

Huawei Cloud Flexus

FAQs

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1 FlexusL

1.1 Product Consulting

1.1.1 How Do I Find My Purchased FlexusL Instances on the Management Console?

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

On the FlexusL console, you can view, renew, or unsubscribe from FlexusL instances you have purchased, and change or reinstall the OS, reset the server login password, and configuration security groups.

1.1.2 What Service Packages Does FlexusL Provide?

Instance specifications include vCPUs and memory, a system disk, a data package, and an EIP. You can associate EVS disks, HSS, or cloud backup vaults with your FlexusL instance as needed.

Table 1-1 Instance specifications

vCPU Memory	System Disk Capacity Type	Peak Bandwidth Data Package	(Optional) Associated Service Resources
2vCPUs 1GiB	40 GiB General Purpose SSD	30 Mbps 2084 GB	The following service resources can be purchased together with FlexusL instances: <ul style="list-style-type: none"> • Data disk: General Purpose SSD V2 Custom capacity • HSS: Basic edition • CBR: Server backup Custom vault capacity
2vCPUs 2GiB	60 GiB General Purpose SSD	30 Mbps 3072 GB	
2vCPUs 4GiB	80 GiB General Purpose SSD	30 Mbps 4096 GB	
2vCPUs 8GiB	160 GiB General Purpose SSD	30 Mbps 5120 GB	
4vCPUs 8GiB	240 GiB General Purpose SSD	30 Mbps 6144 GB	
4vCPUs 16GiB	320 GiB General Purpose SSD	30 Mbps 7168 GB	

1.1.3 What Should I Do If I Selected Inappropriate Instance Specifications?

You can change the instance specification in either of the following ways:

- Method 1: Upgrade the instance specifications.
Instance specifications can only be upgraded. For details, see [Upgrading a FlexusL Instance](#).
- Method 2: Unsubscribe from the FlexusL instance and then purchase another one with appropriate specifications.
For details, see [Unsubscribing from a FlexusL Instance](#) and [Purchasing a FlexusL Instance](#).

1.1.4 Can I Migrate Cloud Servers to FlexusL?

Yes. You can use Server Migration Service (SMS) to migrate cloud servers to Huawei Cloud FlexusL in the same region or across regions.

Before the migration, note the following:

- 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.

1.1.5 Can I Upgrade My FlexusL Instances such as vCPUs, Memory, System Disk Capacity, Peak Bandwidth, and Data Package?

Resources in a FlexusL instance can be upgraded together, but not separately. This means you can upgrade the instance specifications to upgrade the vCPUs, memory, system disk capacity, peak bandwidth, and data package all together. For details, see [Upgrading a FlexusL Instance](#).

1.1.6 What Should I Do If I Do Not Have Permission to Purchase FlexusL?

Symptom

Accessing or purchasing FlexusL is not allowed.

Probable Causes

You are an IAM user and do not have the required permissions to access FlexusL.

NOTE

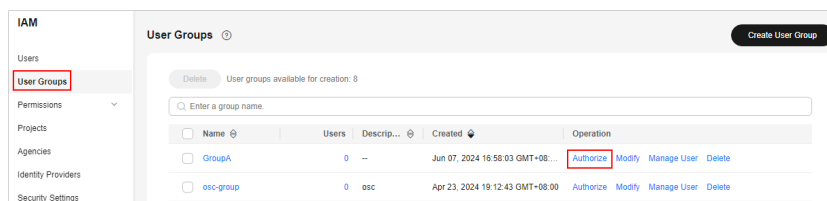
IAM users may encounter this issue. By default, a Huawei account is the administrator. It has full permissions for cloud services and has permission to manage IAM users.

Solution

Add the IAM user to a user group and grant the group **CORS FullAccess** permissions. Then, the IAM user inherits the permissions granted to the user group. The following describes how to grant permissions to an IAM user.

1. Log in to the [IAM console](#) using the account that creates the IAM user.
2. In the left navigation pane, choose **User Groups** and click **Authorize** in the row containing the target user group.

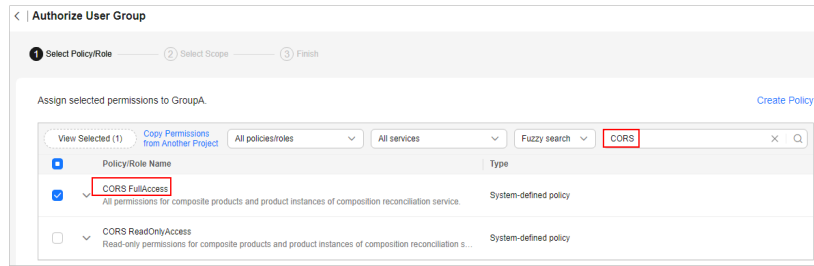
If you have not created a user group, click **Create User Group** to create one.



3. Authorize the user group.
 - a. Select policies and click **Next**.

Search for **CORS** and select **CORS FullAccess** to grant the IAM user full permissions for FlexusL.

You can also search for and select **Tenant Administrator** to grant the IAM user administrator permissions (except for IAM permissions).



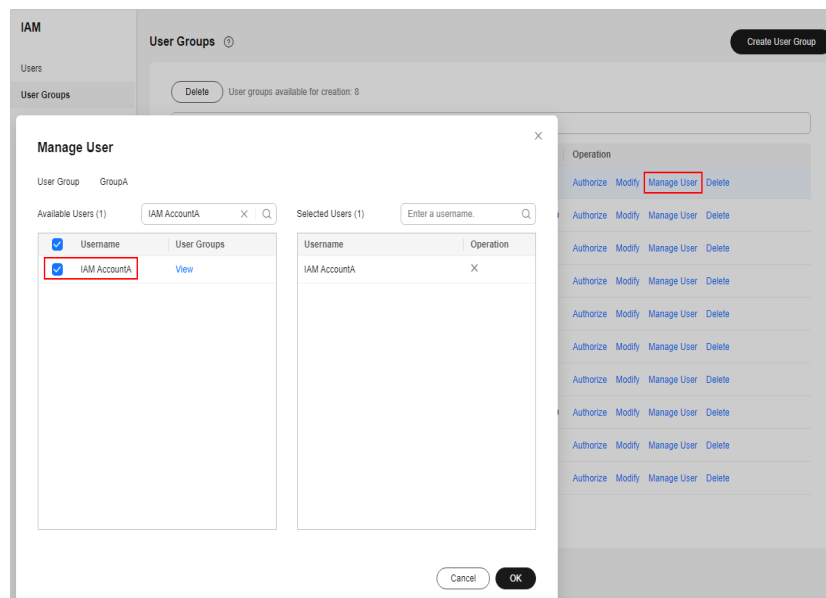
b. Select the authorization scope and click **OK**.

Retain the default setting **All resources**. You can also select other options as needed.

4. On the **User Groups** page, click **Manage User** in the row containing the target user group.

5. Search for the IAM user, select it, and click **OK**.

The IAM user has been added to the user group and inherits the permissions of the user group.



6. Log out of the account and then use the IAM user to log in and access FlexusL.

1.2 Billing

How Will the Traffic in Excess of the Data Package Be Billed?

A FlexusL instance comes with a monthly data package. The traffic usage in excess of the package will be billed on a pay-per-use basis. The excess traffic is billed based on a tiered pricing model, and the unit price varies in different regions.

For details about the unit price of traffic, see [EIP Pricing Details](#). The EIP type is dynamic BGP.

 NOTE

- Only outbound traffic (originating from your server) will be billed. Inbound traffic is free.
- The data package included in the FlexusL service package is a monthly package. A monthly data package starts on the date of purchase and ends at 23:59:59 on the same day of the next month. For example, if you purchase a FlexusL instance at 10:00:00 on June 5, the expiration time of the package is at 23:59:59 (the last second of the day) on July 5. The package for the next month starts from 23:59:59 on July 5 to 23:59:59 on August 5.
- The traffic quota is reset each month. Any unused portion of the data package cannot be rolled over to the next month.

