the Odoo application image.		
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.		
Step 2: Initialize Odoo	Log in to Odoo and create databases.		
Step 4: Deploy Odoo On the dashboard, perform the following opera Configure general settings Obtain administrator information and technic support Manage databases			

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.	
Applicati on Images	Odoo	Select the Odoo application image.	
Instance Specificat ions	2 vCPUs 2 GiB memory and 60 GiB system disk	Select instance specifications as needed.	
Instance Name	Odoo- Example	Customize an instance name that is easy to identify, for example, Odoo-Example.	

Paramet er	Example	Description
(Optional) Associate d Services • Data disk: 10 GiB • Host security • Cloud backup vault: 70 GiB		You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.



After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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 2-6 Security group rules

Priorit y	Actio n	Туре	Protocol & Port	Source	Description
1	Allow	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allow	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

Step 2: Initialize Odoo

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.



◯ NOTE

If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

Configure the parameters and click Create database.
 If you have had a backup database on your local device, click or restore a database.

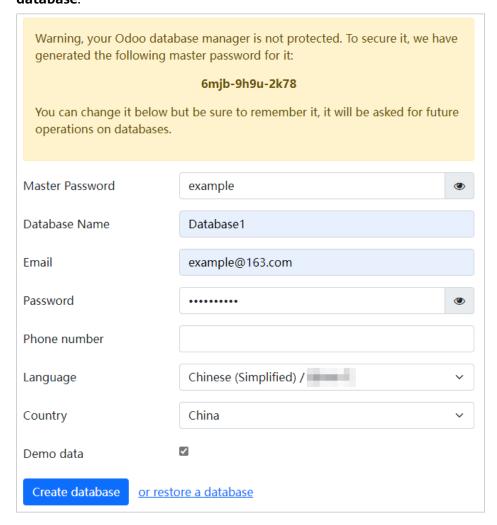
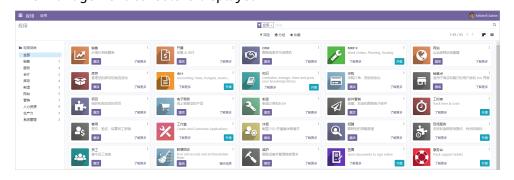


Table 2-7 Parameter descriptions

Parameter	Description	
Master Password	The system automatically generates a database master password. You can change it but be sure to remember it. NOTE The database master password will be asked for future operations on databases, so please keep it safe.	
Database Name	Specifies a database name.	
Email/ Password	Specifies the email address and password for the administrator to log in to Odoo. Please keep it safe.	
Phone number	Specifies the telephone number of the administrator.	
Language	Specifies the language you want to use on the management console.	

Parameter	Description	
Country	Specifies the country or region where you are located.	
Demo data	After this option is selected, data samples are automatically generated for the created database.	

3. Enter the email address and password, and click **Log in**. The management console is displayed.



Then, you have obtained an Odoo hosting server. You can start using Odoo or follow the steps in **Step 4: Deploy Odoo** to configure general settings, obtain administrator information and technical support, and manage databases.

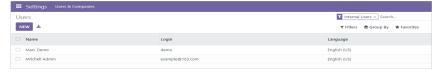
Step 4: Deploy Odoo

This section describes some basic operations of Odoo. For more information, see **Odoo Documentation**.

General Settings

- 1. Click in the upper left corner and choose **Settings**.
- 2. Add a user.
 - a. Click **New** in the upper left corner.
 - b. After the user is added, click the username to view or modify the username, email address, access permissions, and preferences.

The email address must be unique. If you enter a name that already exists, the message indicating the operation cannot be completed because you cannot have two users with the same login will be displayed.



- 3. Add a company.
 - a. Choose **User & Companies** > **Companies**, click **New**, and enter the company name and general information.



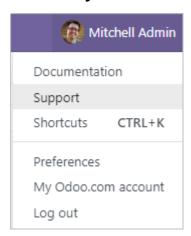
b. Click **New** in the upper right corner.

After the company is added, you can click the company name to view or modify the basic information about the company.

Obtaining Administrator Information and Technical Support

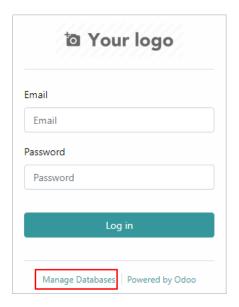
Click the administrator avatar in the upper right corner.

- Click **Documentation** to obtain the official Odoo guide.
- Click Support to go to the Odoo official website and learn more about Odoo products.
- Press Shortcuts CTRL+K to set the shortcut key.
- Click **Preferences** and set administrator preferences and account security information.
- Click My Odoo.com account to go to the Odoo login page.



Managing Databases

On the Odoo login page, click **Manage Databases** to access the Odoo database manager.



□ NOTE

You can access the Odoo login page:

- From the FlexusL management console. For details, see 1.
- By selecting the administrator avatar in the upper right corner and clicking **Log out**, if you have logged in to Odoo.
- (Optional) Set Master Password

If you did not change the database master password when **initialing Odoo**, you can reset a master password that is easy to remember. The master password is required when you create, delete, dump, or restore databases. Please keep it safe.

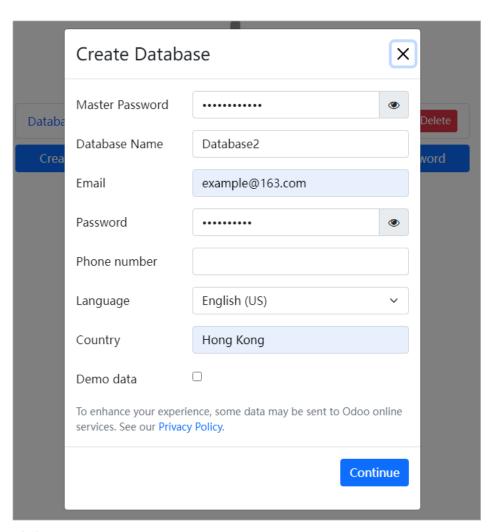
a. Click **Set Master Password** to set a new master password.



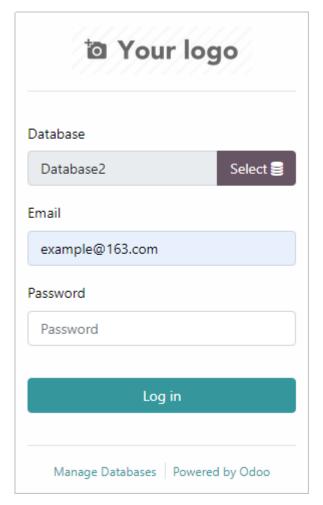
- b. Click **Continue** to save the new master password.
- Create Database

You can add multiple companies on Odoo. Each database means a company. Multiple companies can use Odoo with different accounts and do not interfere with each other.

a. Click Create Database and set basic information.

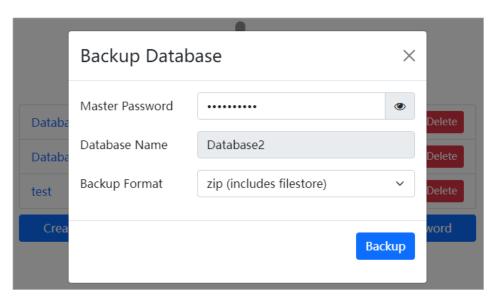


- b. Click Continue.
- c. Click **Select**, select **Database2**, and enter the email and password.



- d. Click **Log in** to log in to the management page of Database2.
- Backup Database
 - a. On the database management page, click **Backup**.
 - b. On the **Backup Database** page, enter the master password, select a backup format, and click **Backup**.

After the backup is completed, the system will automatically download the database backup file.



• Duplicate Database

The data of a company can be duplicated and used as the data of a new enterprise.

- a. On the database management page, click **Duplicate**.
- b. Enter the master password, set a new database name, and click **Continue**.

After the duplication is successful, the duplicated database will be displayed in the database management column.

• Restore Database

After a database is deleted, it can be restored using backup data.

- a. Click Restore Database.
- b. Enter the master password, select the backup file, set the database name, and click **Continue**.

After the restoration is successful, the restored database will be displayed in the database management column.

2.7 Using Superset to Obtain Data from MySQL Databases for Analysis

Application Scenario

Superset is an open-source data exploration and visualization platform. This tool provides a quick way to intuitively visualize datasets by allowing you to create and share interactive dashboards. Supported By FlexusL, the Superset application image uses Ubuntu 22.04 and is deployed using Docker. The Nginx, Redis, pgAdmin, and Docker have been preconfigured in the image. This section describes how to use Superset to obtain data from MySQL databases for analysis.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

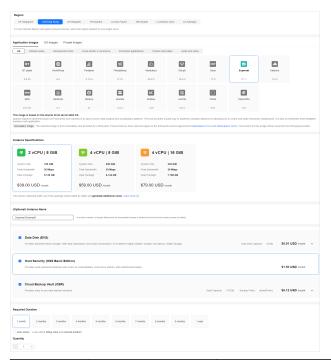
Resource	Configuration	Description	
Cloud server	vCPUs: 2 Memory: 8 GiB	A Superset application image requires at least 2 vCPUs and 8 GiB of memory. Select appropriate instance specifications accordingly.	
Image	Superset	Select the Superset application image.	
Security group	Inbound rule: • Protocol/ Application: TCP • Port: 80,9000,9001,3306 • Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the application O&M dashboard. 9001: Allows external access to the application management page. 3306: Allows access to MySQL databases. 	

