

Compute Services Practice

This exercise walks you through how to create and log in to ECSs, modify the ECS specifications, create private Windows and Linux images, create sharable images, and scale resources flexibly.

1.ECS Lifecycle Management

In this exercise, we will create both Windows and Linux ECSs.

Question: What is [Lab Desktop]?

Go to the [Lab Desktop] and open the Google Chrome browser to access the HUAWEI CLOUD login page. Select IAM User Login. In the login dialog box, enter the assigned HUAWEI CLOUD lab account and password to log in to HUAWEI CLOUD, as shown in the following figure.

The image displays two side-by-side login interfaces. The left interface is titled 'HUAWEI ID login' and features input fields for 'Phone/Email/Login ID/HUAWEI CLOUD account name' and 'Password', followed by a red 'LOG IN' button. Below this are links for 'Register' and 'Forgot password?'. A 'Use Another Account' section is at the bottom, with 'IAM User' highlighted by a red box. The right interface is titled 'IAM User Login' and has input fields for 'Sandbox-Voyager' (username), 'Sandbox-user' (password), and a red 'Log In' button. A red arrow points from the 'IAM User' link on the left page to the 'IAM User Login' page. At the bottom of the right page, there are links for 'Forgot Password' and 'Remember me'.

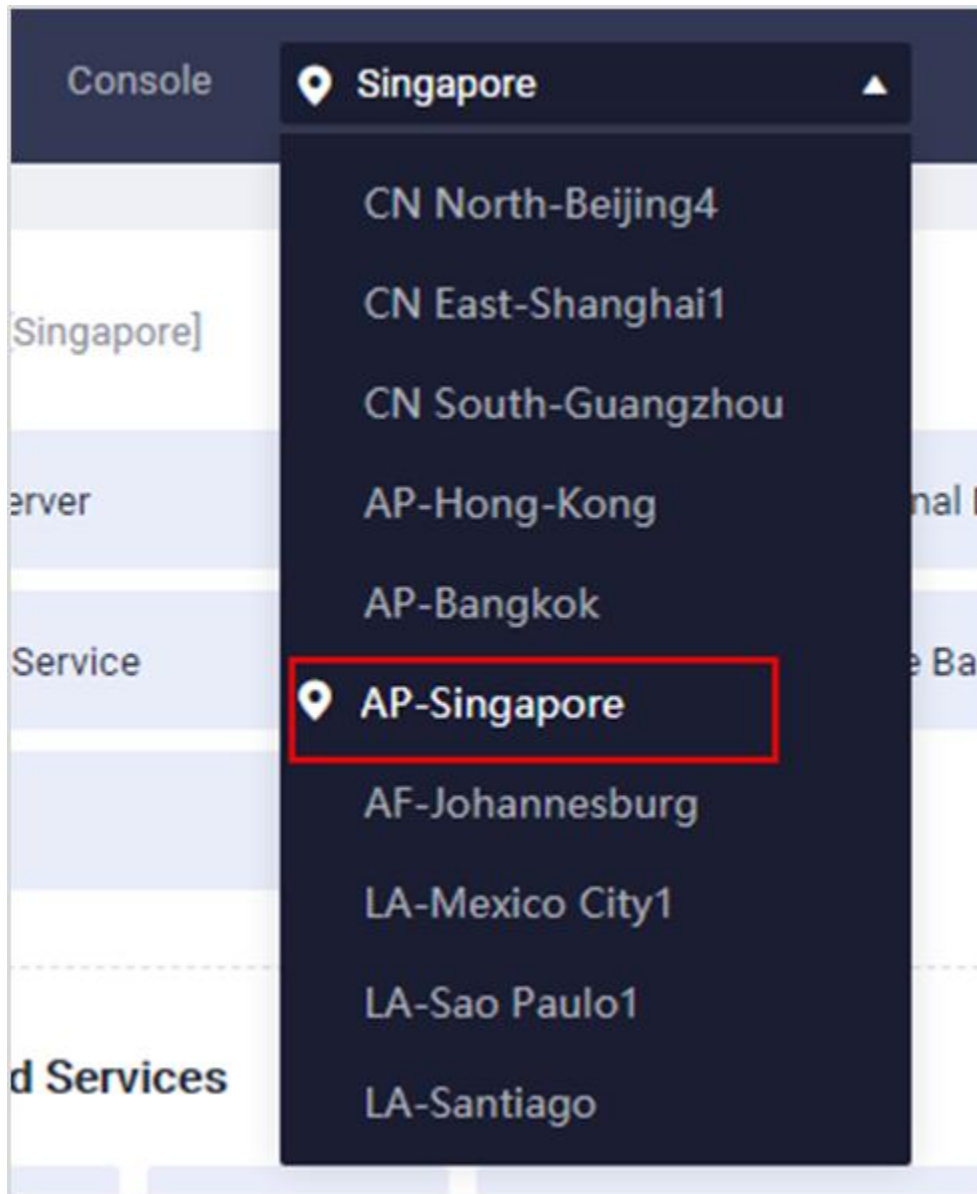
Note: For details about the account information, see the upper part of the lab manual. Do not use your HUAWEI CLOUD account to log in.

The image shows a section titled '(HUAWEI CLOUD Lab Account (Click to Copy))'. Below the title is a table with three rows: 'Account: Sandbox-Voyager', 'Username: Sandbox-user', and 'Password: *****'. The entire table is enclosed in a red rectangular box.

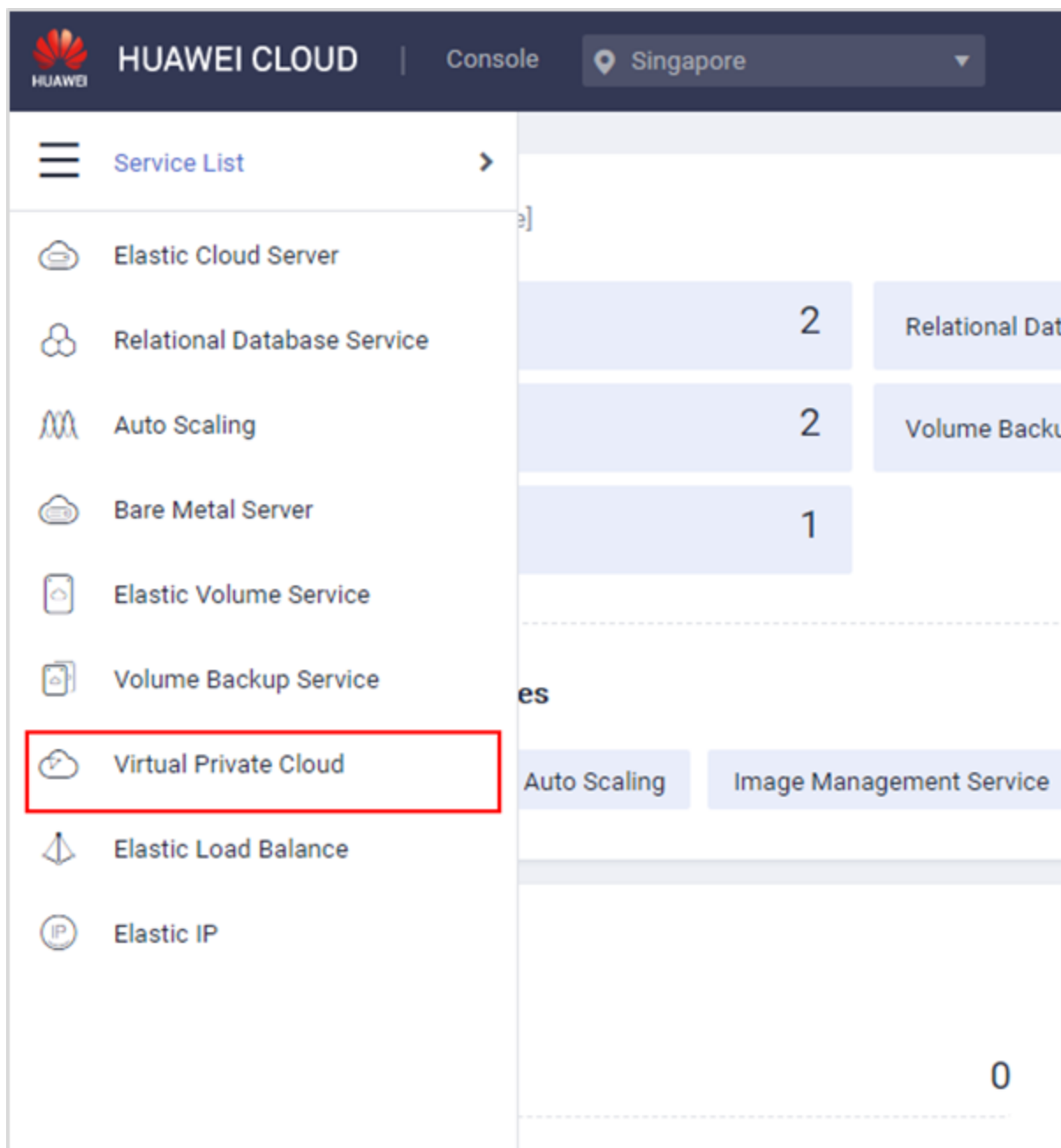
1.1 Creating Two Types of ECSs

Q: What is a VPC?

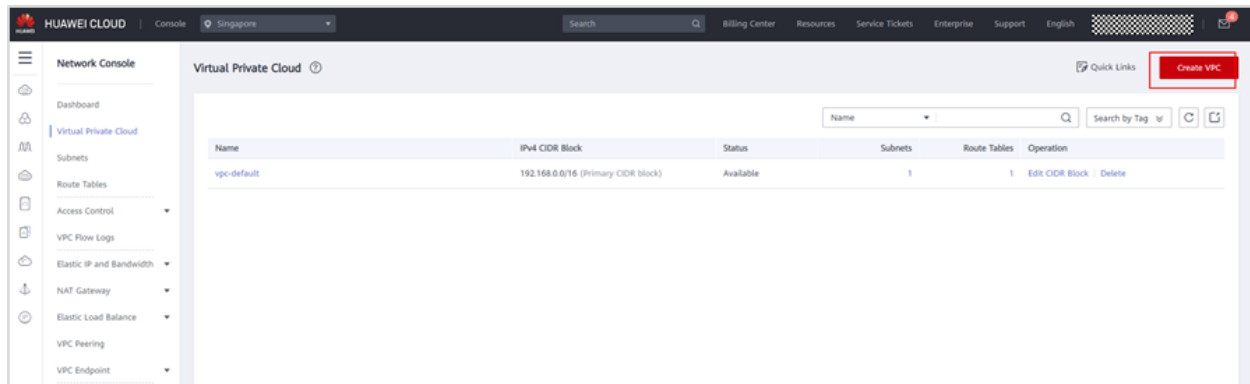
Step 1 Log in to the HUAWEI CLOUD console, and choose the **AP-Singapore** region.



Step 2 In Service List on the left, choose Virtual Private Cloud.



Step 3 Click **Create VPC**.



Step 4 Configure the VPC parameters as follows and click **Create Now**.