1.3 OS and Image

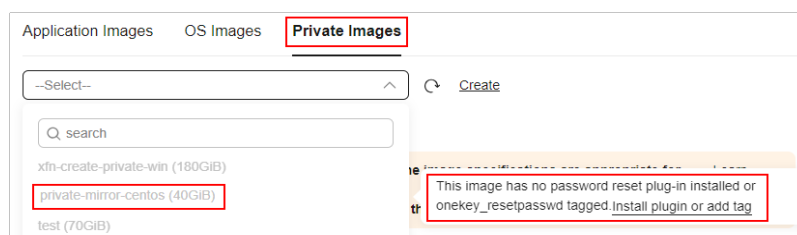
1.3.1 Do FlexusL OS Images Provide Visualized Background Management Pages?

By default, Linux OS images do not provide visualized background management pages. However, the application images provided by FlexusL have visualized dashboards to make image management easier.

1.3.2 What Should I Do If a Private Image Cannot Be Used to Create a FlexusL Instance or Change the OS of an Instance Because the Password Reset Plug-in Is Not Installed on the Image or the Image's `onekey_resetpasswd` Tag Is Missing?

Symptom

When you use a private image to create a FlexusL instance or change the OS, the message "This image has no password reset plug-in installed or `onekey_resetpasswd` tagged." is displayed.



 NOTE

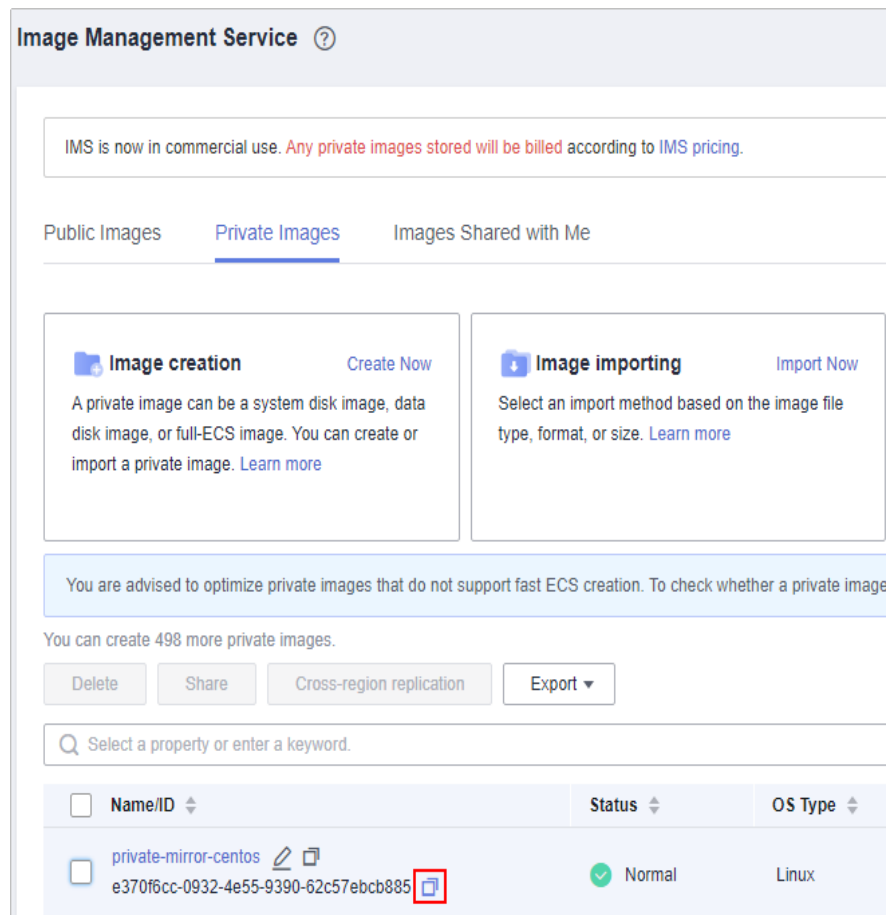
If your private image is not displayed in the private image list of the FlexusL instance, check whether the private image and the FlexusL instance are in the same region. Images are regional resources. FlexusL instances can only be created from private images that are in the same region with them.

Probable Causes

The private image is created from a server on another cloud platform or downloaded from a third party and has no password reset plug-in or `onekey_resetpasswd` tag. Perform the following steps to rectify the fault:

Step 1: Check Whether the Private Image Lacks the `onekey_resetpasswd` Tag

1. Query and copy the ID of the private image on the [IMS console](#).



2. Locate the [ListImages](#) API in API Explorer. Enter the image ID to check whether the private image contains the `onekey_resetpasswd` tag.
 - a. Set the following parameters:
 - Region: Select the region where the private image is located.
 - ID: Enter the private image ID.

Figure 1-1 Selecting a region

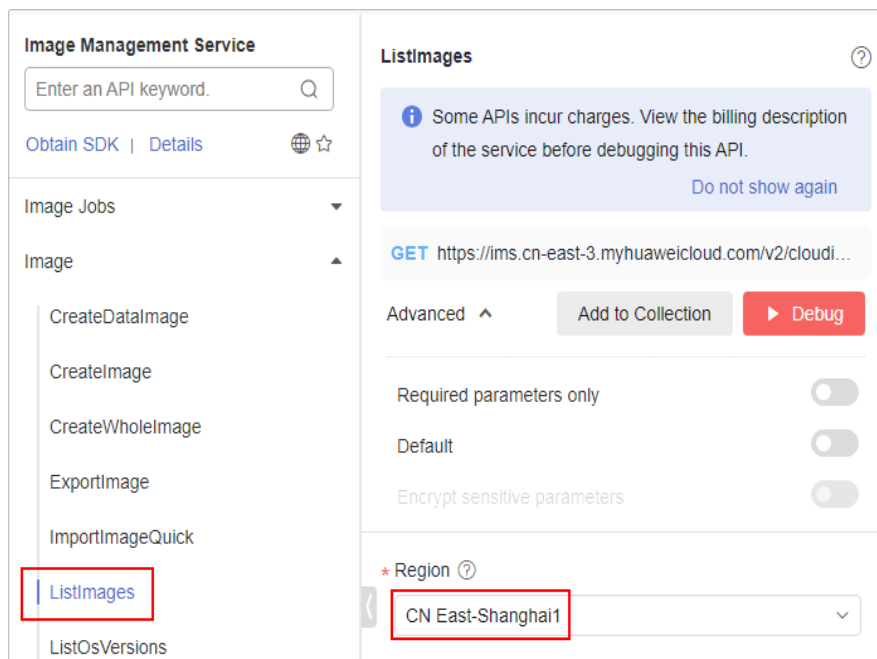
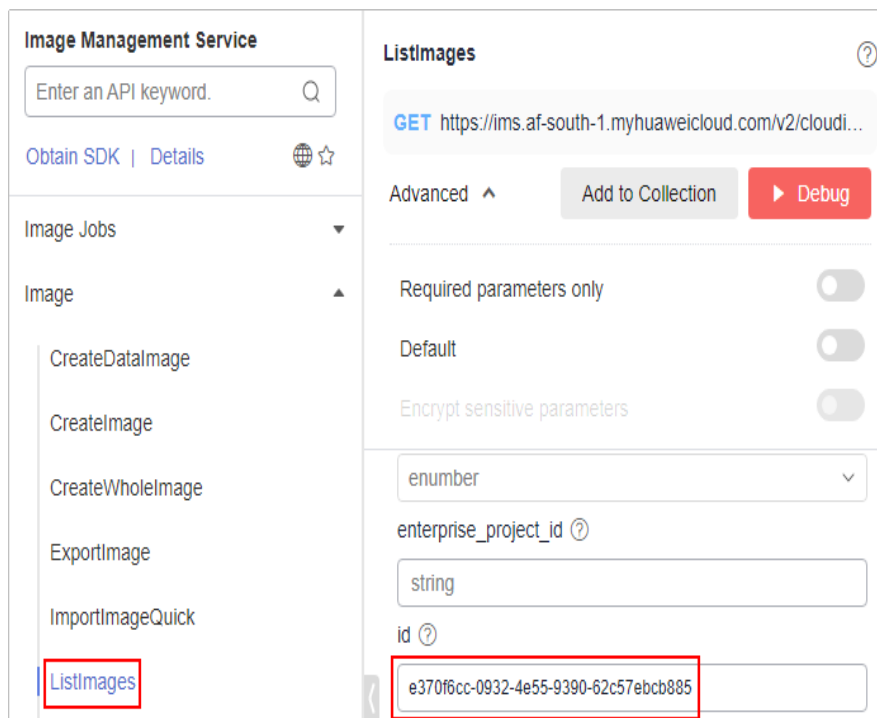