Procedure

Procedure	Description		
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the Superset application image.		
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.		
Step 3: Initialize Superset	Set the language, log in to Superset, and reset the password.		
Step 4: Obtain Data from MySQL Databases for Analysis	To use Superset to obtain data from MySQL databases for analysis, you need to connect to a database, add datasets, and create charts.		

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.	
Applicati on Images	Superset	Select the Superset application image.	
Instance Specificat ions	2 vCPUs 8 GiB memory	Select instance specifications as needed.	
Instance Name	Superset-Example	Customize an instance name that is easy to identify, for example, Superset-Example.	
(Optional) Associate d Services	 Data disk: 10 GiB Host security Cloud backup vault: 170 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.	

Paramet er	Example	Description
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.



After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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 2-8 Security group rules

Prior ity	Acti on	Туре	Protocol & Port	Source	Description
1	Allo w	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allo w	IPv4	TCP: 3306	0.0.0.0/0	Allows access to MySQL databases.
1	Allo w	IPv4	TCP: 9000	0.0.0.0/0	Allows external access to the application O&M dashboard.
1	Allo w	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

Step 3: Initialize Superset

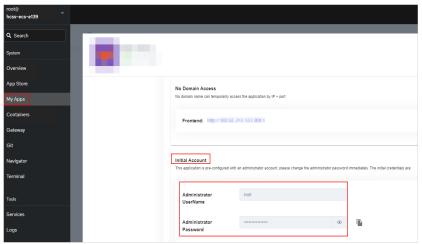
The image application dashboard needs to be initialized only when you log in for the first time.

- 1. Obtain the administrator username and password for logging in to GitLab.
 - a. In the address bar of a local browser, enter http://EIP:9000 to log in to the application O&M dashboard.

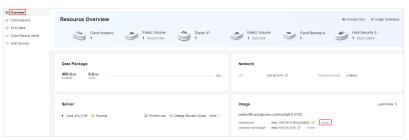
The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. **Reset the password** and use it to log in to the dashboard.

b. Choose **My Apps** and click the App icon.

c. Choose **Access** and click **Initial Account** to view the username and password of the administrator.



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

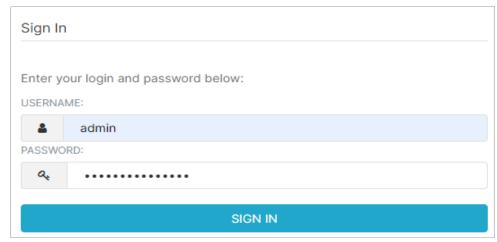


□ NOTE

If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

3. Enter the username and password obtained in step 1 to access the management page.

You can set the language on the login page or on the management page.

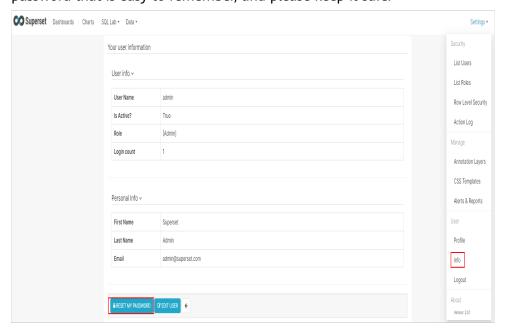


Ⅲ NOTE

If a message is displayed indicating that the username or password you entered is invalid when you attempt to log in to the application dashboard, refer to Why Can't I Access the Dashboard of the Application Pre-installed in the Application Image After Entering the Initial Username and Password?

4. In the upper right corner of the page, choose **Settings** > **User** > **Info** and click **RESET MY PASSWORD**.

Preset passwords are usually difficult to remember, so you are advised to set a password that is easy to remember, and please keep it safe.



Then, you have obtained a Superset hosting server. You can start using Superset or follow the steps in **Step 4**: **Obtain Data from MySQL Databases for Analysis** to connect to a database, add datasets, and create charts.

Step 4: Obtain Data from MySQL Databases for Analysis

This section describes some basic operations of Superset. For more information, see **Superset Documentation**.

Step 1: Connect to Database

You can only analyze data after connecting to a database first.

- 1. On the management page, choose **Data** > **Databases** and click **+DATABASE**.
- 2. Select the database to be connected, for example, the MySQL database.
- 3. Enter the information about the database to be connected.

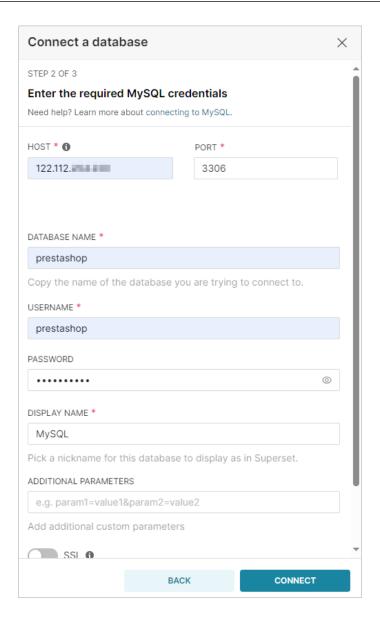


Table 2-9 Parameter descriptions

Parameter	Description
HOST/PORT	Specifies the public IP address and port number of the database. The default MySQL port number is 3306.
DATABASE NAME	Specifies the name of the database to be connected.
USERNAME/ PASSWORD	Specifies the username and password of the database.
DISPLAY NAME	Specifies the name displayed on Superset after the database is connected.

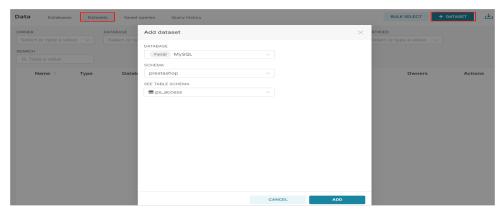
- 4. Click **CONNECT**.
- 5. Click **FINISH** and you can view the connected database in the list.



Step 2: Add Datasets

Now that you have configured a data source, you need to register tables (called **Datasets** in Superset) for subsequent chart creation.

Choose Data > Datasets and click +DATASET.

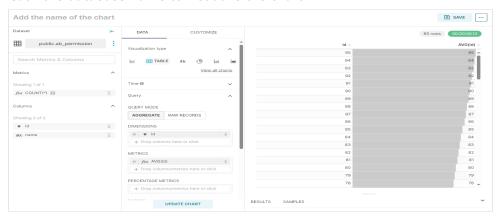


2. Click ADD, and you can view your dataset in the list of datasets.

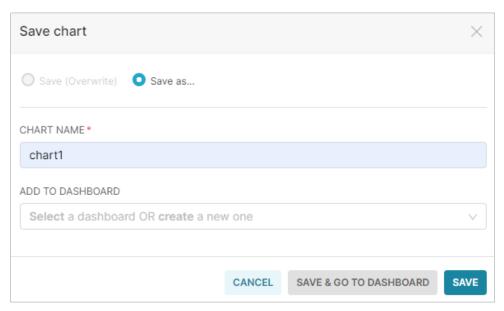
Step 3: Create Charts

Superset is a powerful visualization builder that allows you to create charts and dashboards. This section is for demonstration only. You can create exquisite charts and dashboards by referring to the **official guide**.

1. Click the database name to visualize the chart.



2. Click **SAVE** to add the chart to the dashboard.



3. Click **SAVE & GO TO DASHBOARD**. The visualized chart is displayed on the dashboard.

2.8 Pushing Local PC Desktop Streams to SRS Using OBS

Application Scenario

SRS is a simple and an efficient real-time video server that supports various real-time streaming media protocols, such as RTMP, WebRTC, HLS, HTTP-FLV, and SRT. Supported By FlexusL, the SRS image uses Ubuntu 22.04 and is deployed using Docker. The Nginx and Docker have been preconfigured in the image. This section describes how to push PC desktop streams to SRS using OBS.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 4 GiB	Select appropriate instance specifications based on your service requirements.
Image	SRS	Select the SRS application image.

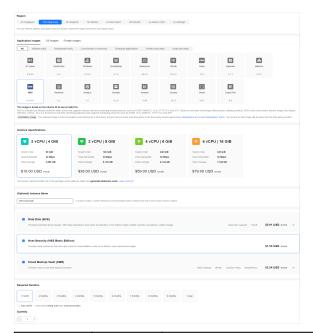
Resource	Configuration	Description
Security group	Inbound rule: Protocol & Port TCP: 80,9001,1935,1985, 8080,8000 Source: 0.0.0.0/0 Protocol & Port ICMP: all Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9001: Allows external access to the application management page. 1935: Allows access to the RTMP livestreaming server. 1985: Allows access to the HTTP API server to deliver HTTP-API and WebRTC streams. 8080: Allows access to the HTTP livestreaming server to deliver HTTP-FLV and HLS streams. 8000: Allows access to the WebRTC media server.
Domain name	wpwebsite.com	 If the website is only used for personal development or testing, there is no need to add a domain name. If the website is open to the public, add and resolve a domain name for the cloud server.