Basic Information

λ **Region:** AP-Singapore

λ **Name:** vpc-WP

λ **IPv4 CIDR Block:** 192.168.0.0/16

Default Subnet

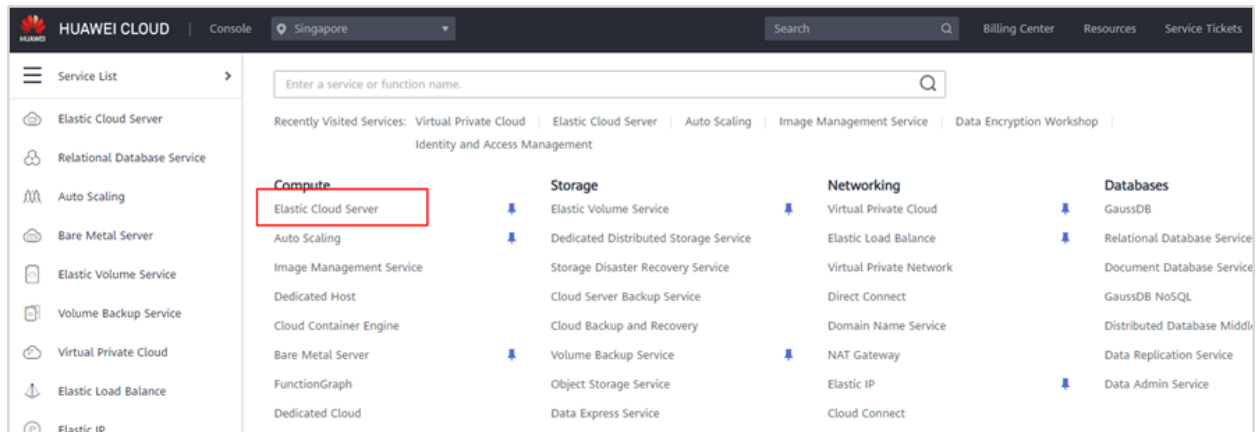
λ **AZ:** AZ1

λ **Name:** subnet-WP

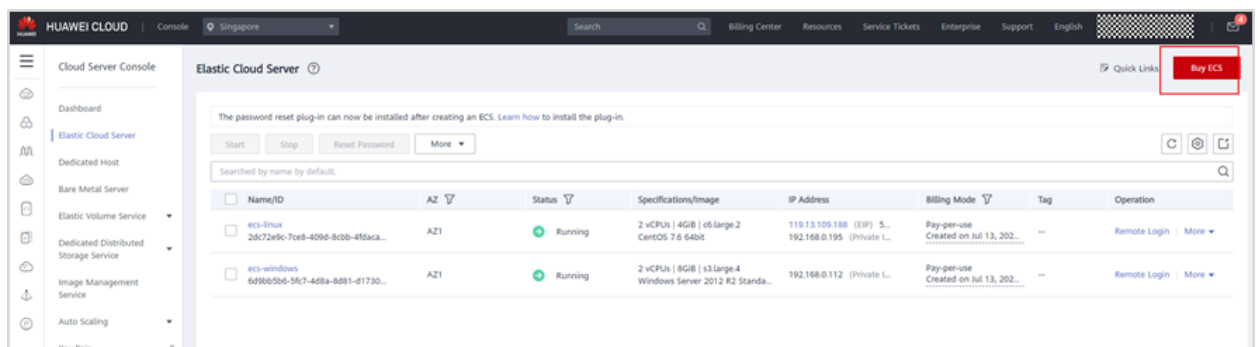
λ **IPv4 CIDR Block:** 192.168.0.0/24

λ Retain the default settings for other parameters.

Note: Replace the VPC name vpc-WP and the default subnet name subnet-WP with the account name assigned by the system, for example, vpc-Sandbox-voyager002 and subnet-Sandbox-voyager002.



Step 7 Click **Buy ECS**.



Step 8 Configure basic settings as follows:

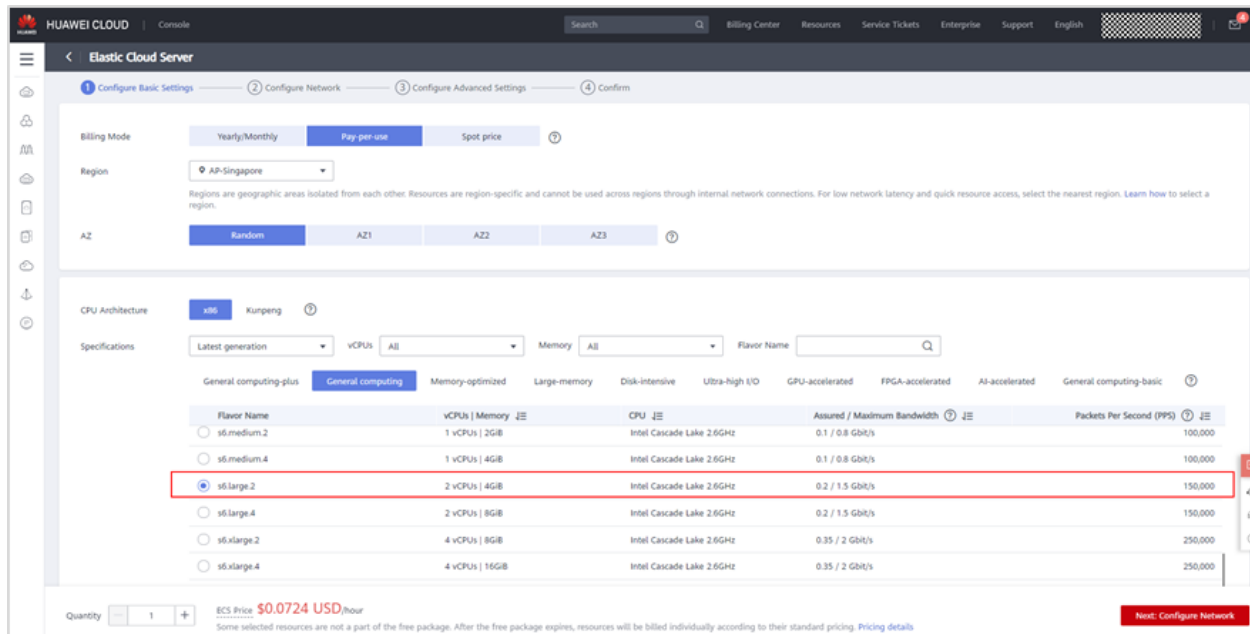
λ **Billing Mode: Pay-per-use**

λ **Region: AP-Singapore**

λ **AZ: Random**

λ **CPU Architecture: x86**

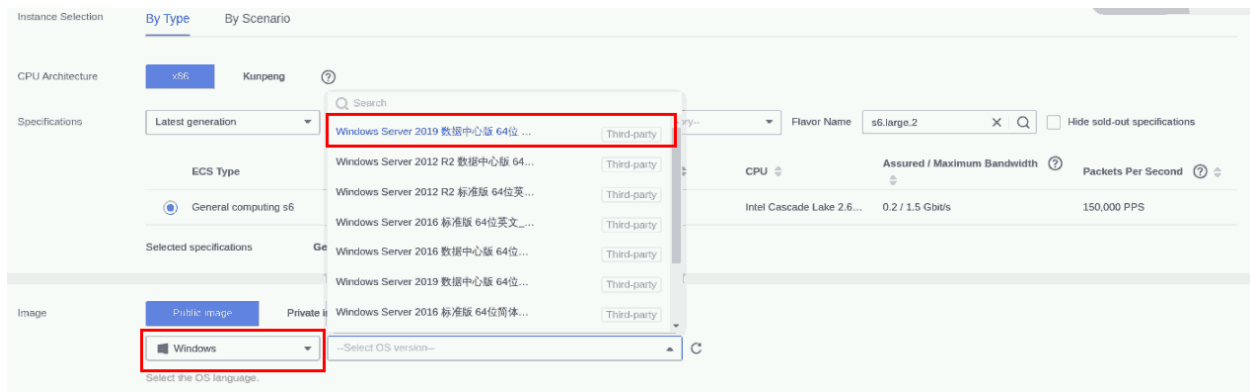
λ **Specifications: General computing, s6.large.2, 2 vCPUs | 4 GB** (configure based on your requirements)



λ **Image: Public Image, Windows, Windows Server 2012 R2 Standard 64bit English(40 GB)**

λ **Host Security:** Select **Enable** (basic edition for this exercise).

λ **System Disk: High I/O, 40 GB**



Step 9 Click **Next: Configure Network**. The **Configure Network** page is displayed.

Configure the parameters as follows:

λ **Network:** Choose the created VPC.

λ **Extension NIC:** Retain the default settings.

λ **Security Group:** Retain the default settings.

λ **EIP: Not required**

Network: vpc-default(192.168.0.0/16) subnet-b820(192.168.0.0/24) Automatically-assigned IP address Available private IP addresses: 250

Extension NIC: Add NIC You can add 1 more NICs.

Security Group: Sys-default (d751e5b1-ed80-4a6d-87ec-32b46df2122a) Create Security Group

Similar to a firewall, a security group logically controls network access.

Security Group Rules

EIP: Auto assign Use existing Not required

An ECS without an EIP cannot access the Internet. However, it can still be used as a service ECS deployed in a cluster or on a private network.

Step 10 Click **Next: Configure Advanced Settings**. The **Configure Advanced Settings** page is displayed. Configure the parameters as follows:

λ **ECS Name:** **ecs-windows** (Change as required.)

λ **Login Mode:** **Password**

λ **Password:** Enter a password, for example, Huawei@1234

λ **Cloud Backup and Recovery:** **Not required**

λ **ECS Group (Optional):** Retain the default settings.

λ **Advanced Options:** Retain the default settings.

Instance Management

ECS Name: ecs-windows Allow duplicate name

When you purchase multiple ECSs, they are named based on automatic or custom naming rules. [Learn more](#)

Login Mode: Password Key pair Set password later

Keep the password secure. If you forget the password, you can log in to the ECS console and change it.

Username: root Password: Confirm Password

Tag: TMS's predefined tags are recommended for adding the same tag to different cloud resources. [Create predefined tags](#)

+ Add Tag

Tags you can still add: 10

Step 11 Click **Next: Confirm**. After confirming the ECS configurations, select **I have read and agree to the Service Level Agreement and Image Disclaimer**, and click **Submit**. After about 10 seconds, you can view the created ECS on the **Elastic Cloud Server** page. If the **Status** is **Running**, the ECS can work normally.

Enterprise Project: [Create Enterprise Project](#)

Quantity: You can create a maximum of 19 ECSs. [Learn how to increase quota.](#)

Agreement: ☒ I have read and agree to the Service Level Agreement and Image Disclaimer.

ECS Price: **\$0.13 USD/hour**
This price is an estimate and may differ from the final price. [Pricing details](#)

[Previous](#) [Submit](#)

Cloud Server Console

Elastic Cloud Server

The password reset plug-in can now be installed after creating an ECS. [Learn how to install the plug-in.](#)

[Start](#) [Stop](#) [Reset Password](#) [More](#)

Searched by name by default.

Name/ID	AZ	Status	Specifications/Image	IP Address	Billing Mode	Tag	Operation
ecs-windows 6d9b556-5f7-4d8a-8d81-d1730...	AZ1	Running	2 vCPUs 4GB s6.large.2 Windows Server 2012 R2 Standa...	192.168.0.112 (Private L...	Pay-per-use Created on Jul 13, 202...	--	Remote Login More

Step 12 Create a Linux ECS. Configure the parameters the same as creating the Windows ECS, except for **ECS Name**, **Image**, and **Login Mode** (choose Password, EIP: Auto assign).