Figure 1-2 Entering the private image ID

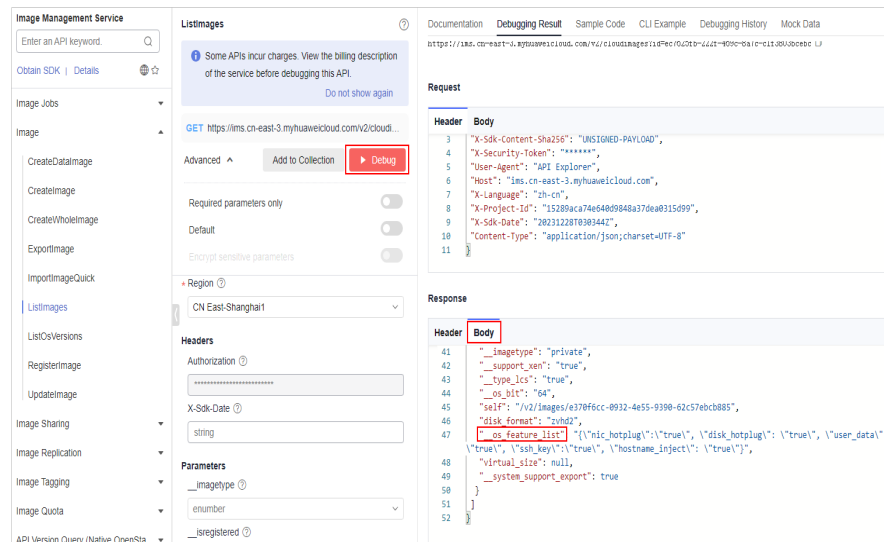


- b. Click **Debug** to view the result.

If the `__os_feature_list` parameter is displayed in the response body and its value contains `\\"onekey_resetpasswd\\": \\"true\\"`, the private image contains the `onekey_resetpasswd` tag. Otherwise, the `onekey_resetpasswd` tag is not contained, as shown in the following figure.

If the private image does not contain the **onekey_resetpasswd** tag, add the tag to the private image by referring to [3](#).

Figure 1-3 The private Image does not contain the onekey_resetpasswd tag



3. Add the **onekey_resetpasswd** tag for the private image.

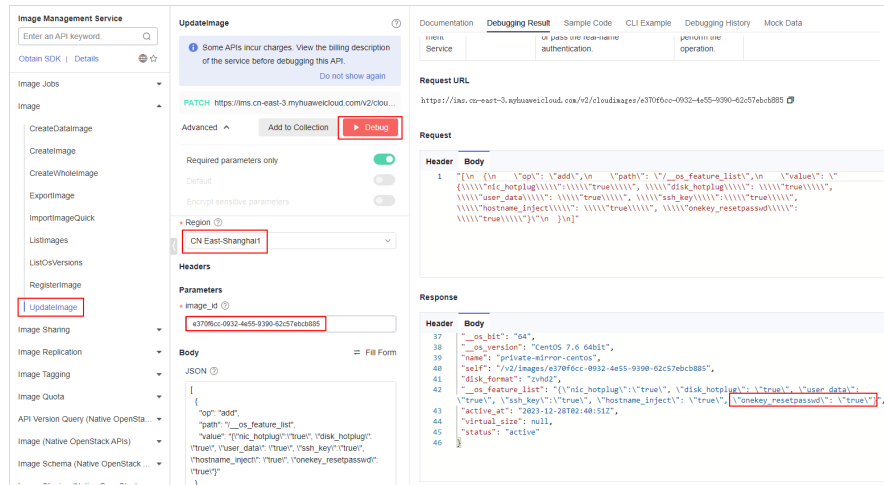
a. Set the following parameters in the **UpdateImage** API:

- Region: Select the region where the private image is located.
- image_id: Enter the private image ID.
- Body: Click **Edit Code** and enter the following content:

```
[
{
  "op": "add",
  "path": "/_os_feature_list",
  "value": "{ \"nic_hotplug\": \"true\", \"disk_hotplug\": \"true\", \"user_data\": \"true\", \"ssh_key\": \"true\", \"hostname_inject\": \"true\", \"onekey_resetpasswd\": \"true\" }"
}
```

b. Click **Debug**, and then view the result.

The **__os_feature_list** parameter is displayed in the response body and its value contains `\"onekey_resetpasswd\": \"true\"`, which means the private image contains the **onekey_resetpasswd** tag.

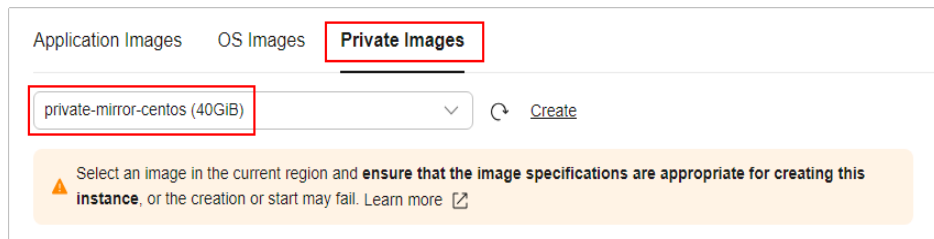


- Refresh the page for creating a FlexusL instance or changing the OS of an instance, and select the private image again.

NOTE

Refresh the page of before you select the private image.

- If the private image can be selected, no further operation is required.
- If you still cannot select the private image, install the password plug-in by referring to [Step 2: Check Whether the Password Reset Plug-in Is Installed in the Private Image.](#)



Step 2: Check Whether the Password Reset Plug-in Is Installed in the Private Image

After using a private image to create a FlexusL instance or change the OS of an instance, [set the password](#) of the FlexusL instance on the console.

- If you can log in to the FlexusL instance using the new password, the password reset plug-in has been installed in the private image.
- If you cannot log in to the FlexusL instance using the new password, the password reset plug-in has not been installed in the private image. In this case, install the plug-in.
 - If you know the initial password of the private image, install the password reset plug-in by referring to [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?](#)
 - If you forget the initial password of the private image, install the password reset plug-in by referring to [What Should I Do If the Password Cannot Be Reset After I Use a Private Linux Image to Create](#)

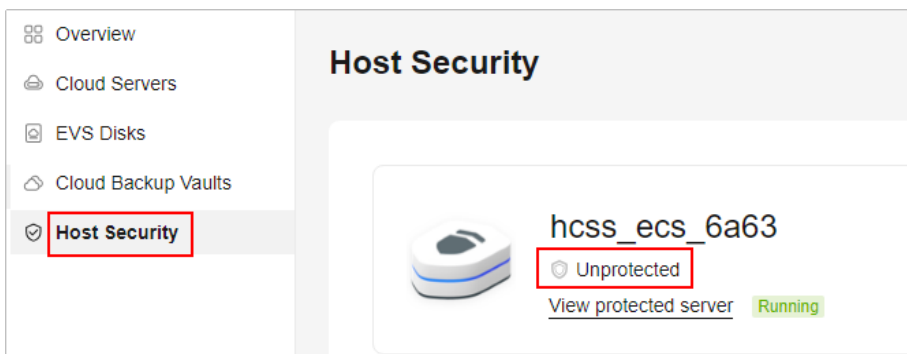
a FlexusL Instance or Change the OS of an Existing Instance and I Forgot the Initial Password of the Private Image?

1.3.3 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?