Process

Procedure	Description
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the SRS application image.
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.
Step 3: Learn About the SRS Working Interface	Understand the SRS working interface.
Step 4: Push Local PC Desktop Streams to SRS Using OBS	Learn how to push local PC desktop streams to SRS using OBS.

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	Exampl e	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.
Applicati on Images	SRS	Select the SRS application image.
Instance Specificat ions	2 vCPUs 4 GiB memory and 80 GiB system disk	Select instance specifications as needed.
Instance Name	SRS- Example	Customize an instance name that is easy to identify, for example, SRS-Example.

Paramet er	Exampl e	Description
(Optional) Associate d Services	 Data disk: 10 GiB Host securi ty Cloud back up vault: 90 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

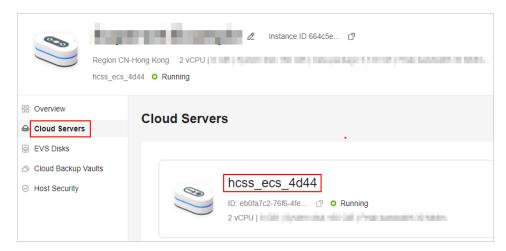
<u>A</u> CAUTION

After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



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

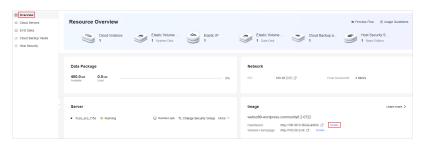
The following figure only displays common rules. You can add more rules as needed.

Table 2-10 Security group rules

Prio rity	Acti on	Typ e	Protoc ol & Port	Sour ce	Description
100	Allo w	IPv 4	TCP: 9001	0.0.0. 0/0	Allows external access to the application dashboard.
100	Allo w	IPv 4	TCP: 1935	0.0.0. 0/0	Allows access to the RTMP livestreaming server.
100	Allo w	IPv 4	TCP: 1985	0.0.0. 0/0	Allows access to the HTTP API server to deliver HTTP-API and WebRTC streams.
100	Allo w	IPv 4	TCP: 8080	0.0.0. 0/0	Allows access to the HTTP livestreaming server to deliver HTTP-FLV and HLS streams.
100	Allo w	IPv 4	TCP: 8000	0.0.0. 0/0	Allows access to the WebRTC media server.

Step 3: Learn About the SRS Working Interface

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

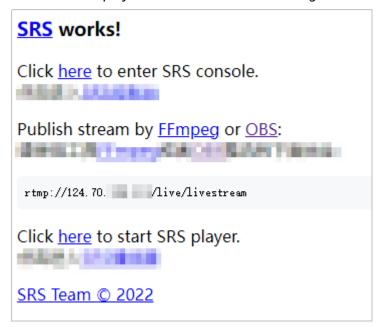


If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

2. Understand the SRS working interface.

You do not need to set the username and password for logging in to SRS. On the SRS working interface, you can:

- Log in to the SRS console.
- Obtain the ingest URL.
- Start SRS player to watch the livestreaming content.



Then, you have obtained an SRS hosting server. You can start using SRS or follow the steps in **Step 4**: **Push Local PC Desktop Streams to SRS Using OBS** to push and watch livestreams.

Step 4: Push Local PC Desktop Streams to SRS Using OBS

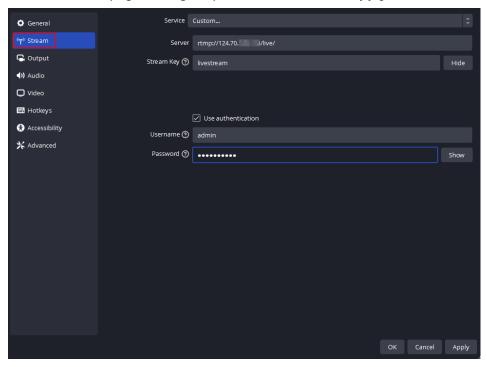
This section describes how to push local PC desktop streams to SRS using OBS.

Step 1: Push Livestreams

1. **Download** and install OBS based on your operating system.

2. Open OBS tool and click **Settings** in the **Controls** area.

3. On the **Stream** page, configure parameters and click **Apply**.



Parameter	Description
Service	Multiple platforms can push livestreams via OBS. For SRS, select Custom .
Server	Enter the stream pushing address specified by SRS, for example, rtmp://124.70.x.x/live/.
Stream key	Specify a character string following the specified stream pushing address, for example, the livestream following live/ in rtmp://124.70.x.x/live/.

Parameter	Description
Use authentication	Select Use authentication and set the Username and Password .

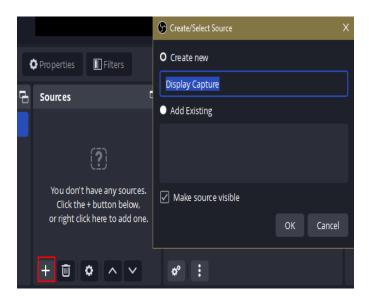


4. In the **Output** page, configure parameters and click **Apply**.

Set **Video Bitrate** to **1000 kbps**. Select **Software** for **Video Encoder** to avoid the need for high-end graphics cards and prevent potential streaming issues. Configure other parameters as needed.



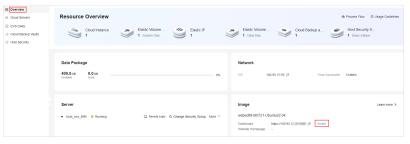
- 5. Click OK.
- 6. In the displayed **Sources** area, click +, select **Display Capture**, create a source, and click **OK**.



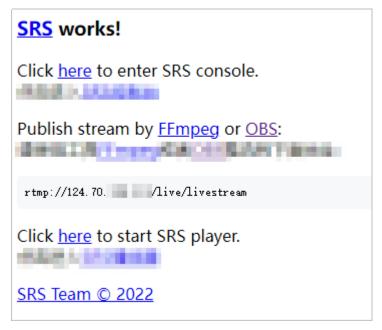
- 7. Perform any operation to change the desktop screen, and you can see that the screen starts to capture desktop content. Click **OK**.
- 8. Click **Start Streaming**. After the connection is successful, a green block is displayed in the lower right corner, indicating that the stream pushing is successful.

Step 2: Watch Livestreams

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. On the **Overview** page, in the **Image** area, click **Access** to access the image application dashboard.



3. Start SRS player.



4. Watch the desktop livestreams.

2.9 Using Nextcloud to Build an Enterprise Web Disk System

Application Scenario

Nextcloud is a suite of open-source cloud based storage software for self-built private cloud disks for enterprises. Nextcloud supports PC, Android, and iOS, and you can easily synchronize with vital data stored on servers, including files, schedules, contacts, and bookmarks. Supported By FlexusL, the Nextcloud image uses Ubuntu 22.04 and is deployed using Docker. The Nginx, MySQL, phpMyAdmin, and Docker have been preconfigured in the image. This section describes how to use Nextcloud to build an enterprise web disk system.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 4 GiB	Select appropriate instance specifications based on your service requirements.
Image	Nextcloud	Select the Nextcloud application image.

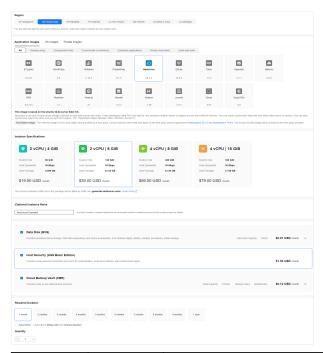
Resource	Configuration	Description
Security group	Inbound rule: Protocol & Port TCP: 80,9000,9001 Source: 0.0.0.0/0 Protocol & Port ICMP: all Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the application O&M dashboard. 9001: Allows external access to the application management page.
Domain name	wpwebsite.com	 If the website is only used for personal development or testing, there is no need to add a domain name. If the website is open to the public, add and resolve a domain name for the cloud server.

Process

Procedure	Description
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the Nextcloud application image.
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.
Step 3: Initialize Nextcloud	Log in to the frontend page and install Nextcloud.
Step 4: Deploy Nextcloud	On the dashboard, perform the following operations: Install applications Configure SMTP

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.	
Applicati on Images	Nextclou d	Select the Nextcloud application image.	
Instance Specificat ions	2 vCPUs 4 GiB memory and 80 GiB system disk	Select instance specifications as needed.	
Instance Name	Nextclou d- Example	Customize an instance name that is easy to identify, for example, Nextcloud-Example.	