Image: Public image, CentOS, CentOS 7.6 64-bit

Image

[Public image](#) [Private image](#) [Shared image](#) [Marketplace image](#)

Huawei Cloud EulerOS

CentOS

SUSE

Ubuntu

EulerOS

Debian

OpenSUSE

Fedora

AlmaLinux

Rocky Linux

CentOS Stream

CoreOS

openEuler

SUSE SAP

Windows

Other

CentOS 7.6 64bit(10 GiB)

1.2 Logging In to an ECS

Step 1 On the **Elastic Cloud Server** page, you can view the ECS AZ and its status. Click **Remote Login** in the **Operation** column on the right.

Cloud Server Console

Elastic Cloud Server

The password reset plug-in can now be installed after creating an ECS. [Learn how to install the plug-in.](#)

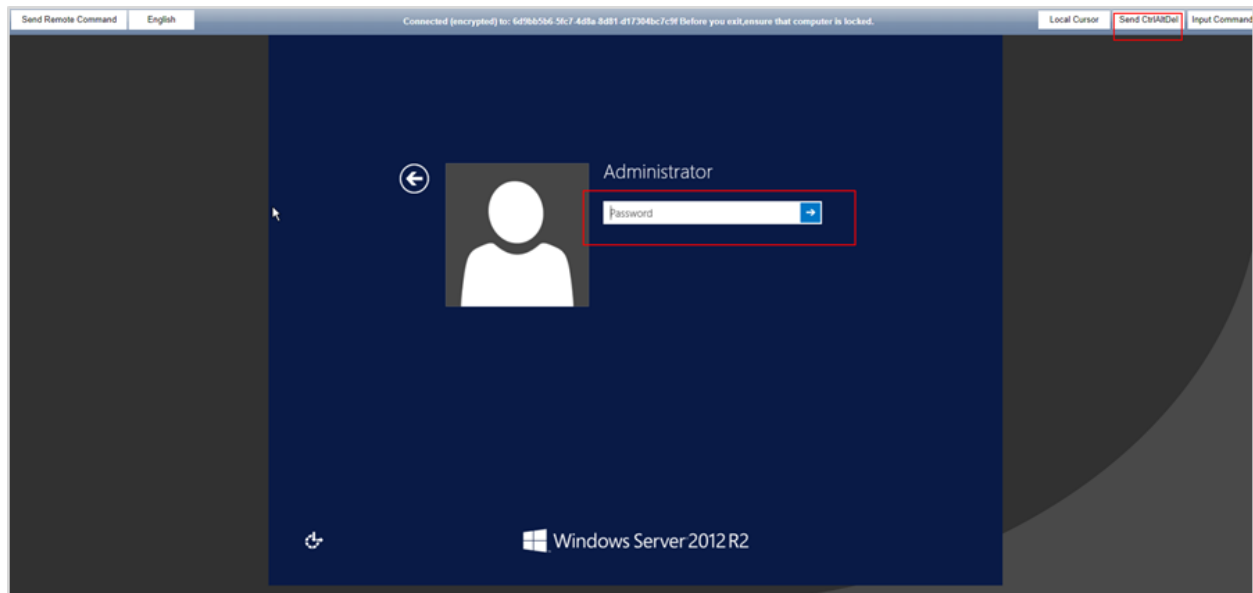
[Start](#) [Stop](#) [Reset Password](#) [More](#)

Searched by name by default.

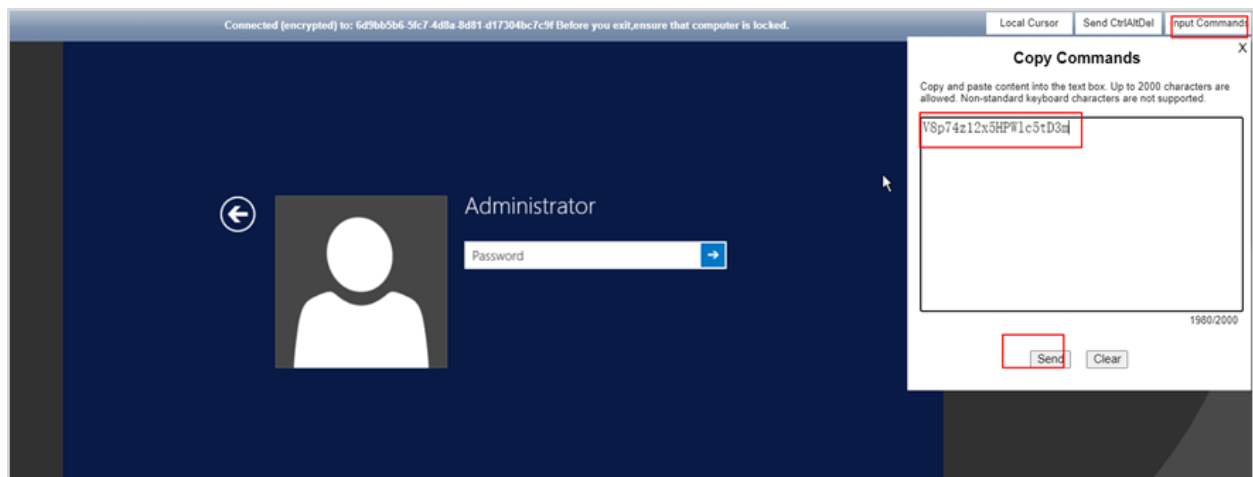
Name/ID	AZ	Status	Specifications/Image	IP Address	Billing Mode	Tag	Operation
ecs-linux 2d1729fc-7ce8-409d-8c3b-4f5aca...	AZ1	Running	2 vCPUs 4GB s6.large.2 CentOS 7.6 64bit	192.168.0.195 (Private IP)	Pay-per-use Created on Jul 13, 202...	--	Remote Login More
ecs-windows 6d9b556-5f7-4d8a-8d81-d1730...	AZ1	Running	2 vCPUs 4GB s6.large.2 Windows Server 2012 R2 Standa...	192.168.0.112 (Private L...	Pay-per-use Created on Jul 13, 202...	--	Remote Login More

Step 2 Locate the row containing **ecs-windows**, click **Remote Login**, and click **Log In**.

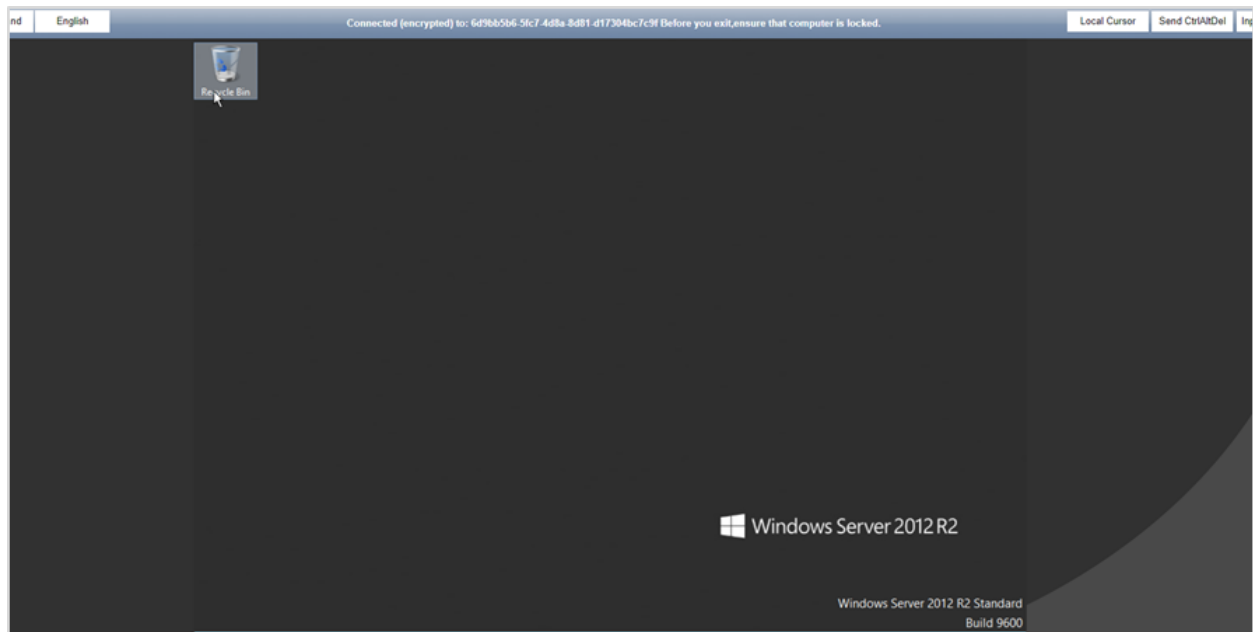
If Press Ctrl+Alt+Delete to sign in is displayed, click Send CtrlAltDel in the upper part of the remote login page.



Step 3 Click **Input Commands** in the upper right corner, paste the copied password, click **Send**, and then press **Enter**.



Step 4 If a page similar to the one in following figure is displayed, the ECS login was successful.



Step 5 In this exercise, there is no EIP bound to the Linux ECS. Therefore, you cannot use remote login tools (SSH tool) to log in to the ECS. You can choose **Remote Login** in the row containing **ecs-linux**, and click **Log In** to log in to the ECS using VNC.

Linux:

ecs-linux login: root

Password: Enter a password, for example, Huawei@123.

Linux ECSs do not have a GUI. After you log in the Linux ECS remotely, enter root after ecs-linux login, and then press Enter to input the password. The password is entered in ciphertext. Ensure that the password is correct before pressing Enter. If Welcome to Huawei Cloud Service is displayed, the ECS login was successful.

```
CentOS Linux 7 (Core)
Kernel 3.10.0-1160.15.2.el7.x86_64 on an x86_64

ecs-linux login: root
Password:
Welcome to Huawei Cloud Service

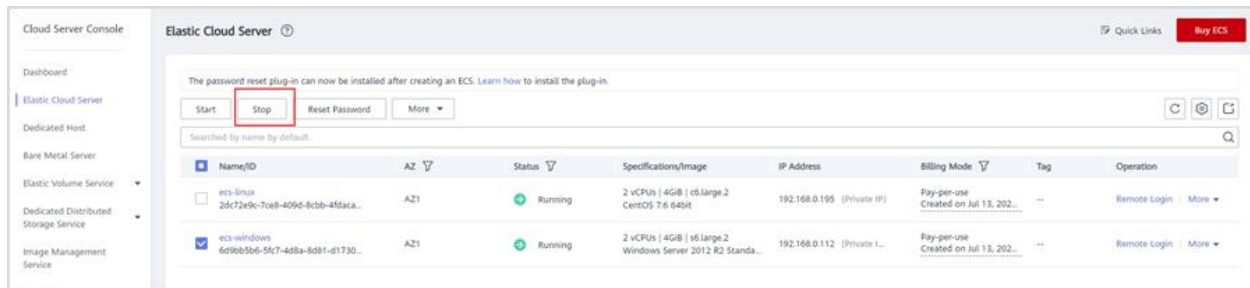
[root@ecs-linux ~]#
```

Step 6 If a page similar to the one in preceding figure is displayed, the Linux ECS login was successful.