Symptom

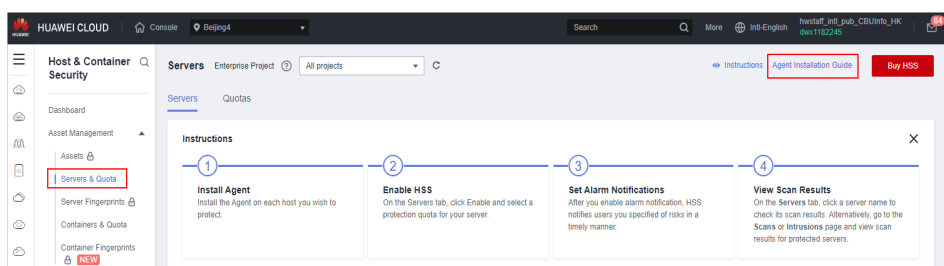
If Host Security Service (HSS) is included in your private image, but after you use the image to create a FlexusL instance or change the OS of an instance, the HSS status is **Unprotected**, the possible cause is that the HSS agent is not installed in your private image. Install and enable the agent to enable HSS.

Figure 1-4 HSS Unprotected status



Procedure

1. Log in to the **HSS console**. Choose **Asset Management > Servers & Quota** in the left navigation pane. On the displayed page, click **Agent Installation Guide** in the upper right corner.



2. Select the server OS as prompted. Click **Copy** to obtain the installation command.
Select **CLOUD** server and **x86** for **Select Server Type**.


```

--- www.a.shifen.com ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 4.582/4.518/4.535/0.069 ms
root@localhost network-scripts# curl -k -O 'https://hss-agent.cn-south-1.mhuaweicloud.com:10100/package/agent/linux/x86/hostguard.x86_64.rpm'
root@localhost network-scripts# curl -k -O 'https://hss-agent.cn-south-1.mhuaweicloud.com:10100/package/agent/linux/x86/hostguard.x86_64.rpm' && echo 'MASTER_IP=hss-agent.cn-south-1.mhuaweicloud.com:10100' > hostguard_setup_config.conf && echo 'SLAVE_IP=hss-agent-slave.cn-south-1.mhuaweicloud.com:10100' > hostguard_slave_config.conf && echo 'ORG_ID=' > hostguard_setup_config.conf && rpm -i -h hostguard.x86_64.rpm && rm -f hostguard_setup_config.conf && rm -f hostguard_slave_config.conf && rpm -i -h hostguard.x86_64.rpm && rm -f hostguard.x86_64.rpm
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 27.3M 0 27.3M 0 0 86.0M 0 --:--:-- --:--:-- --:--:-- 86.3M
Preparing...##### (100%)
Updating / installing...
1: hostguard-3.2.0-1##### (100%)
hostguard starting ...
memory cgroup is disabled
your agent IS in normal mod.
hostwatch is running
hostguard is running with normal mod
Hostguard is running.
Hostguard installed.
root@localhost network-scripts#
    
```

If the following message is displayed, rectify the fault by referring to [Troubleshooting: Modifying the NIC Configuration File](#).

```

root@localhost ~# curl -k -O 'https://hss-agent.cn-south-1.mhuaweicloud.com:10100/package/agent/linux/x86/hostguard.x86_64.rpm' && echo 'MASTER_IP=hss-agent.cn-south-1.mhuaweicloud.com:10100' > hostguard_setup_config.conf && echo 'SLAVE_IP=hss-agent-slave.cn-south-1.mhuaweicloud.com:10100' > hostguard_slave_config.conf && echo 'ORG_ID=' > hostguard_setup_config.conf && rpm -i -h hostguard.x86_64.rpm && rm -f hostguard_setup_config.conf && rm -f hostguard_slave_config.conf && rpm -i -h hostguard.x86_64.rpm && rm -f hostguard.x86_64.rpm
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
0 0 0 0 0 0 0 --:--:-- --:--:-- --:--:-- 0
Network is unreachable
root@localhost ~#
    
```

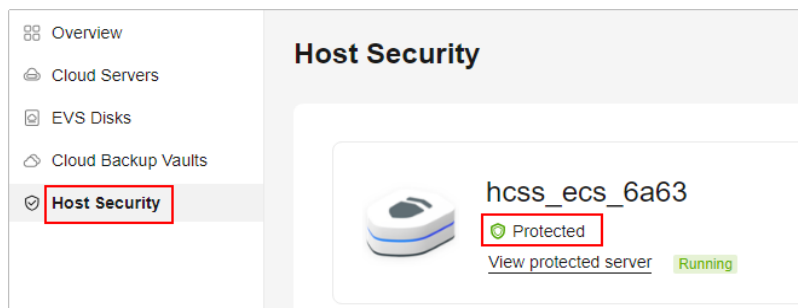
- Return to the [HSS console](#). Choose **Asset Management > Servers & Quota** in the left navigation pane. After the agent is online, click **Enable Protection** in the **Operation** column.

It takes about 10 minutes for the agent status to change to **Online**.

- Set HSS to yearly/monthly billing and the basic edition, read and select the statement, and click **OK**.

FlexusL instances support the HSS basic edition. Do not select other editions.

- Return to the FlexusL console and check that HSS is in the **Protected** status.



Troubleshooting: Modifying the NIC Configuration File

- Run the `ip addr` command to check the NIC name.

```

root@localhost ~# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether fa:16:3e:bc:14:60 brd ff:ff:ff:ff:ff:ff
root@localhost ~#
    
```

- Run `cd /etc/sysconfig/network-scripts/` and then `ls` to view the NIC configuration file.


```

root@localhost ~# cd /etc/sysconfig/network-scripts/
root@localhost network-scripts# ls
ifcfg-eth0  ifdown-ppp  ifdown-routes  ifup  ifup-ip6  ifup-ppp  ifup-tunnel
ifcfg-lo    ifdown-ip6  ifdown-sit     ifup-aliases  ifup-isdn  ifup-routes  ifup-wireless
ifdown     ifdown-isdn  ifdown-Team  ifup-bnep     ifup-plip  ifup-sit     init.ip6-global
ifdown-bnep  ifdown-post  ifdown-TeamPort  ifup-eth     ifup-plusb  ifup-Team  network-functions
ifdown-eth  ifdown-ppp  ifdown-tunnel  ifup-lppp    ifup-post   ifup-TeamPort  network-functions-ip6
root@localhost network-scripts#
    
```

3. Run the `vi ifcfg-eth0` command to edit the file and set **ONBOOT** to `yes`.

```

TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
BOOTPROTO=dhcp
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_FAILURE_FATAL=no
IPV6_ADDR_GEN_MODE=stable-privacy
NAME=eth0
UUID=be2803d4-5812-4b8b-98e9-734b1ac0d98a
DEVICE=eth0
ONBOOT=yes
    
```

4. Run the `service network start` command to start the network service.

```

"ifcfg-eth0" 15L, 278C written
[root@localhost network-scripts]# service network start
Starting network (via systemctl): [ OK ]
[root@localhost network-scripts]#
    
```

1.3.4 How Do I Check that an Application Image Is Up and Running?

After you use an application image to create a FlexusL instance or reinstall or change the OS of a FlexusL instance, ensure that the application has been installed from the image and running properly on the instance before you change the password of the instance.

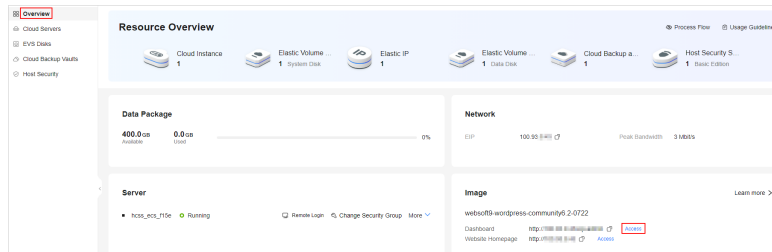
NOTICE

When an application image is being used to install an application, do not restart, power on, and power off the server or reset the password. Otherwise, the installation may fail and you **cannot log in to the image application dashboard**.