Paramet er	Example	Description
(Optional) Associate d Services	 Data disk: 10 GiB Host securit y Cloud backu p vault: 90 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

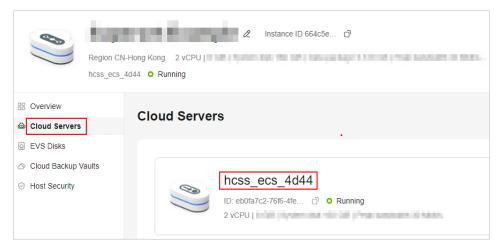
⚠ CAUTION

After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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 2-11 Security group rules

Priorit y	Actio n	Туре	Protocol & Port	Source	Description
1	Allow	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allow	IPv4	TCP: 9000	0.0.0.0/0	Allows external access to the application O&M dashboard.
1	Allow	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

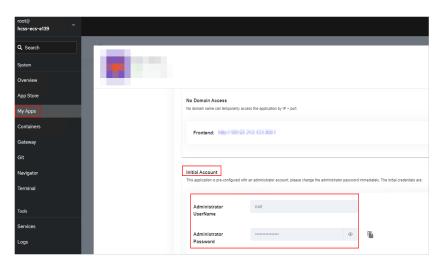
Step 3: Initialize Nextcloud

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

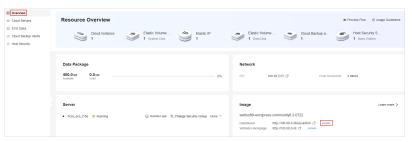
- 1. Obtain the administrator username and password for logging in to Nextcloud.
 - a. In the address bar of a local browser, enter http://E/P:9000 to log in to the application O&M dashboard.

The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. **Reset the password** and use it to log in to the dashboard.

- b. Choose **My Apps** and click the App icon.
- c. Choose **Access** and click **Initial Account** to view the username and password of the administrator.



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



□ NOTE

If the dashboard of WordPress cannot be accessed, it may be because the port for accessing the dashboard is not allowed or the application has not been up and running. To solve this problem, see Why Can't I Open the Dashboard of the Application Pre-installed in the Application Image?

3. Set the username and password of the Nextcloud administrator and click **Log** in.

□ NOTE

If a message is displayed indicating that the username or password you entered is invalid when you attempt to log in to the application dashboard, refer to Why Can't I Access the Dashboard of the Application Pre-installed in the Application Image After Entering the Initial Username and Password?

- 4. After the installation is complete, you can continue to install recommended applications as prompted or click **Cancel**.
 - You can still install these applications on the management page subsequently.
- 5. You can go through the pop-ups to learn about the Nextcloud functions, and then configure Nextcloud on the management page.

Then, you have obtained a Nextcloud hosting server. You can start using Nextcloud or follow the steps in **Step 4: Deploy Nextcloud** to install applications, configure SMTP, and configure domain names.

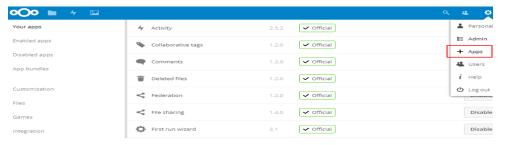
Step 4: Deploy Nextcloud

This section describes some basic operations of Nextcloud. For details, see **Nextcloud Documentation**.

Installing Applications

Nextcloud integrates various applications, and you can add more functions to Nextcloud by installing these applications.

- 1. Click in the upper right corner and choose **Apps** to view the applications integrated with Nextcloud.
- 2. Click Enable.

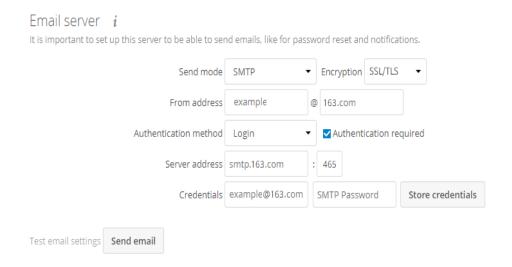


Configuring SMTP

Configuring an SMTP mail server in an application is very important. It can be used to get back your passwords and receive important notifications. You are advised to configure the SMTP service to enable the email notification function.

- 1. Click in the upper right corner and click **Personal**.
- Enter the sender's email address, for example, example@163.
 The email address must be available, and the SMTP function must have been configured.
- 3. Choose **Administration** > **Basic Settings** > **Email Server**, and configure SMTP information.

In this example, the 163 mailbox is only for reference. Please configure the corresponding parameters when other mailboxes are used.



Parameter	Description		
Send mode	Select SMTP.		
Encryption	Select SSL/TLS.		
From address	Enter an email address, for example, example@163.com.		
Server address	Enter smtp.163.com for the 163 email server.		
Port number	Enter 465.		
Authentication method	Select Authentication required.		
Credentials	SMTP Username: Set it to the email address.		
	SMTP Password: Set it to the authorization code obtained when configuring SMTP for example@163.com rather than the login password of example@163.com.		

- 4. Click **Store credentials**.
- 5. Click **Send email** to test whether the SMTP has been successfully configured.

2.10 Using PrestaShop to Build an E-Commerce Website

Application Scenario

PrestaShop is a full-featured, cross-platform, and open source e-commerce platform written in the PHP programming language with support for the MySQL database management system. PrestaShop supports transactions using different currencies and almost all payment methods, such as Paypal. It is a good choice for you to build foreign trade websites. Supported By FlexusL, the PrestaShop application image uses Ubuntu 22.04 and is deployed using Docker. The Nginx, MySQL, phpMyAdmin, and Docker have been preconfigured in the image. This section describes how to use PrestaShop to build an e-commerce website.

Resource Planning and Costs

This practice uses the following resource planning as an example. You can adjust it as required.

Resource	Configuration	Description
Cloud server	vCPUs: 2Memory: 2 GiB	Select appropriate instance specifications based on your service requirements.
lmage	PrestaShop	Select the PrestaShop application image.

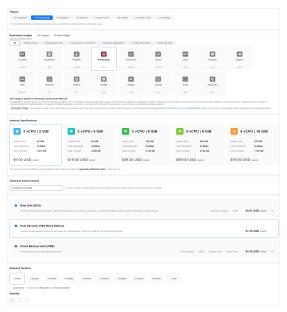
Resource	Configuration	Description
Security group	Inbound rule: Protocol/ Application: TCP Port: 9001,9000,3306 Source: 0.0.0.0/0	 80: Specifies the internal forwarding port of application images. 9000: Allows external access to the application O&M dashboard. 9001: Allows external access to the application management page. 3306: Allows access to MySQL databases.
Domain name	wpwebsite.com	 If the website is only used for personal development or testing, there is no need to add a domain name. If the website is open to the public, add and resolve a domain name for the cloud server.

Procedure

Procedure	Description		
Step 1: Purchase a FlexusL Instance	Purchase a FlexusL instance and select the PrestaShop application image.		
Step 2: Configure Security Groups	Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.		
Step 3: Initialize Prestashop	Log in to PrestaShop and select the desired language for the management page.		
Step 4: Deploy Prestashop	On the dashboard, perform the following operations: • Manage language packages and set languages • Manage modules • Back up databases • Configure domain names		

Step 1: Purchase a FlexusL Instance

- 1. Log in to the FlexusLconsole and click **Buy FlexusL**.
- 2. Specify required parameters for the FlexusL instance.



Paramet er	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.
Applicati on Images	PrestaShop	Select the PrestaShop application image.
Instance Specificat ions	2 vCPUs 2 GiB memory and 60 GiB system disk	Select instance specifications as needed.
Instance Name	PrestaShop -Example	Customize an instance name that is easy to identify, for example, PrestaShop-Example.
(Optional) Associate d Services	 Data disk: 10 GiB Host security Cloud backup vault: 70 GiB 	You can bundle any of the services to your FlexusL instances as needed: EVS, HSS (basic edition), and CBR and set specifications as needed.

Paramet er	Example	Description
Required Duration	1 month	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. For more information about auto-renewal rules, see Auto-Renewal Rules.
Quantity	1	Set the number of FlexusL instances to be purchased.

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.



After a FlexusL instance is created using an application image, wait until **the image with the pre-installed application is up and running**. Then, you can perform operations such as restarting or stopping the instance, or resetting the password. Otherwise, the installation may fail and you cannot log in to the image application dashboard.

Step 2: Configure Security Groups

Add inbound security group rules to ensure that the application preinstalled in the image can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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 2-12 Security group rules

Prior ity	Acti on	Туре	Protocol & Port	Source	Description
1	Allo w	IPv4	TCP: 80	0.0.0.0/0	Specifies the internal forwarding port of application images
1	Allo w	IPv4	TCP: 3306	0.0.0.0/0	Allows access to MySQL databases.
1	Allo w	IPv4	TCP: 9000	0.0.0.0/0	Allows external access to the application O&M dashboard.
1	Allo w	IPv4	TCP: 9001	0.0.0.0/0	Allows external access to the application dashboard.

Step 3: Initialize Prestashop

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

NOTICE

When you visit http://Public IP address:9001/admin to access the management console for the first time, PrestaShop generates a random character string following admin for encryption. Keep the encrypted address in mind because you can only use it to access the management console. For example, when you visit http://1.1.1.1:9001/admin to access the management console for the first time, the address automatically changes to http://1.1.1.1:9001/admin923reep1k.