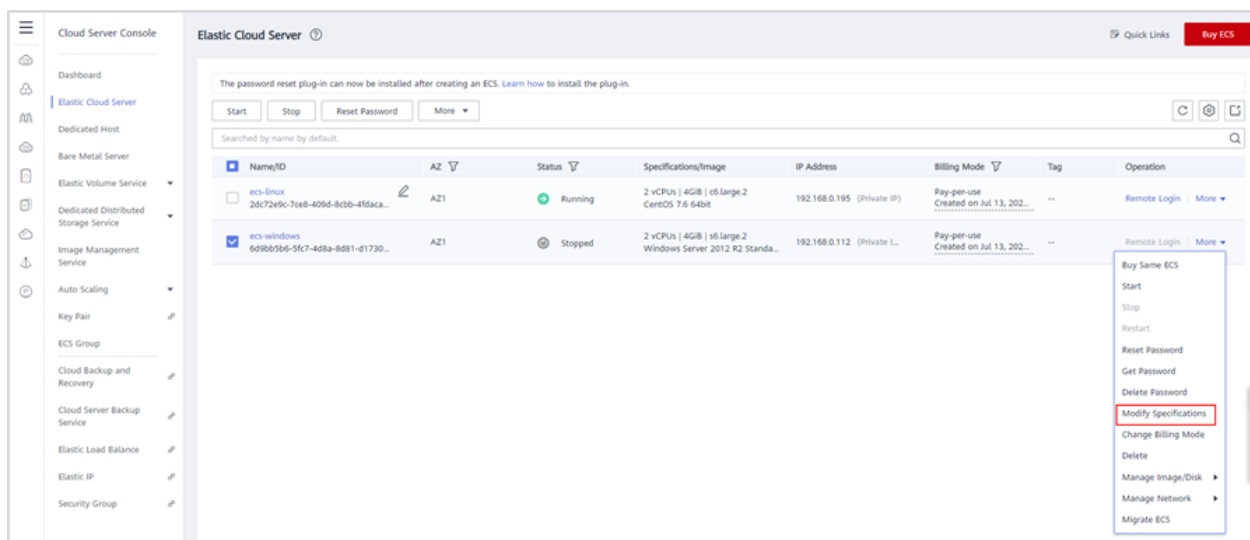
1.3 Modifying Windows ECS Specifications

Step 1 On the **Elastic Cloud Server** page, view the status of the target Windows ECS.

Step 2 If the ECS is not in the stopped state, select it and click **Stop**. If the **Stop ECS** page is displayed, select **Forcibly stop the preceding ECSs** and click **Yes**.



Step 3 After the ECS has stopped, click **More** in the **Operation** column of this ECS and choose **Modify Specifications**.



Step 4 In the **Modify Specifications** dialog box,

select the desired ECS type, vCPUs, and memory size based on service requirements. In this exercise, the memory size is changed from 4 GB to 8 GB. Click **Next**.

Latest generation
vCPUs
All
Memory
All
Flavor Name

General computing-plus
General computing
Memory-optimized
General computing-basic

Flavor Name	vCPUs Memory	CPU	Assured / Maximum Bandwidth	Packets Per Second (PPS)
s3.small.1 (Sold Out)	1 vCPUs 1GiB	Intel Skylake 6161 2.2GHz	0.1 / 0.5 Gbit/s	50,000
s3.medium.2	1 vCPUs 2GiB	Intel Skylake 6161 2.2GHz	0.1 / 0.5 Gbit/s	50,000
s3.medium.4	1 vCPUs 4GiB	Intel Skylake 6161 2.2GHz	0.1 / 0.5 Gbit/s	50,000
s3.large.2 Free Package	2 vCPUs 4GiB	Intel Skylake 6161 2.2GHz	0.2 / 0.8 Gbit/s	100,000
s3.large.4	2 vCPUs 8GiB	Intel Skylake 6161 2.2GHz	0.2 / 0.8 Gbit/s	100,000
s3.xlarge.2	4 vCPUs 8GiB	Intel Skylake 6161 2.2GHz	0.4 / 1.5 Gbit/s	150,000
s3.xlarge.4	4 vCPUs 16GiB	Intel Skylake 6161 2.2GHz	0.4 / 1.5 Gbit/s	150,000
s3.2xlarge.2	8 vCPUs 16GiB	Intel Skylake 6161 2.2GHz	0.8 / 3 Gbit/s	200,000

New Specifications: General computing | s3.large.4 | 2 vCPUs | 8GiB

ECS Price \$0.14 USD/hour
Next

Step 5 After confirming the new ECS specifications, select **I have read and agree to the Image Disclaimer** and click **Submit**. Go to the **Elastic Cloud Server** page and you will see that the ECS status is **Resized**.

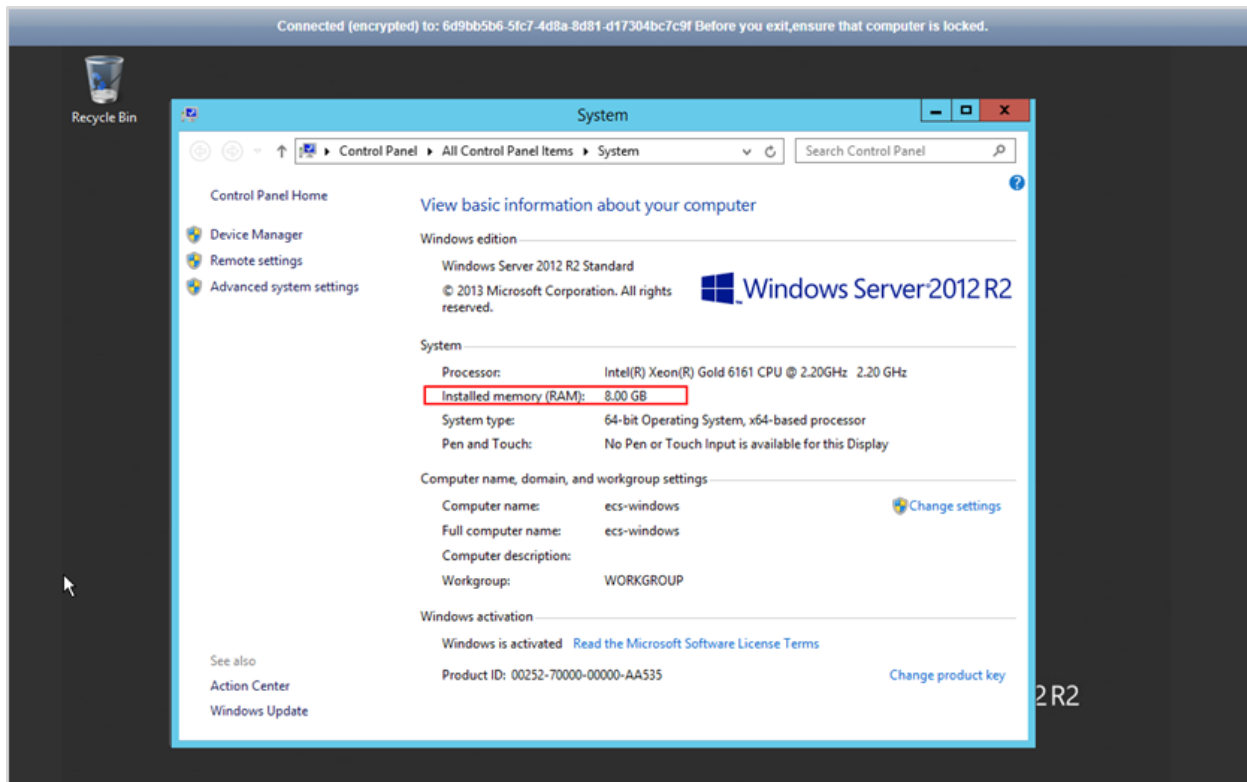
Cloud Server Console
Elastic Cloud Server
Quick Links
Buy ECS

The password reset plug-in can now be installed after creating an ECS. Learn how to install the plug-in.
Start Stop Reset Password More

Searched by name by default.

Name/ID	AZ	Status	Specifications/Image	IP Address	Billing Mode	Tag	Operation
ecs-linux-2dc72efc-7ce8-409d-8cbb-4f1aca...	AZ1	Running	2 vCPUs 4GiB c6.large.2 CentOS 7.6 64bit	192.168.0.195 (Private I...)	Pay-per-use Created on Jul 13, 202...	--	Remote Login More
ecs-windows-6d9db5b6-5fc7-4d8a-bd81-d1730...	AZ1	Resized	2 vCPUs 4GiB s3.large.2 Windows Server 2012 R2 Stand...	192.168.0.112 (Private I...)	Pay-per-use Created on Jul 13, 202...	--	Remote Login More

Step 6 Start the ECS. The ECS specifications have been modified.



2. Creating a Windows System Disk Image from an ECS

If you have created and configured a Windows ECS based on your service requirements (for example, by installing software and setting up an application environment), you can create a system disk image based on this configured ECS. Then, all new ECSs created from this image will have the same software and environment preinstalled.

To create a Windows system disk image using an ECS, you need to configure a Windows ECS and then use it to create a system disk image.