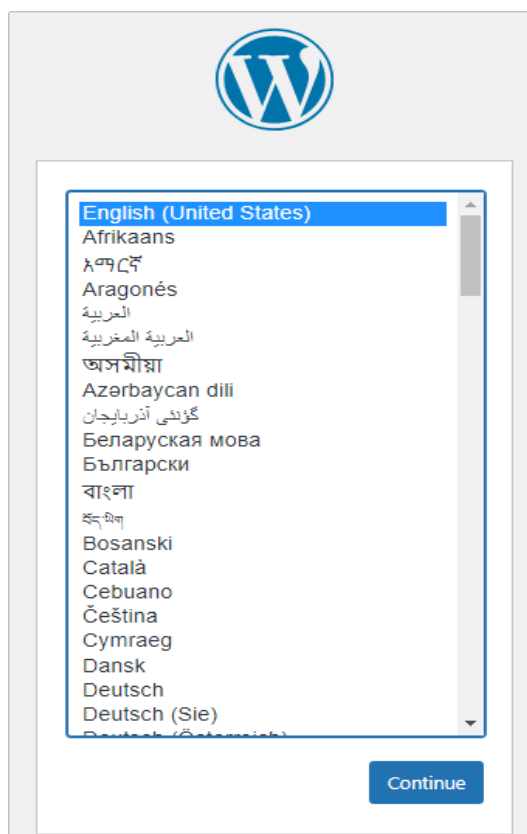
1. Log in to the FlexusL console and click a resource card to go to the instance details page.
2. On the **Overview** page, in the **Image** area, click **Access** to access the image application dashboard.

NOTE

You can access the dashboard only after the port for accessing the dashboard is enabled in the security group. If you cannot access the dashboard, check whether the port is enabled in the security group. For details, see [Configuring a Security Group](#).



If a boot or login page is displayed on the dashboard normally, the application image has been finished with installing the application. The following shows an example boot page of WordPress. Otherwise, wait a minute and try again later.



1.4 Traffic

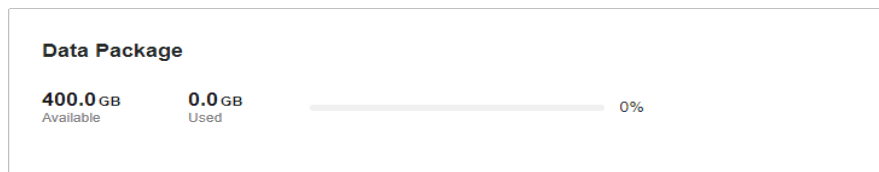
How Is the Data Package Provided by FlexusL Billed?

- Only outbound traffic (originating from your server) will be billed.
- The data package included in the FlexusL service package is a monthly package. A monthly data package starts on the date of purchase and ends at 23:59:59 on the same day of the next month. For example, if you purchase a FlexusL instance at 10:00:00 on June 5, the expiration time of the package is at 23:59:59 (the last second of the day) on July 5. The package for the next month starts from 23:59:59 on July 5 to 23:59:59 on August 5.

- Service traffic is preferentially deducted from the data package. Any traffic usage in excess of the package is billed by traffic. The excess traffic is billed based on a tiered pricing model, and the unit price varies in different regions. For details about the unit price of traffic, see [EIP Pricing Details](#). The EIP type is dynamic BGP.
- The traffic quota is reset each month. Any unused portion of the data package cannot be rolled over to the next month.
- After you unsubscribe from or stop a FlexusL instance, the excess traffic will no longer generate costs.

How Do I View the Traffic Usage of My FlexusL Instance?

1. Log in to the FlexusL console.
2. Click the target instance name. On the **Overview** page, view the traffic usage in the **Data Package** area.
 - Available: The remaining traffic in the monthly data package.
 - Used: The traffic volume that has been used in the current month.
 - Traffic usage: The traffic usage in the current month, which can be calculated using the following formula: Traffic usage = Used traffic / Available traffic



Can I Purchase a Data Package Separately?

No. A FlexusL instance provides a monthly fixed data package.

Service traffic is preferentially deducted from the data package. Any traffic usage in excess of the package is billed by traffic. The excess traffic is billed based on a tiered pricing model, and the unit price varies in different regions.

You can upgrade the instance specifications to increase the data package. For details, see [Upgrading a FlexusL Instance](#).

1.5 Disk Management

Are There Any Restrictions on Using Disks In a FlexusL Instance?

- Adding data disks
 - A FlexusL instance package can have only one data disk.
 - Only data disks newly added from the FlexusL console can be attached to FlexusL instances.
 - A newly purchased data disk must be initialized in the cloud server OS before you can use it (the system disk does not need to be initialized). For details, see [Initializing a Data Disk](#).

- Added data disks have the same expiration time as their FlexusL instances. They cannot be detached or unsubscribed from separately.
- Expanding data disk capacity
 - Only data disks can be expanded separately. System disks cannot be expanded. The maximum capacity that a data disk can be expanded to is 1,024 GiB.
 - The data disk capacity can only be expanded, not reduced.
 - Resources added to the package have the same expiration time as the FlexusL instance, and they cannot be unsubscribed separately.

Can I Use EVS Disk Snapshots to Back Up Server Data for FlexusL Instances?

FlexusL server data cannot be backed up using EVS disk snapshots. To back up and restore server data, use Cloud Backup and Recovery (CBR). For details, see [Backing Up and Restoring a FlexusL Instance](#).

1.6 Password

1.6.1 General Password Questions

What Are the Default Username and Password for Logging In to a Cloud Server?

A FlexusL instance does not have an initial password. After purchasing a FlexusL instance, you need to manually set a password. For details, see [Setting or Resetting a Password](#).

What Should I Do If I Forgot the Password for Logging In to a Cloud Server?

If you forget the server login password, you can reset it. For details, see [Setting or Resetting a Password](#).

1.6.2 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?

Symptom

After I use a private Linux image to create a FlexusL instance or change the OS of an existing instance, I cannot log in to the server in the instance by resetting the password. If the private image is created from a server on another cloud platform or downloaded from a third party, the image may not have the password reset plug-in installed, so the password reset function is unavailable.

- If you know the password for logging in to the server created from the private image or whose OS is changed using the private image, install the plug-in by referring to [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?

- If you forgot the server login password, see the content in this section.

This section describes how to reset the password of user **root**. After resetting the password, you can log in to the cloud server and change the private key or reset the password of a non-root user.