You can also reset the address for accessing the management console, but this will lead to data loss. Please keep the encrypted address safe.

- 1. Obtain the administrator username and password for logging in to GitLab.
 - a. In the address bar of a local browser, enter **http://**EIP:9000 to log in to the application O&M dashboard.

The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not have an initial password. **Reset the password** and use it to log in to the dashboard.

b. Choose **My Apps** and click the App icon.

Proof to the service 199

Q. Search
System
Overview
App Store
My Apps
Containers
Containers
Gateway
Git
Navigator
Terminal

Initial Account
This application is pre-configured with an administrator account, please change the administrator password immediately. The initial credentials are:

Administrator
Total

Administrator
Total

Administrator
Total

c. Choose **Access** and click **Initial Account** to view the username and password of the administrator.

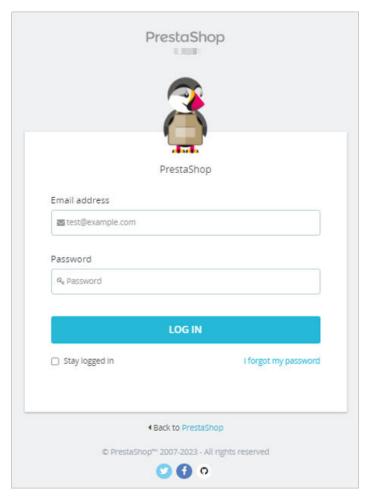
2. Visit http://Public IP address:9001/admin in the address bar of a local browser to access the management console.

NOTICE

When you visit http://Public IP address:9001/admin to access the management console for the first time, PrestaShop generates a random character string following admin for encryption. Keep the encrypted address in mind because you can only use it to access the management console. For example, when you visit http://1.1.1.1:9001/admin to access the management console for the first time, the address automatically changes to http://1.1.1.1:9001/admin923reep1k.

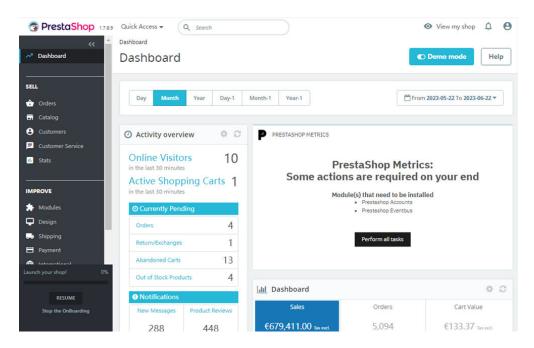
You can also reset the address for accessing the management console, but this will lead to data loss. Please keep the encrypted address safe.

3. Enter the password obtained in step 1.



If a message is displayed indicating that the username or password you entered is invalid when you attempt to log in to the application dashboard, refer to Why Can't I Access the Dashboard of the Application Pre-installed in the Application Image After Entering the Initial Username and Password?

4. Click **LOG IN** to log in to PrestaShop.



Then, you have obtained a PrestaShop hosting server. You can start operating the website or follow the steps in **Step 4**: **Deploy Prestashop** to manage language packages and set languages, install modules, back up databases, and configure domain names.

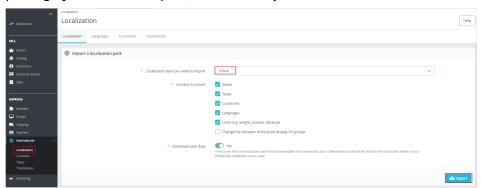
Step 4: Deploy Prestashop

This section describes some basic operations of PrestaShop. For more information, see **PrestaShop Documentation**.

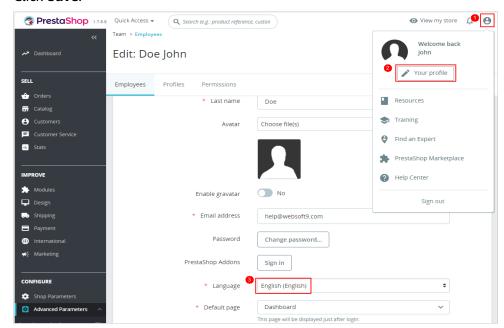
Managing Language Packages

PrestaShop has a built-in multi-language system. You only need to select the corresponding language and import it to your PrestaShop system online.

- Import a language package.
 - a. Choose **IMPROVE** > **International** > **Localization**, select the language package you want to import, and click **Import**.



- b. Click the **Languages** tab to view the language packages that have been imported.
- Set the language of the dashboard.

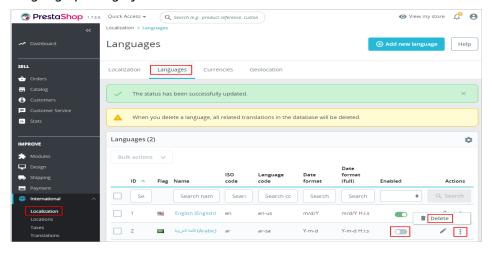


Click the avatar on the right corner, select **Your profile** and set the language. Click **Save**.

Delete a language package.

You can delete unnecessary language packages.

a. Choose **International** > **Localization** > **Languages** and disable the language package you want to delete.



b. In the **Actions** list, click **Delete** to delete the language that is disabled.

Managing Modules

PrestaShop has a rich module library, which greatly expands the functions of PrestaShop.

- Choose Modules > Marketplace, find the required plug-in, and click Buy
 Now or Install to purchase and install the module.
 - You can also click **Upload a module** to install other modules.
- Choose Modules > Module Manager.

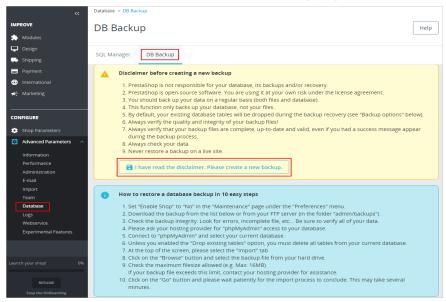
- On the Modules tab page, you can disable, configure, uninstall, and restore the modules.
- On the Alerts tab page, you can view the notifications of modules.
- On the **Updates** tab page, you can view modules that can be updated.

Backing Up Databases

PrestaShop allows you to back up databases.

In the navigation pane on the left, choose Advanced Parameters > Database
 DB Backup, read the disclaimer, and click I have read the disclaimer.
 Please create a new backup.

You can follow the instructions on the following page to restore a database.



2. Click **Download the backup file** to download the backup file to your local PC.

Configuring Domain Names

Add and resolve a domain name for the website so that users can use the domain name to access the website. If the website is only used for personal development or testing, there is no need to add a domain name.

- 1. If the domain name is not registered with Huawei Cloud or not hosted on Huawei Cloud DNS, the domain name cannot be resolved. Use either of the following methods to resolve the issue:
 - Contact the DNS service provider to add an A record that maps the domain name to the EIP of the FlexusL instance.
 - Use Huawei Cloud DNS servers to resolve the domain name. For details, see Migrating to Huawei Cloud DNS for Domain Name Resolution.
- 2. Add the domain name on the application O&M dashboard.
 - a. In the address bar of a local browser, enter **http://**EIP:9000 to log in to the application O&M dashboard.
 - The username and password for logging in to the dashboard are the **root** user and password of the FlexusL instance. A FlexusL instance does not

have an initial password. Reset the password and use it to log in to the dashboard.

- b. Choose My Apps and click the App icon.
- c. Choose Access and click Add Domain.



3. Apply for ICP licensing for the domain name.

To successfully access the server using a domain name, you must license the domain name. Domain name licensing provided by the ICP License Service is free of charge. For details, see ICP Filing Process.

After the domain name is licensed, you can use it to visit the website.

3 Migrating Servers Using Server Migration Service (SMS)

Application Scenario

This section describes how to use Server Migration Service (SMS) to migrate other cloud servers to Huawei Cloud FlexusL instances in the same region or across regions.

Precautions

- Once the migration starts, do not perform operations on the FlexusL instances, including but not limited to stopping the instances, changing the OS, or reinstalling the OS. Otherwise, the migration will be interrupted or fail.
- If you want to migrate incremental data after the full migration is complete, do not reinstall or change the OS for the FlexusL instances, or the migration will fail.

Constraints

- Only x86 servers can be migrated to FlexusL instances.
- SMS migrates entire servers. It cannot only migrate system or data disks of servers.
- Only servers with one data disk can be migrated. The paired FlexusL instances must have system and data disks at least as large as the source servers.

For more information, see SMS Precautions and SMS Constraints.

Resource Planning and Costs

Resour ce	Data Planning	Description	Cost
Source server	Server name: source-server OS: CentOS 7.9	The source server can be in Huawei Cloud, another cloud platform, or an onpremises environment.	If the source server has no EIP bound, you need to configure one for the source server. You need to pay for the EIP.
Target server	Server name: destination_se rver OS: Huawei Cloud EulerOS 2.0	The target server is a Huawei FlexusL instance.	You need to pay for the FlexusL instance.
SMS	-	SMS is available for free.	You need to pay for the pay-per-use migration resources (including EVS disks, EVS snapshots, and traffic) used during the migration. For details, see SMS Billing.