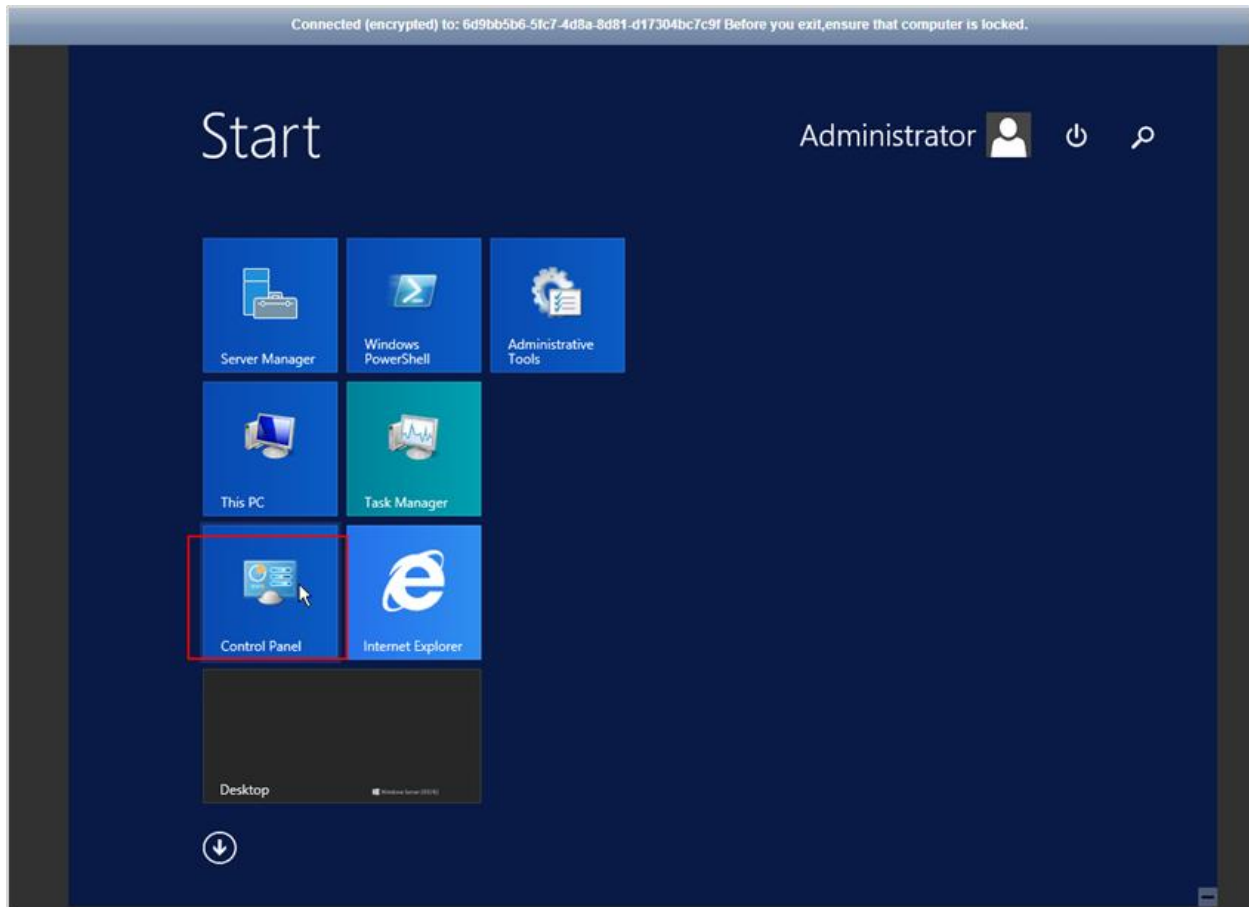
2.1 Configuring a Windows ECS

Take the ecs-windows ECS you created as an example.

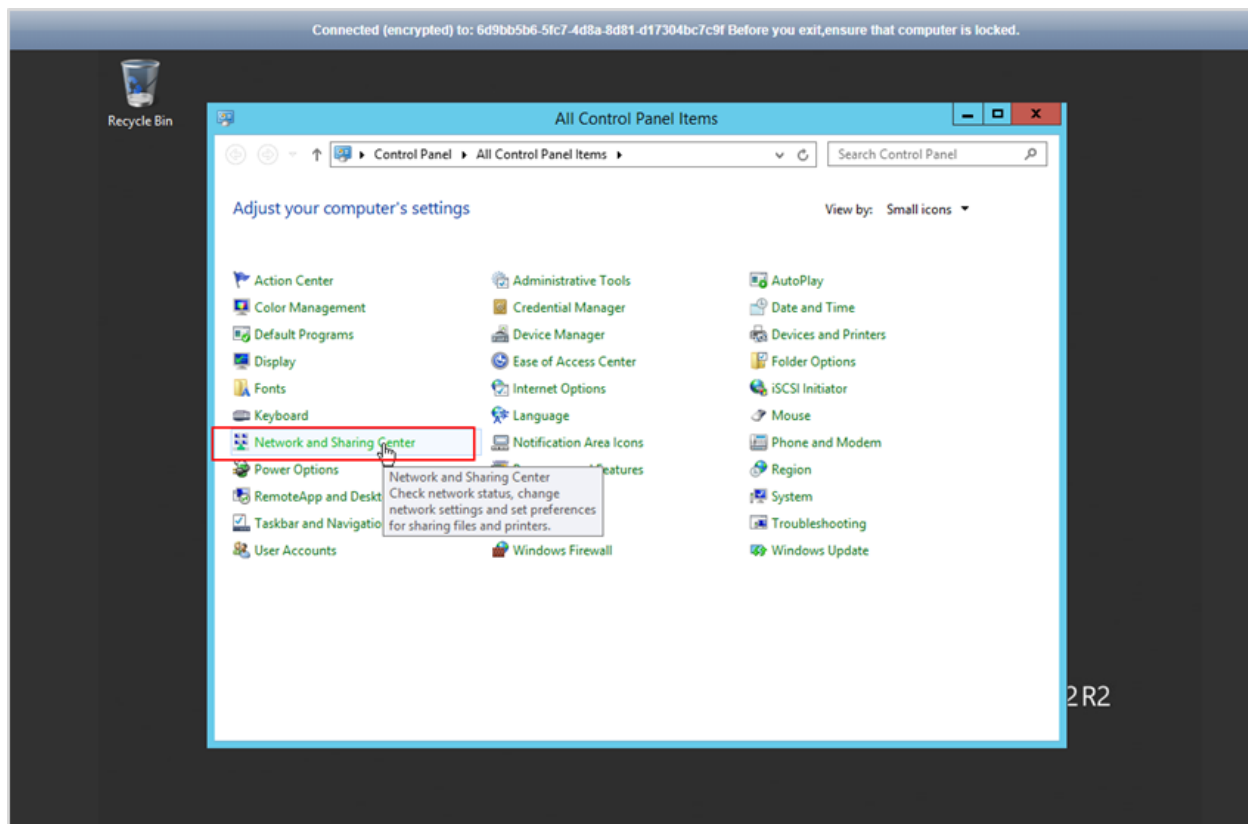
Step 1 Remotely log in to the ECS.

Step 2 Check whether DHCP is configured for the ECS NICs. If it is not, configure it.

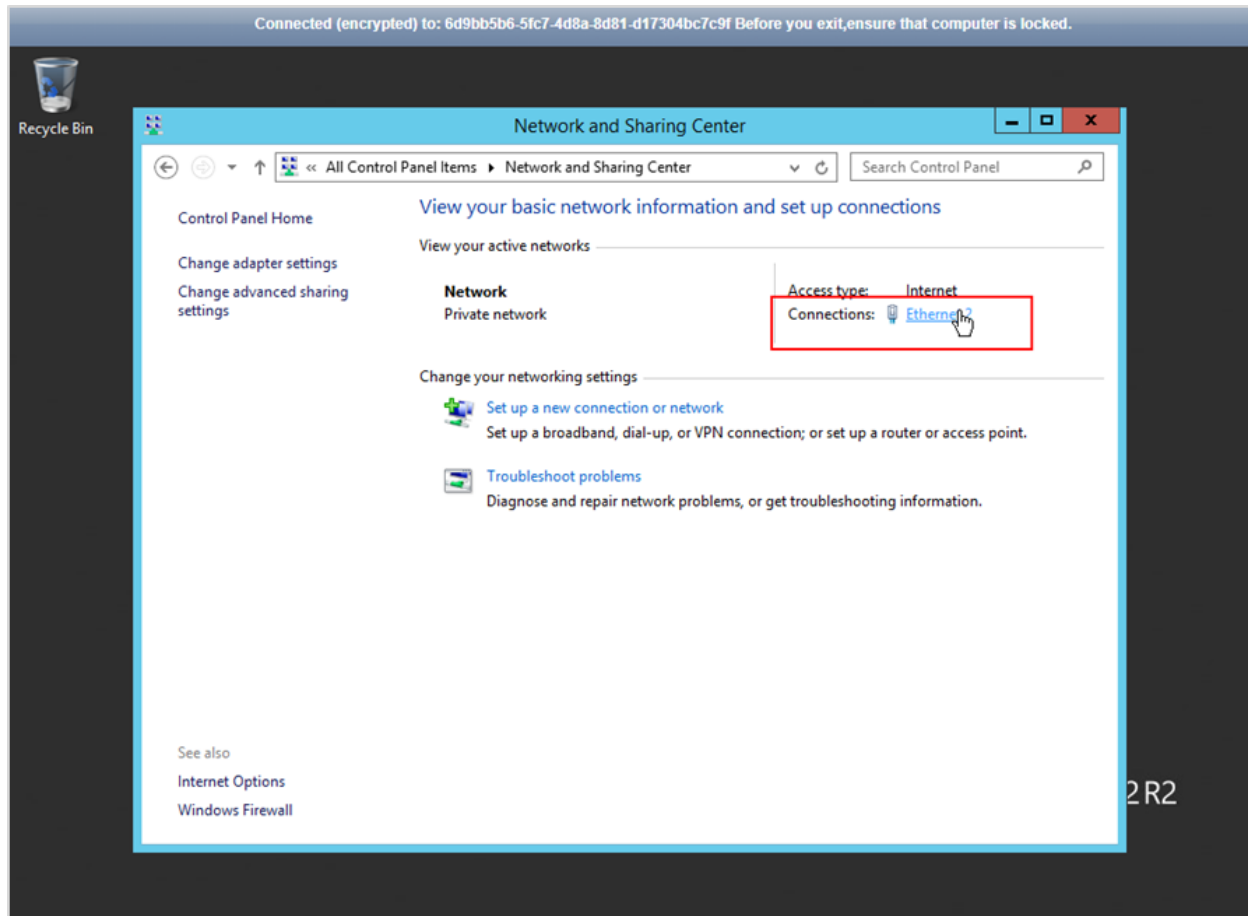
1. Choose Start > Control Panel. (The GUI varies somewhat depending on the OS version.)



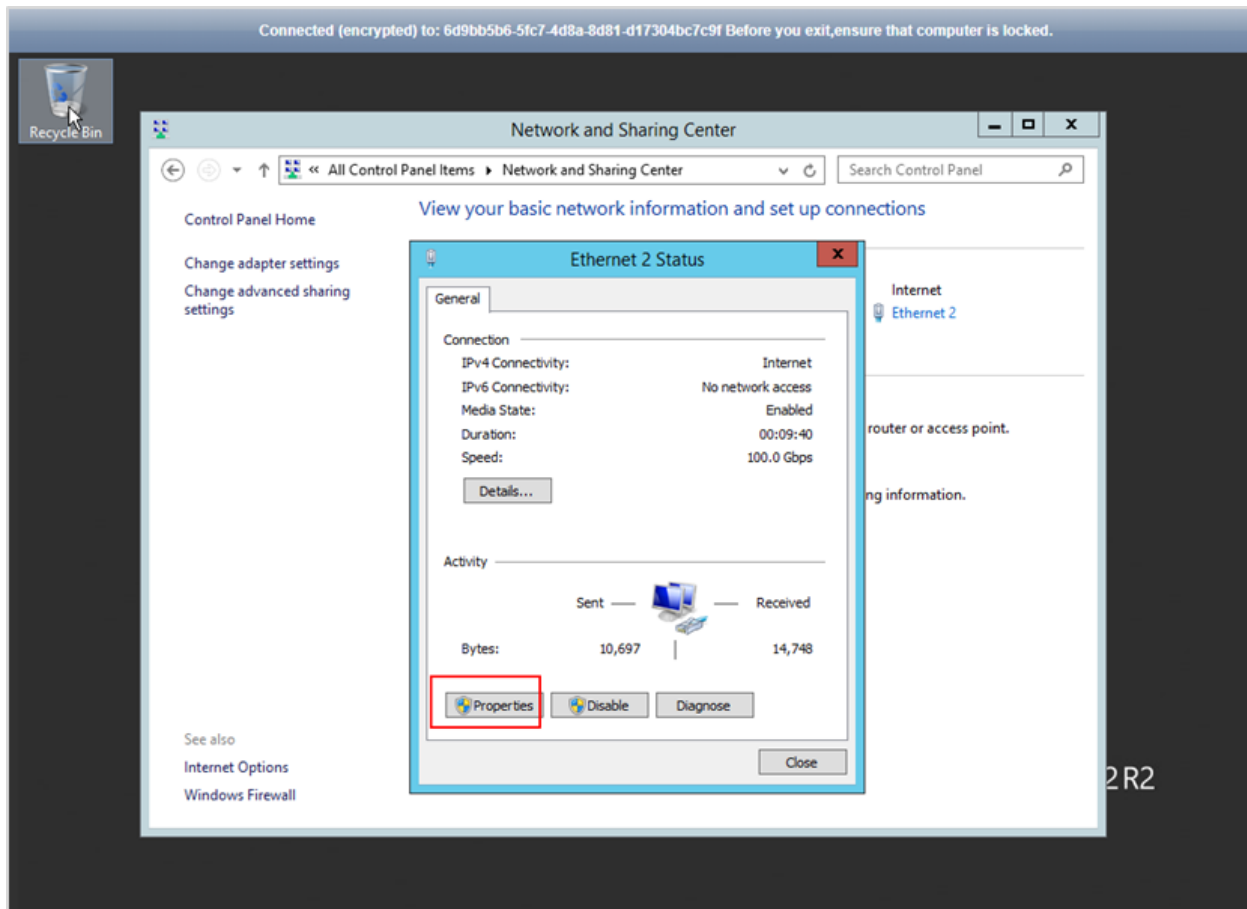
2. Click Network and Sharing Center.