Prerequisites

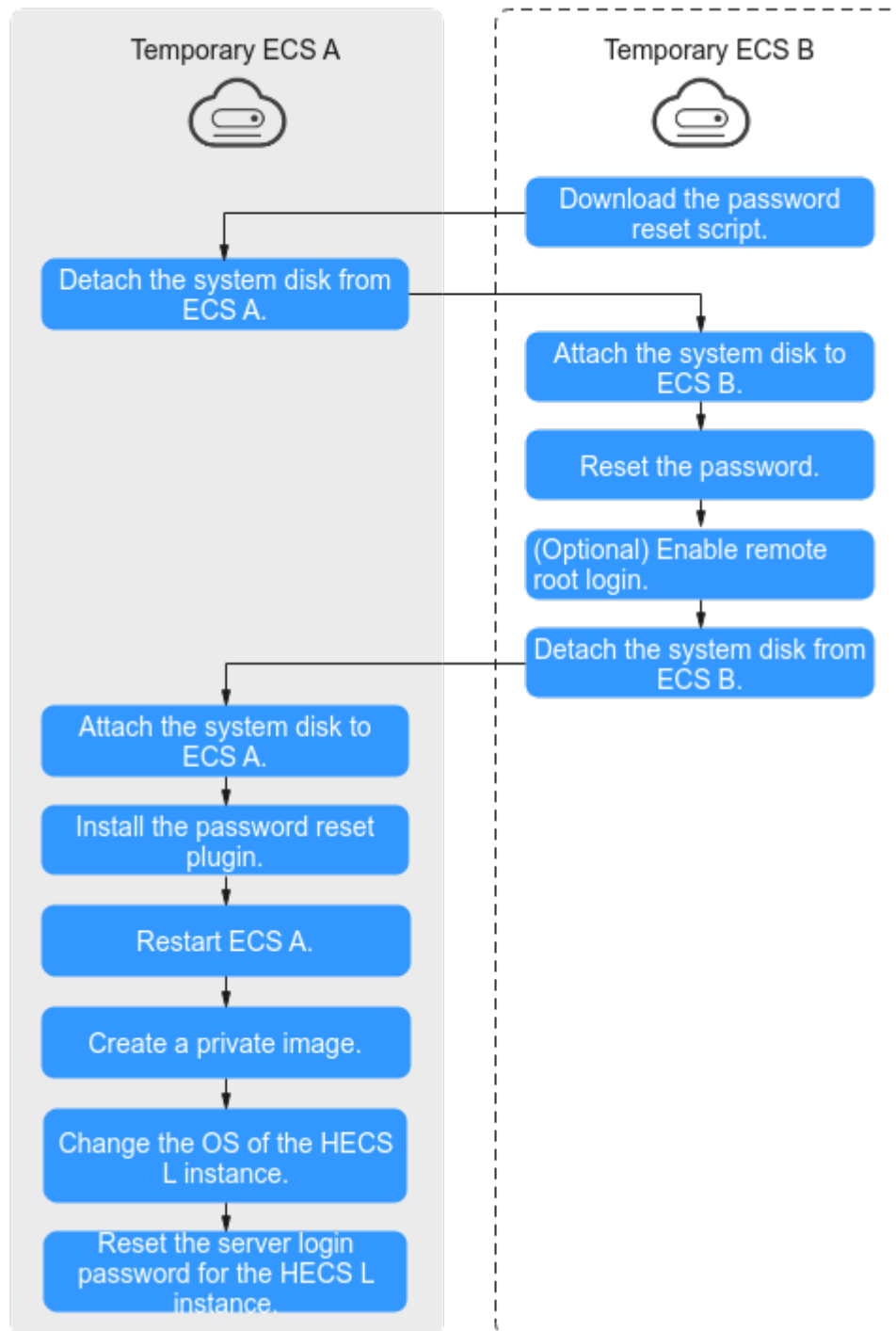
- Use the private image that has no password reset plug-in installed to create a temporary Linux ECS A.
- Prepare a temporary Linux ECS B that resides in the same AZ as the temporary ECS A.

NOTE

- Ensure that the temporary ECSs A and B are in the same region as the FlexusL instance for which you are going to install the password reset plug-in.
 - You can select an existing ECS or purchase an ECS as the temporary ECS B.
 - After the password is reset, delete the temporary ECS B in a timely manner to avoid generating costs.
- An EIP has been bound to the temporary ECS B.

Process Flow

Figure 1-5 Process flow of resetting a password





Procedure

1. Download the password reset script and upload the script to the temporary ECS B.
Download the password reset script. Use a connection tool, such as WinSCP, to upload the obtained **changepasswd.sh** script to the temporary ECS B.

You can download WinSCP from <https://winscp.net/>.

- In the password reset script, comment out line 164 and uncomment lines 165 to 173.

```
161 function create_setpasswd_sh()
162
163     export PATH=$PATH:/bin:
164     #chroot ${mountPath} bash -c "(echo '{password}'; echo '{password}') | passwd root > /dev/null 2>&1"
165     filename=${mountPath}/etc/init.d/setpasswd.sh
166     if [ -f $filename ];then
167         rm $filename
168     fi
169     echo "#!/bin/bash" >> $filename
170     echo "echo 'root:${password}' | chpasswd" >> $filename
171     echo "rm -f /etc/init.d/setpasswd.sh" >> $filename
172     chmod +x $filename
173     echo "create setpasswd.sh success."
174 }
175
```

- Stop the temporary ECS A, detach its system disk, and attach it to the temporary ECS B.
 - Log in to the management console.
 - Click  in the upper left corner and select a region and project.
 - Click . Under **Compute**, click **Elastic Cloud Server**.
 - Stop the temporary ECS A, click its name to go to the details page, and click the **Disks** tab.

NOTE

Do not forcibly stop the temporary ECS A, or the password reset may fail.

- Locate the row containing the system disk to be detached and click **Detach**.
- Attach the system disk to the temporary ECS B.
 - Click the temporary ECS B to go to the details page and click the **Disks** tab.
 - Click **Attach Disk**. In the displayed dialog box, select the system disk detached in step 3.e and attach it to the temporary ECS B.
 - Log in to the temporary ECS B and reset the password.
 - In the server list, locate the row containing the temporary ECS B and click **Remote Login** in the **Operation** column.
 - Run the following command to view the directory of the system disk that was detached from the temporary ECS A now attached to the temporary temporary ECS B:

```
fdisk -l
```

Figure 1-6 Viewing the directory of the system disk

```
root@temp-02-zuh:~# fdisk -l
Disk /dev/sda: 50 GiB, 53687091200 bytes, 104857600 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x44451b07

Device     Boot Start      End  Sectors  Size Id Type
/dev/sda1  *        2048 104857566 104855519   50G 83 Linux

Disk /dev/sdb: 100 GiB, 107374182400 bytes, 209715200 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x183aae88

Device     Boot  Start      End  Sectors  Size Id Type
/dev/sdb1  *        2048 1126399 1124352   549M  7 HPFS/NTFS/exFAT
/dev/sdb2  1126400 83884031 82757632  39.5G  7 HPFS/NTFS/exFAT
root@temp-02-zuh:~#
```

- c. Run the following commands in the directory where the **changepasswd.sh** script is stored to execute the password reset script:

```
chmod +x changepasswd.sh
```

```
./changepasswd.sh
```

When you run the password reset script, if the system displays a message indicating that there is no command related to logical volume manager (LVM), such as the message "no lvs command", install an LVM tool on the temporary ECS B. The LVM2 tool is recommended and you can install it by running the **yum install lvm2** command.

NOTE

If the temporary ECSs A and B both run CentOS 7, a mount failure may occur during script execution. To resolve this issue, replace **mount \$dev \$mountPath** with **mount -o nouuid \$dev \$mountPath** in the script.

- d. Enter the new password and the directory obtained in step 5.b as prompted.

The password is reset if the following information is displayed:
set password success.

6. (Optional) Enable remote root login for non-root users.

```
vi /etc/ssh/sshd_config
```

Modify the following settings:

- Change **PasswordAuthentication no** to **PasswordAuthentication yes**.
Alternatively, uncomment **PasswordAuthentication yes**.
- Change **PermitRootLogin no** to **PermitRootLogin yes**.
Alternatively, uncomment **PermitRootLogin yes**.
- Change the value of **AllowUsers** to **root**.

Search for **AllowUsers** in the file. If **AllowUsers** is missing, add it at the end of the file.

7. Stop the temporary ECS B, detach its system disk, and attach it back to the temporary ECS A. Then, restart the temporary ECS B.

- a. Stop the temporary ECS B, go to its details page, and click the **Disks** tab.
 - b. Locate the row containing the system disk that was attached in [3](#) and click **Detach**.
 - c. Click the temporary ECS A to go to the details page and click the **Disks** tab.
 - d. Click **Attach Disk**. In the displayed dialog box, select the system disk detached in [7.b](#).
8. Install the password reset plug-in on the temporary ECS A. For details, see [Procedure](#).
 9. Restart the temporary ECS A.
 10. Create a system disk image from the temporary ECS A. For details, see [Creating a System Disk Image](#).
 11. Use the system disk image to change the OS of the FlexusL instance. For details, see [Changing an OS](#).

After the preceding operations are complete, you can reset the password for logging in to the server in your FlexusL instance. For details, see [Setting or Resetting a Password](#).

1.6.3 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?

Symptom

After I use a private Linux image to create a FlexusL instance or change the OS of an existing instance, I cannot log in to the server in the instance by resetting the password. If the private image is created from a server on another cloud platform or downloaded from a third party, the image may not have the password reset plug-in installed, so the password reset function is unavailable.

- If you know the password for logging in to the server created from the private image or whose OS is changed using the private image, install the plug-in by referring to the content in this section. After the plug-in is installed, you can reset the password.
- If you forgot the server login password, see [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?](#) After the plug-in is installed, you can reset the password.