Process

Procedure	Description
Making Preparations	Prepare accounts, obtain required permissions, and prepare source and target servers.
Step 1 Installing and Starting the Agent on the Source Server	Install and start the Agent on the source server. To start the Agent, you must enter the AK/SK pair of the Huawei Cloud account the FlexusL instance belongs to. After the Agent is started, it reports information about the source server to SMS.
Step 2: Configuring the Target Server on the SMS Console	Configure the target server which will receive data migrated from the source server.
Step 3: Starting the Migration	Start the migration to replicate all data from the source server to the target server. The replication speed depends on the outbound bandwidth of the source server or the inbound bandwidth of the target server, whichever is smaller.

Procedure	Description
Step 4: Viewing the Migration Result	Check whether the source server is successfully migrated, and install the one-click password reset plug-ins and the HSS Agent on the target server.
Step 5: Creating a Private Image and Changing the OS of the FlexusL instance	Create a private image for the FlexusL instance and use the image to change the OS for the instance. In this way, the OS name of the FlexusL instance can be displayed in the instance card, and reinstalling the OS for the FlexusL instance will not roll back its OS to that before the migration.

Making Preparations

Prepare accounts, obtain required permissions, and prepare source and target servers.

1. Register a HUAWEI ID and enable Huawei Cloud services.

Real-name authentication is required for migration to regions within the Chinese mainland.

2. Obtain required permissions for your HUAWEI ID.

If you use an HUAWEI ID for migration, you have the required permissions by default. If you use an IAM user for migration, you need to obtain the required permissions. For more information, see **Creating a User Group and Assigning Permissions**.

3. Obtain an AK/SK pair for your target account.

The AK/SK pair will be used for authentication during the migration. To learn how to obtain an AK/SK pair, see **How Do I Obtain an AK/SK Pair for an Account?**



SMS does not support AK/SK-based authentication for federated users (virtual users).

4. Note the username and password for logging in to the source server.

If your source server is not in Huawei Cloud, note the username and password of the source server. The username and password are required when you install the one-click password reset plug-ins on the target server after the migration is complete. If you forget the username and password, the plug-ins installation process will be complex.

- 5. Confirm that the source server OS is supported by SMS.
 - See Supported Windows OSs or Supported Linux OSs.
 - A target server must run the same type of OS as the source server.

- 6. Ensure that the following network requirements are met:
 - a. The source server can connect to the Huawei Cloud API Gateway over TCP port 443. For more information, see Connecting Source Servers to Huawei Cloud API Gateway.

□ NOTE

It is recommended that all outbound ports on the source server be opened.

b. The source server can connect to the target server. For more information, see Connecting Source Servers to Target Servers.

In this practice, EIP is used for connection. You need to purchase and configure EIPs for both the source and target servers. A FlexusL instance has an EIP bound by default.

- c. The following ports are enabled in the security group of the target server to allow traffic to these ports:
 - Windows: TCP ports 8899, 8900, and 22
 - Linux: TCP port 22 for file-level migration, and ports 8900 and 22 for block-level migration

For details about how to control traffic into and out of a security group, see **Adding a Security Group Rule**.

CAUTION

- For security purposes, you are advised to only allow traffic from the source servers over these ports.
- The firewall of the target server must allow traffic to these ports.
- 7. Ensure that the following source server requirements are met:

Available Space

- Windows: at least 320 MB of available space on a partition not smaller than 600 MB, and at least 40 MB of available space on a partition smaller than 600 MB
- Linux: at least 200 MB of available space on the root partition

Source Environment

- The system time of the source server must be consistent with the local standard time to avoid Agent registration failures.
- If the source server runs Linux, rsync must be installed on it. You can run
 the rsync -v command to check whether rsync is installed.

If it is not, install it by running the following command:

- CentOS: yum -y install rsync
- Ubuntu: apt-get -y install rsync
- Debian: apt-get -y install rsync
- SUSE: zypper install rsync

Other distributions: Refer to the official website documentation.

Ⅲ NOTE

rsync comes preinstalled on most distributions by default.

Step 1 Installing and Starting the Agent on the Source Server

- If the source server runs a Linux OS, see Installing the Agent on Linux.
- If the source server runs a Windows OS, see Installing the Agent on Windows.

FAQ

 If an error message indicating that rsync is not installed is displayed when you install Agent on the Linux source server, install rsync based on <u>Installing</u> <u>Rsync</u> and then reinstall the Agent.

```
| Croot@ecs-migrate-to-hecsl SMS-Agent]# ./startup.sh | Start the migration pre-check. Please waiting... | ko | Li165.6918081 device-mapper: uevent: version 1.0.3 | Li165.6928601 device-mapper: uevent: version 1.0.3 | Li165.6928601 device-mapper: ioctl: 4.37.1-ioctl (2018-04-03) initialised: dm-devel@redhat.com | Li166.093401 avx | coton | coto
```

2. If the following error message is displayed, check whether the access key is correctly entered or deleted.

Figure 3-1 Error message

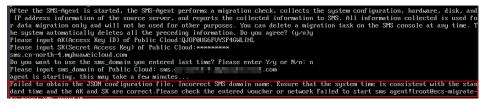
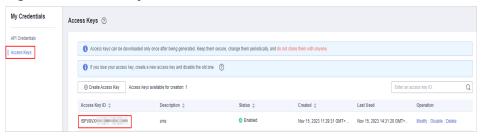


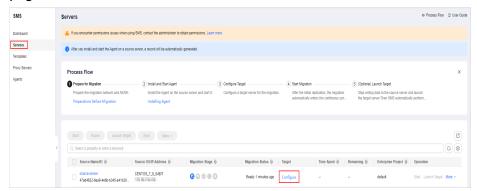
Figure 3-2 Access key



Step 2: Configuring the Target Server on the SMS Console

- 1. Log in to the **SMS console** using the Huawei Cloud account that owns the FlexusL instance and choose **Servers** on the left.
- 2. On the **Servers** page, locate the source server to be migrated and click **Configure**.

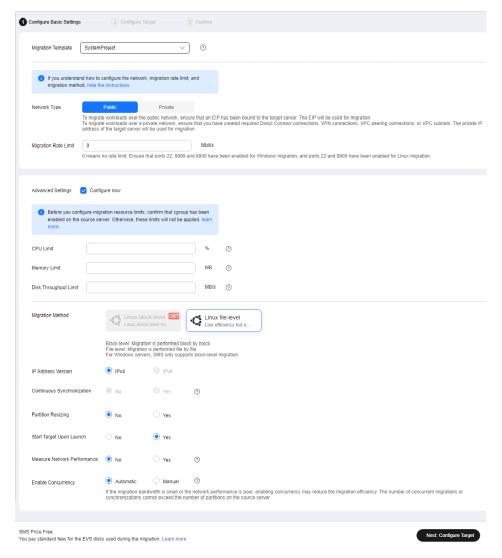
After step 1 is complete, you can see the source server record on the **Servers** page of the SMS console.



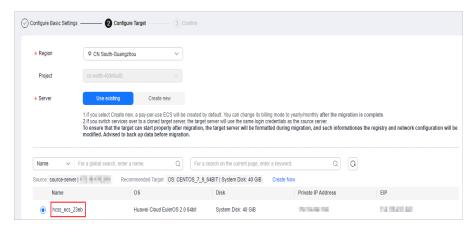
3. Configure the basic settings.

Retain the default settings on this page.

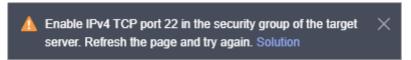
For details about the parameters, see Configuring the Target Server.



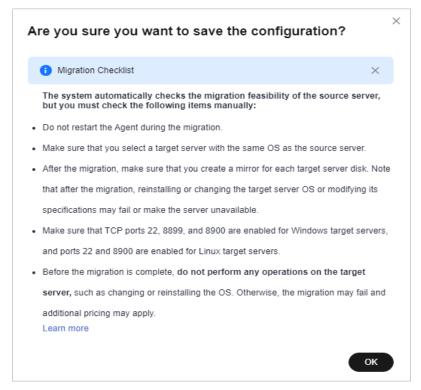
- 4. Configure the target server and click **Next: Confirm** in the lower right corner.
 - Region: Select the region where the purchased FlexusL instance is located.
 - **Server**: Select **Use existing** and choose the purchased FlexusL instance.
 - Only servers with one data disk can be migrated. The paired FlexusL instances must have system and data disks at least as large as the source servers.
 - The target server must run the same type of OS as the source server.
 - The security group of the target server must be correctly configured. It must be configured to allow access on TCP ports 8899, 8900, and 22 for a Windows migration, or on port 22 for a Linux migration.



If the following information is displayed when you perform this step, allow traffic over the prompted port, refresh the page, and repeat this step.