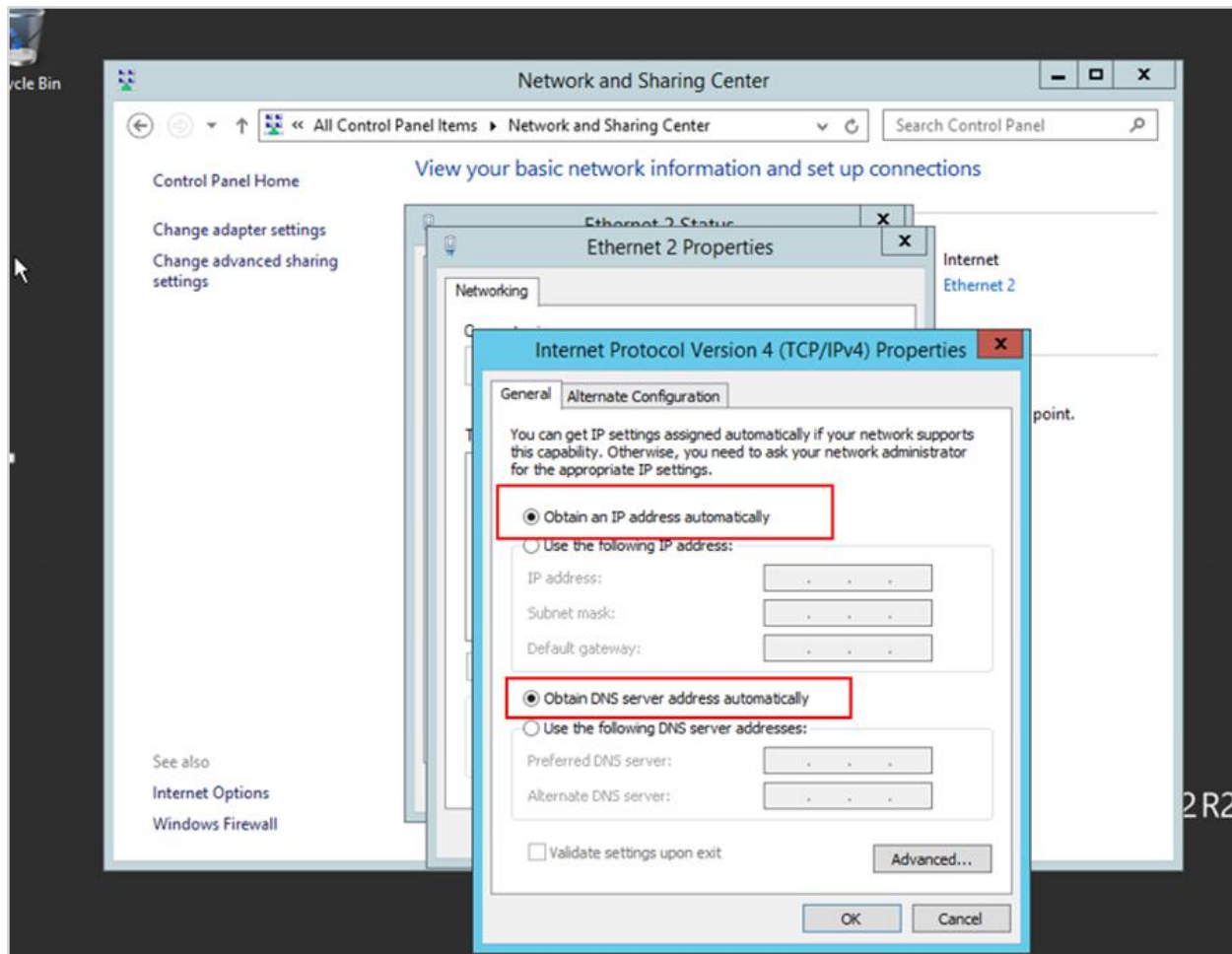
3. Click a network connection, for example, Ethernet 2.



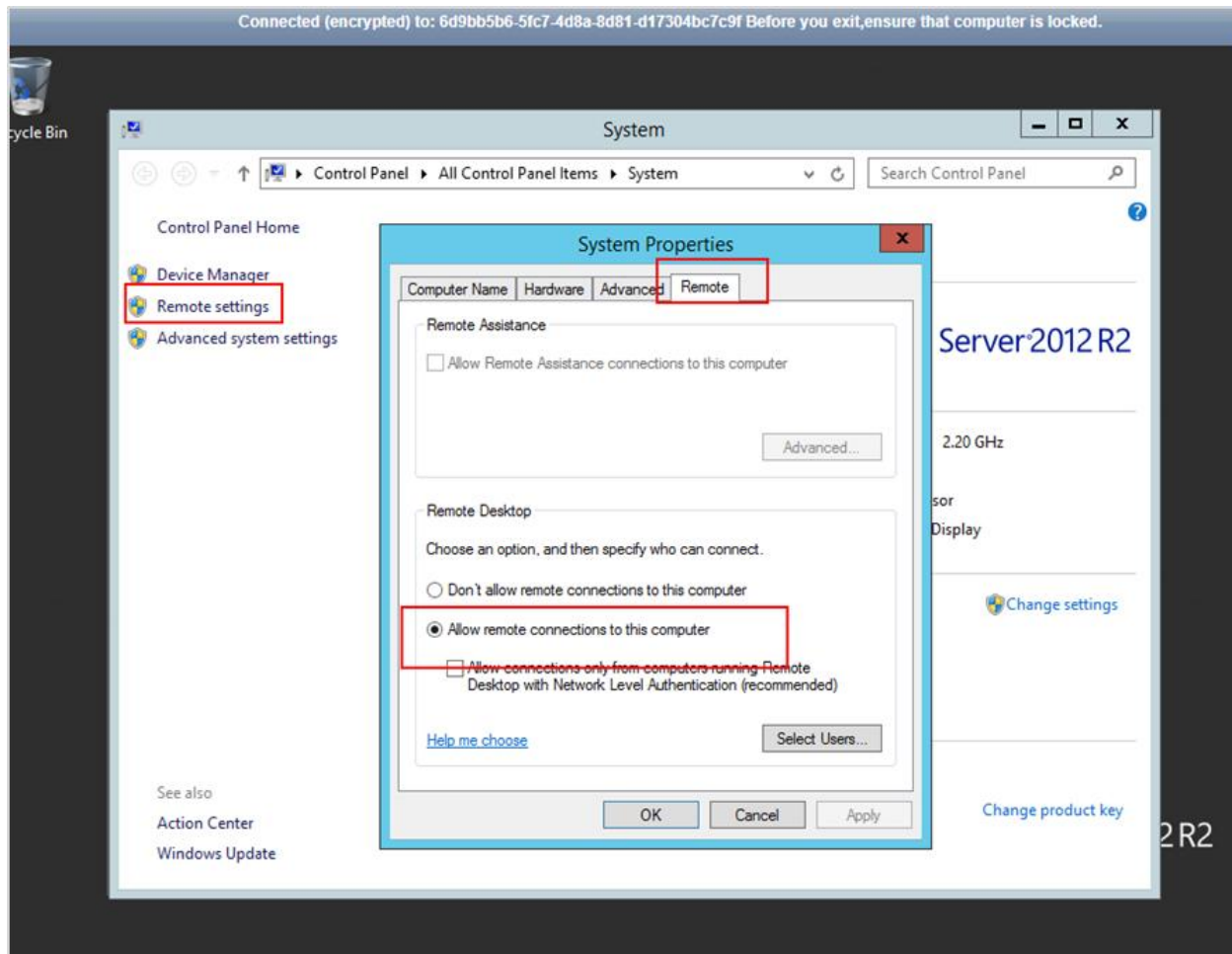
4. Click Properties, select Internet Protocol Version 4 (TCP/IPv4), and click Properties.



5. If Obtain an IP address automatically and Obtain DNS server address automatically are selected, DHCP has been configured. Otherwise, select the two check boxes and click OK.