Procedure

1. [Log in](#) to the server in the FlexusL instance as user **root**.
2. Run the following command to check whether CloudResetPwdAgent has been installed:

```
ls -lh /Cloud*
```

Figure 1-7 Checking whether the plug-in has been installed

```
[root@ecs-test ~]# ls -lh /Cloud*
total 20K
drwx----- 2 root root 4.0K Jun 13 14:13 bin
drwxr-xr-x 2 root root 4.0K Jun 13 11:53 conf
drwx----- 3 root root 4.0K Jun 13 11:53 depend
drwx----- 2 root root 4.0K Jun 13 11:53 lib
drwx----- 2 root root 4.0K Jun 13 14:13 logs
[root@ecs-test ~]#
[root@ecs-test ~]#
```

Check whether the command output is similar to that shown in [Figure 1-7](#).

- If yes, the plug-in has been installed. No further actions are required.
- If no, the plug-in has not been installed. Go to the next step.

3. **Obtain the one-click password reset plug-in CloudResetPwdAgent.zip and verify its integrity (Linux).**

There is no special requirement for the directory where the plug-in should be stored.

4. Decompress **CloudResetPwdAgent.zip**.

There is no special requirement for the directory where the **CloudResetPwdAgent.zip** should be decompressed.

unzip -o -d *Decompressed directory* CloudResetPwdAgent.zip

Example:

If the plug-in is decompressed to **/home/linux/test**, run the following command:

unzip -o -d /home/linux/test CloudResetPwdAgent.zip

5. Install the password reset plugin.

- a. Open the **CloudResetPwdAgent.Linux** file.

**cd {*Plug-in decompressed directory*}/CloudResetPwdAgent/
CloudResetPwdAgent.Linux**

Example:

If the plug-in is decompressed to **/home/linux/test**, run the following command:

**cd /home/linux/test/CloudResetPwdAgent/
CloudResetPwdAgent.Linux**

- b. Grant the execute permission to the **setup.sh** file.

chmod +x setup.sh

- c. Install the plug-in.

sudo sh setup.sh

If "cloudResetPwdAgent install successfully." is displayed and "Failed to start service cloudResetPwdAgent" is not displayed, the installation is successful.

NOTE

If the installation failed, check whether the installation environment meets requirements and try to install the plug-in again.

6. Modify file permissions for the password reset plug-in.

```
chmod 700 /CloudrResetPwdAgent/bin/cloudResetPwdAgent.script
```

```
chmod 700 /CloudrResetPwdAgent/bin/wrapper
```

```
chmod 600 /CloudrResetPwdAgent/lib/*
```

After the preceding operations are complete, restart the FlexusL instance on the console and then you can reset the password.

2 FlexusX

2.1 Product Consulting

What Are the Differences Between FlexusX, FlexusL, and ECS Instances?

- A FlexusL instance is a package of resources that include cloud servers, EVS disks, EIPs, CBR vaults, and HSS. Resources in the package are created and managed together. FlexusL instances provide various featured application images to help you quickly set up service environments. FlexusL instances are easy to use and friendly to beginners in cloud computing.

Both FlexusL and FlexusX instances are lightweight cloud servers. FlexusL instances are sold and managed as packages. FlexusX instances provide more flexible specifications and functions and have fewer constraints.

- An ECS instance is a server that supports high-load scenarios. It provides multiple billing modes, flavor types, image types, and disk types. You can customize ECS configurations for different service scenarios.

FlexusX provides functions similar to what ECS provides. It is a simplified version of ECS. FlexusX simplifies the purchase process of cloud servers. It supports one-stop purchase for compute, disk, and network resources, as well as Cloud Eye and HSS cloud services. It helps you configure cloud servers easily and efficiently. In addition, FlexusX allows you to flexibly configure vCPU to memory ratios to match your specific needs and change specifications without service interruptions.

For details about the differences among them, see [Table 1](#).

Table 2-1 Differences among FlexusX, FlexusL, and ECS

Item	FlexusL	FlexusX	ECS
Target customer	Small- and medium-sized enterprises and developers with low service loads and requiring fast deployment	Small- and medium-sized enterprises and developers with medium service loads and requiring flexible configurations	High-load and full-service scenarios, such as website applications, enterprise e-commerce, graphics rendering, data analysis, and high-performance computing.
Feature	Various built-in solutions and images, quick environment setup, easy service management	Custom specifications, stable and robust performance, and flexible pay-per-use billing	Flexible vCPU, memory, and bandwidth configuration; reliable, secure, and efficient application environments
CPU architecture	x86	x86	x86 or Arm
Billing mode	Yearly/Monthly FlexusL instances are sold and managed as packages. Resources created with FlexusL instances cannot be disassociated, deleted, or unsubscribed from separately.	<ul style="list-style-type: none"> • Pay-per-use • Yearly/Monthly 	<ul style="list-style-type: none"> • Yearly/Monthly • Pay-per-use • Spot pricing

Item	FlexusL	FlexusX	ECS
Specifications	<ul style="list-style-type: none"> Multiple instance specifications are available. Instance specifications can only be upgraded. 	<ul style="list-style-type: none"> The vCPU to memory ratio can be customized. The sizes of vCPU and memory resources are as follows: <ul style="list-style-type: none"> Performance mode disabled: 2 to 16 vCPUs, 2 GiB to 128 GiB memory Performance mode enabled: 2 to 32 vCPUs, 2 GiB to 256 GiB memory The memory size is determined by the number of vCPUs. For details, see the specifications displayed on the console. Instance specifications can be flexibly upgraded or degraded. 	<ul style="list-style-type: none"> Multiple instance specifications are available. Instance specifications can be flexibly upgraded or degraded.
Disk	<p>Each FlexusL instance has a system disk with a fixed capacity by default and supports one data disk at most. Data on FlexusL instances cannot be restored using snapshots on the console.</p> <ul style="list-style-type: none"> System disk: General Purpose SSD Data disk: General Purpose SSD V2 	<p>System disk specifications can be customized. Supported disk types:</p> <ul style="list-style-type: none"> System disk: common I/O, high I/O, General Purpose SSD, ultra-high I/O, and General Purpose SSD V2 Data disk: common I/O, high I/O, General Purpose SSD, ultra-high I/O, and General Purpose SSD V2 	<p>System disk specifications can be customized.</p> <ul style="list-style-type: none"> System and data disks: All disk types are supported. <p>For details about disk types supported by ECS, see Disk Types and Performance.</p>

Item	FlexusL	FlexusX	ECS
Network	<ul style="list-style-type: none"> A fixed EIP is assigned by default. EIP bandwidth is billed by traffic. A FlexusL instance comes with a monthly data package. The VPC, private IP address, and public IP address of a FlexusL instance cannot be changed. 	<ul style="list-style-type: none"> You can choose whether to bind an EIP. You can select an EIP type. Bandwidth is billed by bandwidth, traffic, or shared bandwidth. 	<ul style="list-style-type: none"> You can choose whether to bind an EIP. You can select an EIP type. Bandwidth is billed by bandwidth, traffic, or shared bandwidth.
Advantage	Easy setup and O&M, cost-effective, and secure	<ul style="list-style-type: none"> Easy setup and O&M, cost-effective, and secure FlexusX instances that use the Huawei Cloud EulerOS 2.0 public image support Nginx, Redis, and MySQL application acceleration. 	Stable, reliable, scalable, secure, and hardware-software synergy
Image	<ul style="list-style-type: none"> Five types of mainstream system images provided Various application images provided Private system disk images supported 	<ul style="list-style-type: none"> Various public images provided Private images shared images supported 	<ul style="list-style-type: none"> Various public images provided Private images, shared images, and KooGallery images supported
Login mode	Password	Password or key pair	Password or key pair
Associated Service	<ul style="list-style-type: none"> HSS (basic edition) CBR 	<ul style="list-style-type: none"> HSS (basic and enterprise editions) Cloud Eye CBR 	<ul style="list-style-type: none"> HSS (all editions) Cloud Eye CBR

What Regions Does FlexusX Support?