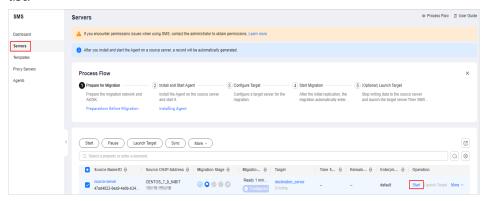
- 5. On the **Confirm** page, confirm the information and click **Save** or **Save and Start**.
 - If you select Save, read the migration checklist carefully and click OK.
 Then start the migration.
 - If you select Save and Start, read the migration checklist carefully and click OK. The migration starts automatically. View the migration status and details.



Step 3: Starting the Migration

- 1. Log in to the **SMS console** using the Huawei Cloud account that owns the FlexusL instance and choose **Servers** on the left.
- 2. On the **Servers** page, locate the source server to be migrated and click **Start** in the **Operation** column.

Alternatively, select the server to be migrated and click **Start** above the server list.



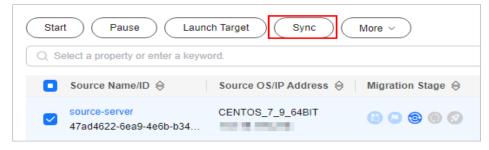
3. After the migration starts, click the name of the source server to view the migration status and details.



4. Check whether the **Status** changes to **Finished**. If it changes, the target server has been launched, and the migration is complete.



5. (Optional) If incremental data is generated on the source server after the full migration is complete, synchronize the incremental data from the source server to the target server.



□ NOTE

If you want to migrate incremental data after the full migration is complete, do not reinstall or change the OS for the target server, or the migration will fail.

Step 4: Viewing the Migration Result

Check the OS on the FlexusL instance.

Click **Remote Login** in the FlexusL instance card. If the OS and kernel information of the source server is displayed, the migration is successful. Enter the username and password of the source server to log in to the FlexusL instance.

```
CentOS Linux 7 (Core)
Kernel 3.10.0-1160.92.1.el7.x86_64 on an x86_64

source-service login: root
Password:
Last login: Wed Nov 15 16:18:34 on tty1

[root@source-service ~]#
```

2. (Optional) Install the one-click password reset plug-in on the FlexusL instance.

If your source server was not created from a Huawei Cloud image, install the one-click password reset plug-in on the FlexusL instance. With the plug-in, you can reset your instance password. To install the plug-in, refer to the following:

- What Should I Do If the Password Cannot Be Reset After I Use a Private Linux Image to Create a FlexusL Instance or Change the OS of an Existing Instance and I Forgot the Initial Password of the Private Image?
- What Should I Do If the Password Cannot Be Reset After I Use a Private Linux Image to Create a FlexusL Instance or Change the OS of an Existing Instance and I Know the Initial Password of the Private Image?
- 3. (Optional) Check the HSS service status.
 - If your FlexusL instance does not contain the HSS service, skip this step.
 - If your FlexusL instance contains the HSS service, but the service is not enabled, enable HSS by referring to What Do I Do If HSS Is Not Started After I Use a Private Image to Create a FlexusL Instance or Change the OS of an Instance?

Figure 3-3 HSS Unprotected status



Step 5: Creating a Private Image and Changing the OS of the FlexusL instance

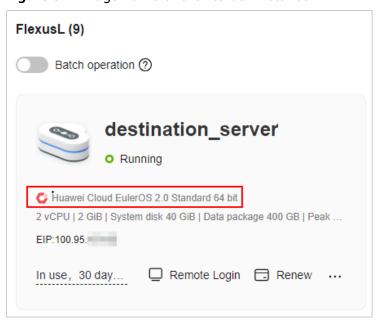
After the migration is complete, the original OS name (Huawei Cloud EulerOS 2.0) is still displayed in the FlexusL instance card, as shown in figure **Figure 3-4**. If you choose to reinstall the OS for the FlexusL instance after the migration is complete, the OS will actually be rolled back to the original OS Huawei Cloud EulerOS 2.0 rather than CentOS 7.9, and the OS data migrated from the source server will be lost.

Create a private image for the FlexusL instance. Then use the image to change the OS for the instance. After the OS is changed, the above two problems can be solved.

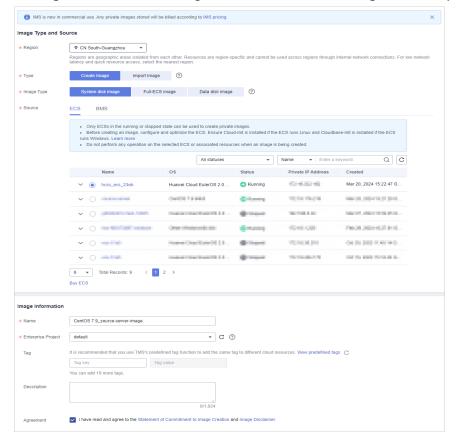
NOTICE

If the OS is changed, incremental data on the source server cannot be synchronized. Ensure that no incremental data needs to be synchronized before changing the OS.

Figure 3-4 Image name of the FlexusL instance



- 1. Log in to **IMS console**, choose **Create Image**, and configure the following parameters:
 - **Region**: Retain the default value.
 - **Type**: Retain the default value.
 - Image Type: Retain the default value.
 - **Source**: Select the FlexusL instance.
 - Name: Enter an image name that is easy to identify, for example,
 CentOS 7.9_source-server-image.

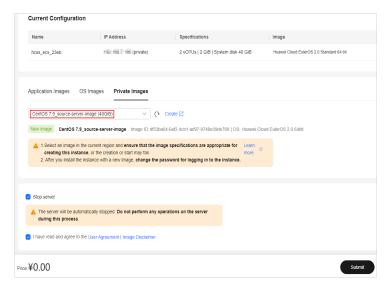


- **Agreement**: Read the agreements and select the **Agreement** option.

- 2. Click **Next**, confirm the information, and click **Submit**.
- 3. Go back to the FlexusL console, click the FlexusL instance, and choose **Change OS** in the upper right corner.



- 4. Configure the parameters for changing the OS and click Submit.
 - Select the private image CentOS 7.9_source-server-image created in 1.
 - Stop the instance first or select Stop server on the Change OS page.
 - Read and agree to the agreements.



5. Check whether the image name on the console is changed.



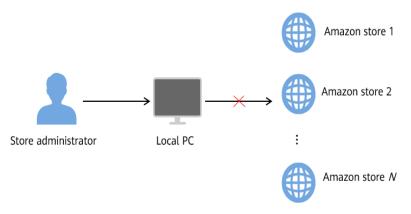
4 Using Windows Server to Set Up a Cross-Border E-Commerce Store

Application Scenario

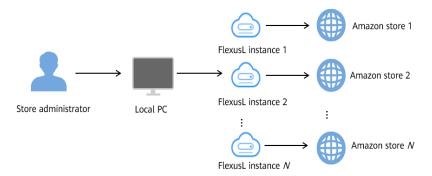
Windows Server is a group of Microsoft-developed OSs for servers. This section uses the Windows Server 2016 OS image as an example to describe how to set up and manage cross-border e-commerce stores. The following uses Amazon stores as an example to show how to manage multiple e-commerce stores on FlexusL instances.

Solution Architecture

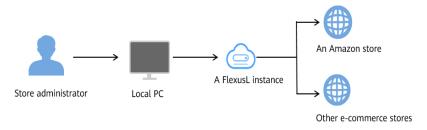
On the Amazon platform, a seller cannot manage multiple accounts from the same public IP address. This can raise red flags and may lead to account suspension or other consequences.



With FlexusL instances, you can log in to different stores from the same host without worrying about account issues.



You can also use the same FlexusL instance to manage stores on other e-commerce platforms.



Resource Planning and Costs

Table 4-1 Resource planning and costs

Resou rce	Туре	Description	Cost	
Cloud server	vCPUs: 2Memory: 2GiB	FlexusL instances are easy to provision and manage. In this example, three FlexusL instances are created, each with 2 vCPUs and 2 GiB memory. You can select proper FlexusL instance flavors based on service requirements. The FlexusL instance names are MyShop_1, MyShop_2, and MyShop_3, respectively.	You need to pay for resour ces packed in the	
EIP	Automatically An EIP can be used for Internet access default, one fixed EIP is assigned to a FlexusL instance.		Flexus L instanc es.	
Data disk	10 GiB	Data disks are used to store data except the operating system. They are like drive D, drive E, and drive F in a PC.	Windo ws private images are free.	
CBR	70 GiB	Cloud Backup and Recovery (CBR) can back up data in system and data disks of FlexusL instances and restore data if instances fail.		

Resou rce	Туре	Description	Cost
HSS	Host security	Host Security Service (HSS) is designed to improve the overall security of FlexusX instances. It helps you eliminate risks and defend against intrusions and web page tampering. There are also advanced protection and security operations functions available to help you easily detect and handle threats.	
Image	Windows Server 2019	Windows Server 2019 is used.	