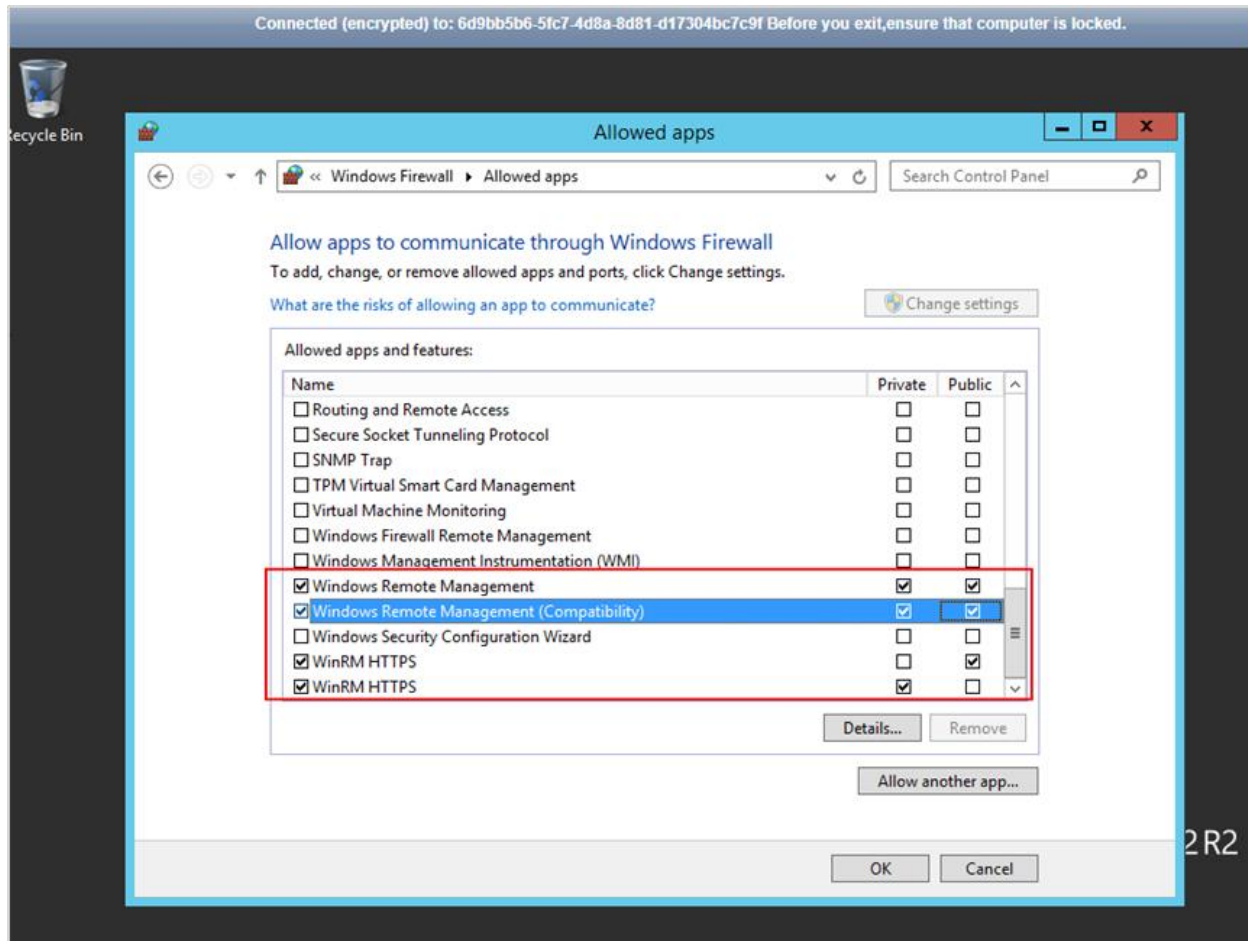


Step 3 Click **Start**, right-click **This PC**, and choose **Properties**. In the navigation pane to the left of the **System** page, click **Remote settings**. Select **Allow remote connections to this computer**. Click **OK**. (The GUI varies somewhat depending on the OS version.)



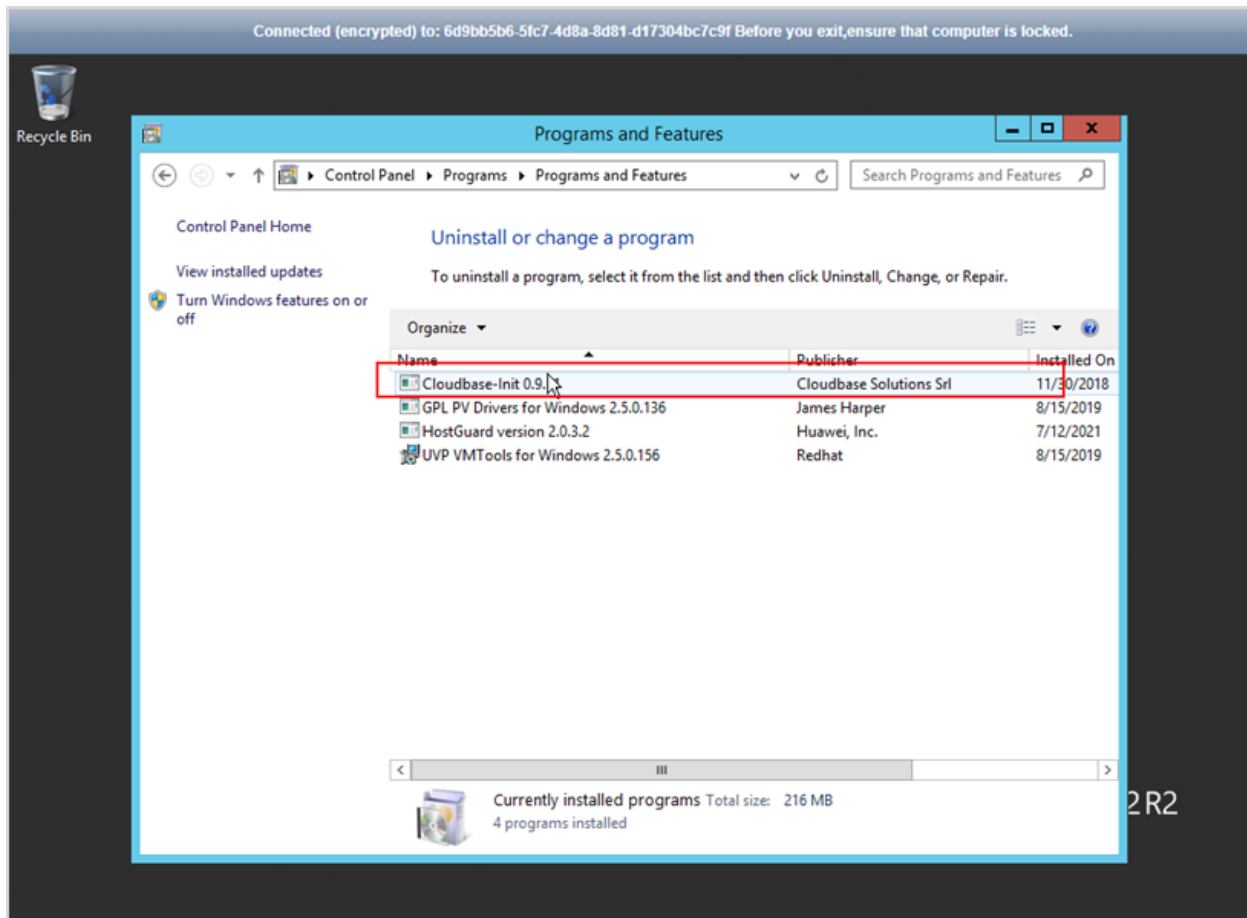
Step 4 Go to **Start > Control Panel** and navigate to **Windows Firewall**. In the left pane, select **Allow an app or feature through Windows Firewall**. Select apps that are allowed by Windows Firewall for **Remote Desktop** based on your network requirements and click **OK**.

In this exercise, both the private and public networks are allowed by the firewall.



Step 5 Check whether Cloudbase-Init is installed on the ECS. If it is not, install it.

Go to Start > Control Panel > Programs and Features to check whether Cloudbase-Init has been installed on the ECS.



Note:

λ If Cloudbase-Init is not installed on the ECS, custom information cannot be injected into the new ECSs created from the private image. You will only be able to log in to the ECSs with the password specified in the image.

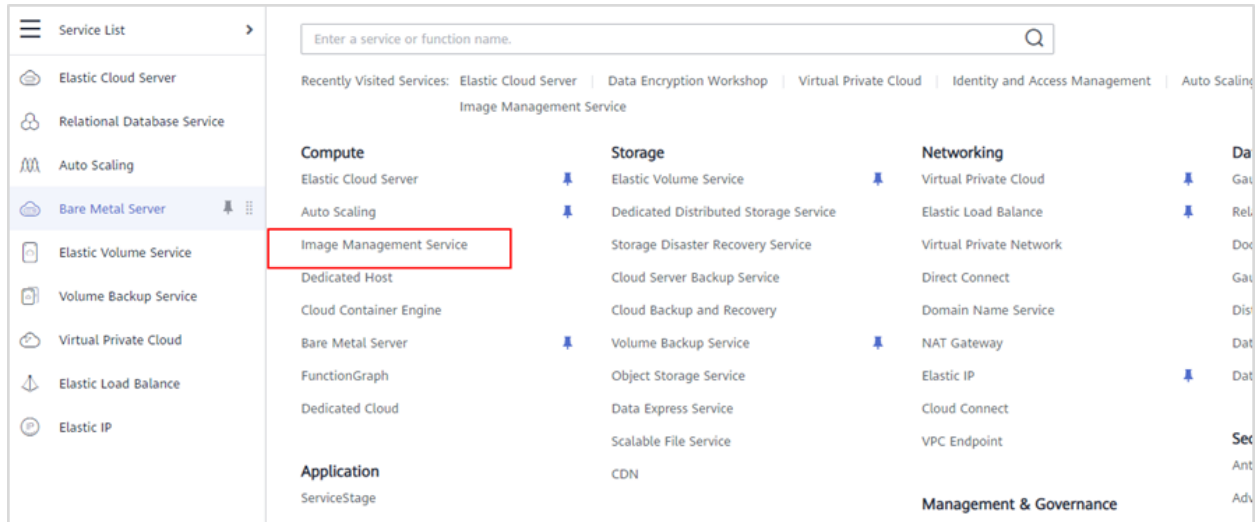
λ For an ECS created from a public image, Cloudbase-Init has been installed on it by default. You do not need to manually install Cloudbase-Init for it.

λ For an ECS created using an external image file, you need to install Cloudbase-Init for the ECS before you use it to create a private image. For details, see Installing and Configuring Cloudbase-Init (https://support.huaweicloud.com/intl/en-us/usermanual-ims/en-us_topic_0030730602.html).

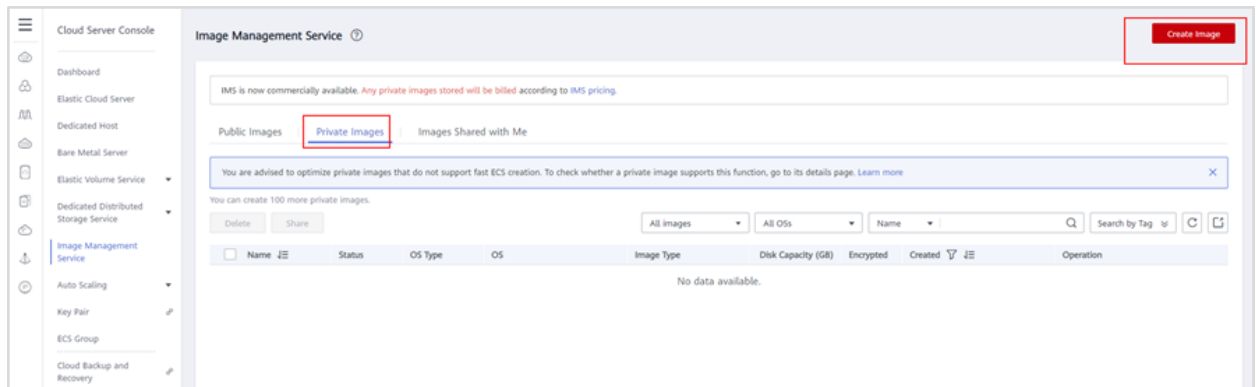
In this exercise, the ECS is created from the public image windows2012 R2, which has Cloudbase-Init installed by default.

2.2 Creating a Windows Private Image

Step 1 Go back to the management console and in **Service List** choose **Compute > Image Management Service**.



Step 2 On the Image Management Service page, click **Create Image**.



Step 3 On the **Create Image** page, set the following parameters and click **Next**. (Retain the defaults for the rest of the parameters.)

λ Region: AP-Singapore

λ Type: System disk image

λ Source: Select a Windows ECS, for example, **ecs-windows**.

λ Name: Enter a name, for example, **image-windows2012**.