FlexusX instances are now only available in the CN-Hong Kong and AP-Singapore regions.

2.2 Billing

What Billing Modes Does FlexusX Support?

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

2.3 OS and Image

What Images Does FlexusX Support?

- Public images: Huawei Cloud EulerOS, CentOS, Ubuntu, EulerOS, Debian, openSUSE, AlmaLinux, Rocky Linux, CentOS Stream, CoreOS, openEuler, and FreeBSD
- Shared images and private images of the following types:
 - System disk images, data disk images, and full-server images
 - Linux private images created using x86 servers

3 FlexusRDS

3.1 What Is FlexusRDS?

FlexusRDS is a lightweight relational database service developed for startups and individuals. It allows you to easily set up and manage DB instances and frees you to focus on your core business.

3.2 Can FlexusRDS and RDS for MySQL Instances Access Each Other?

FlexusRDS and RDS for MySQL are two different products and cannot access each other.

3.3 Can I Change the Instance Class of My FlexusRDS Instance?

- No. FlexusRDS provides preconfigured database plans (each plan has fixed specifications) to simplify database creation. You can choose one of the plans that best suits your needs. Or [submit a service ticket](#) to contact customer service for professional suggestions. You can purchase FlexusRDS instances by choosing a database plan. The specifications in a plan cannot be changed after purchase.
- If your purchased database plan cannot keep up with the growth in service data, you can restore your instance data to a new instance.

3.4 Does FlexusRDS Support Cross-AZ HA?

Yes.

When purchasing a FlexusRDS instance, you can select a high-availability plan. The primary and standby instances are automatically deployed in two different AZs. If your application workloads experience heavy use and require data redundancy, high-availability instances are recommended.

3.5 What Is the Backup Policy of FlexusRDS?

After you purchase a DB instance, click the instance name and go to the **Backups & Restorations** tab page. Automated backups and manual backups are available.

- Automated backup is enabled by default. To save backup space and costs, automated backups are retained for seven days. At the end of this period, the automated backups will be deleted. If you want to retain backups for a longer time, create manual backups.
- You can create manual backups as needed. Manual backups can be downloaded to your local PC. Manual backups will not be deleted even after seven days. You can restore data beyond seven days using manual backups.
- Both automated and manual backups are stored on OBS and occupy the free OBS space.
- FlexusRDS backup uses the open-source software extrabackup.

3.6 How Are FlexusRDS Backups Billed?

Both full and incremental backups of FlexusRDS are stored on OBS. FlexusRDS provides free backup space of the same size as your purchased storage space. For example, if you purchase a 2U4GB_120GB instance, you will get an instance with 2 vCPUs, 4 GB of memory, 120 GB of storage space, and 120 GB of OBS backup space. You will only be billed additionally for backup space in excess of 120 GB. The backup space is billed on a pay-per-use basis. For details, see [Price Calculator](#).

3.7 How Do I Download Backups to Restore Data Locally?

On the **Backups & Restorations** page, select a backup, click **Download** in the **Operation** column, and download the backup as prompted.

To download a manual backup, you need to create a manual backup first and then download it.

3.8 Why Does the Root User Not Have Super Permissions?

FlexusRDS does not provide super permissions for the **root** user. Super permissions allow you to execute management commands, such as **reset master**, **set global**, **kill thread_ID**, and **reset slave**. These operations may cause primary/standby replication errors.

If you need to perform operations that require super permissions, FlexusRDS provides alternative methods.

Example 1: The command `set global parameter_name=parameter_value;` cannot be used to modify parameter values of a FlexusRDS instance. You can modify FlexusRDS instance parameter values only through the console.

Example 2: An error is reported after you run `create definer='root'@'%'
trigger(procedure)...` because the `root` user does not have super permissions. To solve this problem, delete `definer='root'` from the command.

3.9 Which Storage Engine Does FlexusRDS Provide?

FlexusRDS provides the InnoDB storage engine by default. The InnoDB engine is the preferred engine for transactional databases. It supports Atomicity, Consistency, Isolation, Durability (ACID) transaction security tables, row locks, and foreign keys. In versions later than MySQL 5.5.5, InnoDB is used as the default storage engine.

3.10 Why Does FlexusRDS Not Support the MyISAM Storage Engine?

The reasons are as follows:

- MyISAM engine tables do not support transactions. They only support table-level locks. As a result, read and write operations conflict with each other.
- MyISAM is not good at protecting data integrity. Data can be damaged or lost.
- If data is damaged, MyISAM does not support data restoration provided by FlexusRDS. Data can only be restored manually.
- Data can be transparently migrated from MyISAM to InnoDB without changing code.

3.11 Does FlexusRDS Support Read Replicas?

No. FlexusRDS is designed to provide lightweight, less expensive, ready-to-use databases for startups and individuals. If you want to use read replicas, we recommend Relational Database Service (RDS).

3.12 Why Can't I Ping the EIP After It Is Bound to My FlexusRDS Instance?

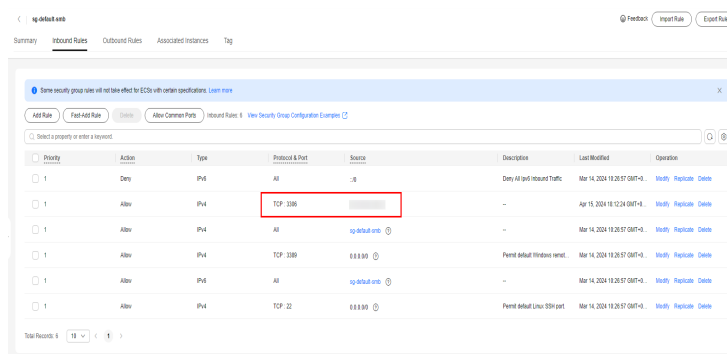
Fault Location

1. Check security group rules.
2. Check network ACLs.
3. Ping the EIP from another FlexusX instance in the same region.

Solution

1. Check security group rules.
 - a. To connect to your DB instance through an EIP, add the EIP and port **3306** to an inbound rule of security group **sg-default-smb**. For details, see [Adding a Security Group Rule](#).

Figure 3-1 Adding an inbound rule



2. Check network ACLs.
 - a. Check the network ACL status.
 - b. Check whether the NIC to which the EIP bound belongs to the subnet associated with the network ACL.
 - c. If the network ACL is enabled, add an ICMP rule to allow traffic.

NOTE

The default network ACL rule denies all incoming and outgoing packets. If the network ACL is disabled, the default rule still takes effect.

3. Ping the EIP from another FlexusX instance in the same region.
Use the FlexusX instance in the same region to ping the EIP. If the EIP can be pinged, the virtual network is normal. Contact customer service.

3.13 How Do I Create Accounts and Databases for My DB Instance?

After purchasing a FlexusRDS instance, you can log in to the instance through DAS and run commands to create accounts and databases.

3.14 What Major Versions and Minor Versions Does FlexusRDS Support?

FlexusRDS supports two major versions: MySQL 5.7 and 8.0. MySQL 8.0 is recommended for new application rollout. The community has stopped maintaining MySQL 5.7. Huawei Cloud has also released a maintenance termination plan for MySQL 5.7. For details, see [RDS for MySQL Versioning Policy](#).

When you purchase an instance, minor versions are unavailable to you. FlexusRDS provides the optimal minor version.

3.15 Why Are Pay-per-Use Instances Not Provided?

FlexusRDS provides a lightweight database service for startups and individuals. It is easy to use, so you can focus better on more critical work. Only yearly/monthly instances are provided.

If you need pay-per-use instances, we recommend Relational Database Service (RDS). RDS instances can be billed on an on-demand hourly rate.

3.16 Can I Scale Up the Storage Space of My FlexusRDS Instance?

Yes. FlexusRDS supports storage autoscaling. Storage autoscaling is disabled by default. You can enable it after the instance is set up. For details, see [Storage Autoscaling](#).

4 Change History

Released On	Description
2024-05-15	This issue is the third official release. Added the FlexusX FAQs.
2024-04-30	This issue is the second official release. Added the FlexusRDS FAQs.
2024-04-15	The issue is the first official release.