Process

Procedure	Description	
Preparations	Upload the Windows Server 2019 private image created from the Windows Server 2019 image to the IMS console so that you can select the Windows Server 2019 private image when purchasing FlexusL instances.	
Step 1: Purchase FlexusL Instances	Purchase a FlexusL instance and select the Windows Server 2019 private image.	
Step 2: Configure Security Groups	Configure inbound rules for a security group to ensure that the FlexusL instance can be accessed.	
Step 3: Log In to a FlexusL Instance Server	Set a password and log in to the FlexusL instance server.	
Step 4: Remove the Session Time Limit	Set the session time and remove the session time limit to avoid repeated logins due to session timeout.	
Step 5: Open Stores	After the preceding steps are complete, you have obtained a complete Windows Server FlexusL instance with a fixed EIP bound. You can create accounts, and open and manage stores on e-commerce websites.	

Preparations

To use the Windows Server 2019 image, create a private image from it on the IMS console first.

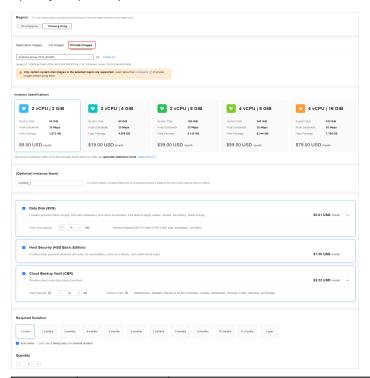
- If your image format is VMDK, VHD, QCOW2, VHDX, QED, VDI, QCOW, or ZVHD, see Creating a Windows System Disk Image from an External Image File.
- If your image format is ISO, see Creating a Windows System Disk Image from an ISO File.
- If your image format is RAW or ZVHD2, see **Quickly Importing an Image** File.

NOTICE

Images are regional resources. FlexusL instances only can use private images that are in the same region as them. Ensure that the image is in the same region as the FlexusL instance.

Step 1: Purchase FlexusL Instances

- Log in to the FlexusLconsole and click Buy FlexusL.
- 2. Specify required parameters for the 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.

Parame ter	Example	Description	
Image	Windows Server 2019	In the private image list, select the Windows Server 2019 private image which is in the same region (CN-Hong Kong) as the instance and has been uploaded to the IMS console.	
Instanc e Specific ations	2 vCPUs 2 GiB memory and 60 GiB system disk	Select instance specifications as required.	
Instanc e Name	MyShop_1	Customize an instance name that is easy to identify, for example, MyShop_1, MyShop_2, and MyShop_3.	
(Option al) Associa ted Services	 Data disk: 10 GiB Host security Cloud backup vault: 70 GiB 	You can bundle any of the services to your Flexuslinstances as needed: EVS, HSS (basic edition), and CBR.	
Require d Duratio n	1 monthEnabling 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. For more information about auto-renewal rules, see Auto-Renewal Rules.	
Quantit y	3	Set the number of FlexusL instances to be purchased, for example, three in this example.	

- 3. Click **Buy Now** and complete the payment as prompted.
- 4. Go back to the FlexusL console and view the purchased FlexusL instance.

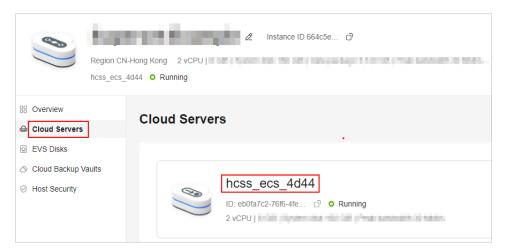


5. Hover the pointer over a resource card, click next to the instance name, and change it to **MyShop_1**, **MyShop_2**, and **MyShop_3**, respectively.

Step 2: Configure Security Groups

Configure inbound rules for security groups to ensure that the FlexusL instance can be accessed.

- 1. Log in to the FlexusL **console** and click a resource card to go to the instance details page.
- 2. In the navigation pane on the left, choose **Cloud Servers**. Locate the server and click its name.



3. 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.

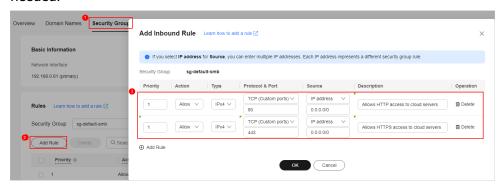


Table 4-2 Security group rules

Priorit y	Actio n	Туре	Protocol & Port	Source	Description
1	Allow	IPv4	TCP: 80	0.0.0.0/0	Allows HTTP traffic to FlexusL instances.
1	Allow	IPv4	TCP: 443	0.0.0.0/0	Allows HTTPS traffic to FlexusL instances.

Step 3: Log In to a FlexusL Instance Server

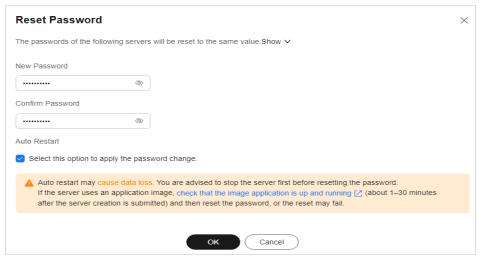
For Windows FlexusL instances, the administrator username is **Administrator** and there is no default password. Set a password before logging in to the server.

1. Enable **Batch operation**, select **Select all**, and click **Reset Password**.

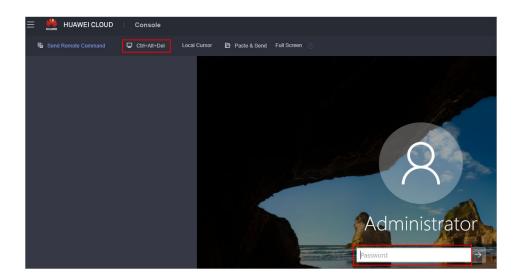


Set a new password for the FlexusL instance servers and click OK.

If you reset the password for running servers, the password change is applied only after the next restart. Select **Auto Restart**. After the password is reset, the server status becomes **Restarting**. Wait until the status changes to **Running** and go to the next step.



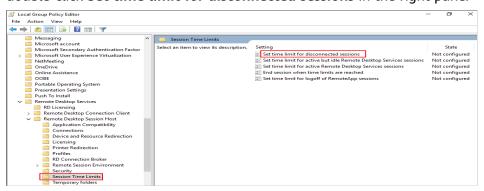
- 3. In the resource card, click **Remote Login** to remotely log in to the cloud server using VNC.
- Click Ctrl+Alt+Del in the upper left corner to unlock the desktop.
 Follow the instructions to enter the password set in step 2 and press Enter.



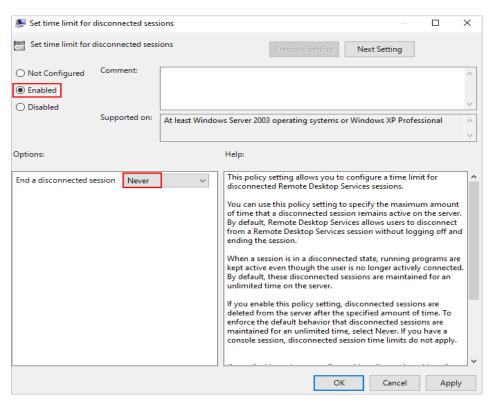
Step 4: Remove the Session Time Limit

A session is a sequence of uninterrupted requests and responses between a user and a server. Session timeout occurs when a user does not perform any action within a specified period and the session of the user is terminated. Once the session times out, you need to log in to the FlexusL instance server again. This section describes how to remove the session time limit.

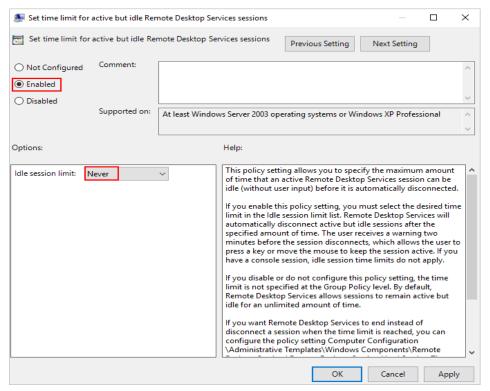
- 1. In the search box at the lower left corner of the page, search for **RUN**.
- 2. Enter **gpedit.msc** in the **RUN** dialog box and click **OK**.
- 3. In the Local Group Policy Editor window, choose Computer Configuration > Administrative Templates > Windows Components > Remote Desktop Services > Remote Desktop Session Host > Session Time Limits, and double-click Set time limit for disconnected sessions in the right pane.



4. In the displayed dialog box, select **Enabled** and set **End a disconnected** session to Never. Click OK.



- 5. In the Local Group Policy Editor window, double-click Set time limit for active but idle Remote Desktop Services sessions in the right pane.
- 6. In the displayed dialog box, select **Enabled** and set **Idle session limit** to **Never**. Click **OK**.



Step 5: Open Stores

Now you have obtained a Windows Server FlexusL instance with a fixed EIP bound. You can create accounts, and open and manage stores on e-commerce websites.

When running e-commerce stores, you may need to upload your local files to cloud servers. For details, see **How Do I Upload Files to My ECS** (The method also applies to uploading files to FlexusL instances).