Image Type and Source

★ Type: System disk image Full-ECS image Data disk image ISO image

★ Source: ECS BMS Image File

- Only ECSs in the running or stopped state can be used to create private images.
- Before creating an image, configure and optimize the ECS. Ensure Cloud-Init is installed if the ECS runs Linux and Cloudbase-Init is installed if the ECS runs Windows. [Learn more](#)
- Do not perform any operation on the selected ECS or associated resources when an image is being created.

All statuses ▼
Name ▼

Name	OS	Status	Private IP Address	Created
▼ <input type="radio"/> ecs-linux	CentOS 7.6 64bit	➔ Running	192.168.0.195	Jul 13, 2021 02:09:47 GM...
▼ <input checked="" type="radio"/> ecs-windows	Windows Server 2012 R2 ...	➔ Running	192.168.0.112	Jul 13, 2021 02:05:17 GM...

Selected: ecs-windows | OS: Windows Server 2012 R2 Standard 64bit | System Disk: High I/O | 40 GB

[Buy ECS](#)

Step 4 Confirm the settings. Then, select **I have read and agree to the Image Disclaimer** and click **Submit**.

Create Image

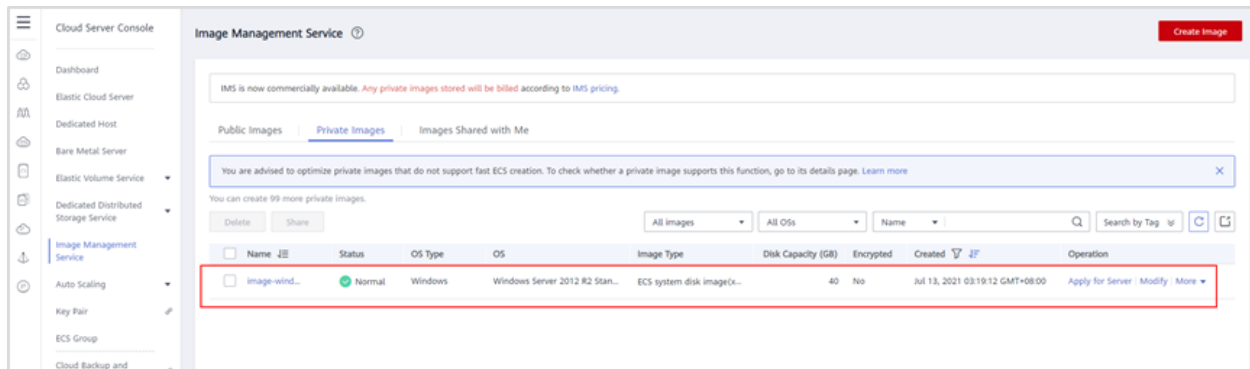
Details

Resource	Configuration	Quantity
System disk image	<div>Name: image-windows2012</div> <div>Source: ECS (ecs-windows)</div>	1

☒ I have read and agree to the Image Disclaimer.

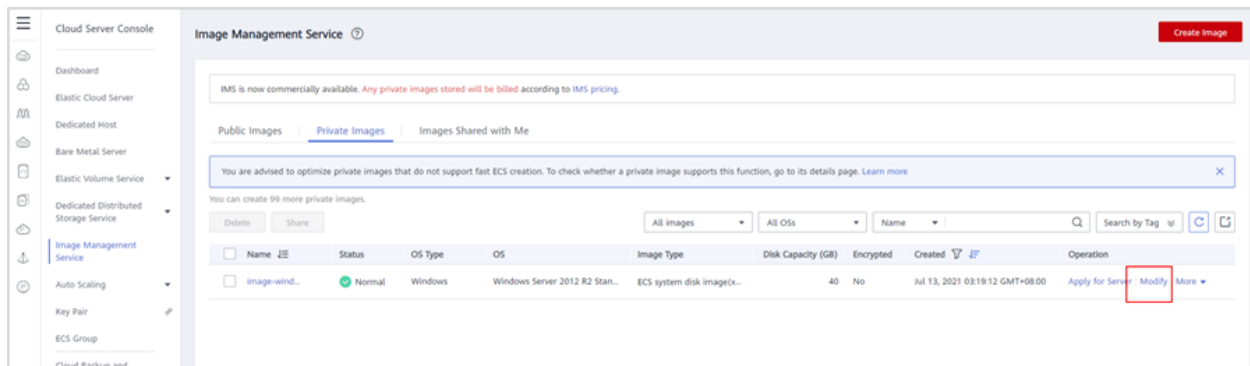
Step 5 Switch back to the **Private Images** tab page to view the image status.

The time required for creating an image depends on the image size. Generally, it takes about 10 to 20 minutes. When the image creation completes, its status changes to **Normal**.



2.3 Modifying Image Information

Step 1 Locate the row that contains the image to be modified and click **Modify** in the **Operation** column.



Step 2 You can modify the image name, memory, and other details.

×

Modify Image

★ Name

image-windows2012

Description

0/1,024

Minimum Memory

Ensure that the minimum memory size of an image is set to its original size before you reinstall OSs of the ECSs that were created using the image.

Unlimited

1 GB

2 GB

4 GB

8 GB

16 GB

32 GB

64 GB

128 GB

Maximum Memory

Unlimited

4 GB

32 GB

64 GB

128 GB

NIC Multi-Queue

Supported

Not supported

Boot Mode

BIOS

UEFI

The boot mode must be the same as that of the OS contained in the image file. Otherwise, ECSs created from this system disk image will fail to start.

OK

Cancel

2.4 Replicating an Image Within a Region

Step 1 On the **Image Management Service** page, click **Private Image** to display the image list.

Cloud Server Console

Image Management Service

Create Image

IMS is now commercially available. Any private images stored will be billed according to IMS pricing.

Public Images | **Private Images** | Images Shared with Me

You are advised to optimize private images that do not support fast ECS creation. To check whether a private image supports this function, go to its details page. [Learn more](#)

You can create 99 more private images.

Delete

Share

All Images

All OSs

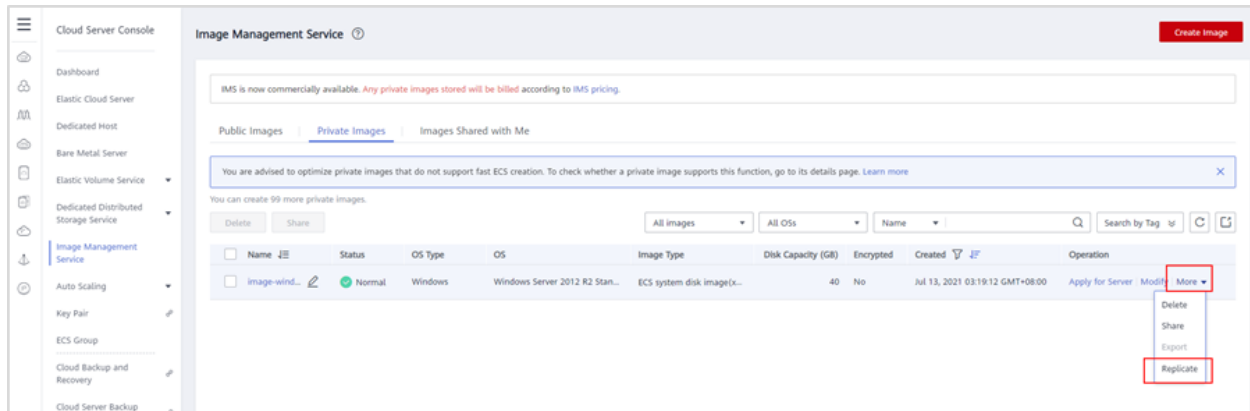
Name

Q

Search by Tag

<input type="checkbox"/>	Name	Status	OS Type	OS	Image Type	Disk Capacity (GB)	Encrypted	Created	Operation
<input type="checkbox"/>	Image-wind...	Normal	Windows	Windows Server 2012 R2 Stan...	ECS system disk image(x...	40	No	Jul 13, 2021 03:19:12 GMT+08:00	Apply for Server · Modify · More

Step 2 Locate the row that contains the image to be replicated and in the **Operation** column choose **More > Replicate**.



Step 3 In the displayed **Replicate Image** dialog box, enter a new name for the image and click **OK**. (Do not select **KMS encryption**.)

Replicate Image

Image Size: 9.07 GB

OS Type: Windows

OS: Windows Server 2012 R2 Standard 64bit

Created: Jul 13, 2021 03:19:12 GMT+08:00

Replication Mode: **Within Region** | Across Regions

* Name: **copy_image-windows2012**

Description:
0/1,024

Encryption: ☐ KMS encryption ?

OK Cancel

<input type="checkbox"/>	Name	Status	OS Type	OS	Image Type	Disk Capacity (GB)	Encrypted	Created	Operation
<input type="checkbox"/>	copy_image-wind...	Creating 20%	Windows	Windows Server 2012 R2 Stan...	ECS system disk image	40	No	Jul 13, 2021 03:39:30 GMT+08:00	Apply for Server Modify More
<input type="checkbox"/>	image-wind...	Normal	Windows	Windows Server 2012 R2 Stan...	ECS system disk image(x...	40	No	Jul 13, 2021 03:19:12 GMT+08:00	Apply for Server Modify More

2.5 Applying for an ECS Using a Private Image

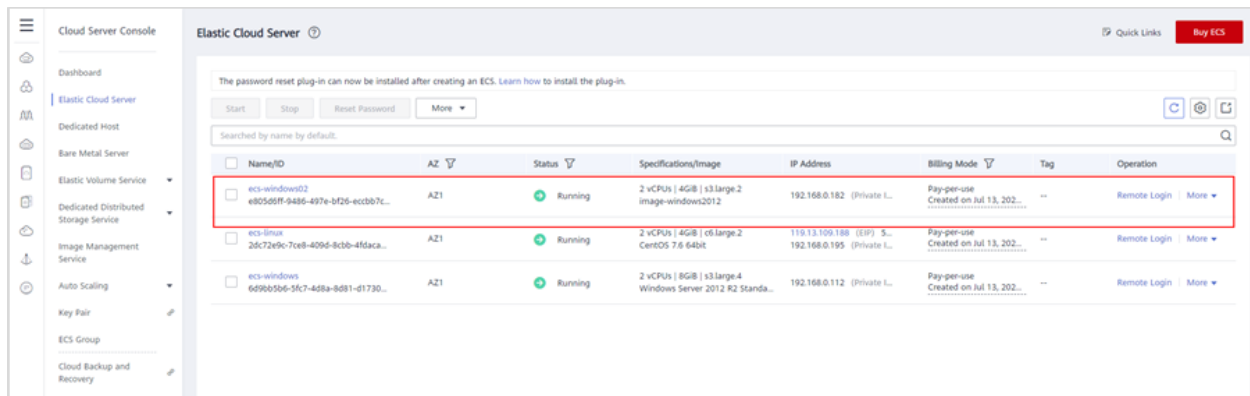
Step 1 On the **Private Images** tab page, locate the image and click **Apply for Server** in the **Operation** column.

The screenshot shows the 'Image Management Service' console. The 'Private Images' tab is active. A table lists private images, with 'image-wind...' highlighted. The 'Operation' column for this image contains the 'Apply for Server' button, which is circled in red. A sidebar on the left shows navigation options like Dashboard, Elastic Cloud Server, and Image Management Service.

Step 2 On the ECS purchase page, ensure that the private image is selected.

The screenshot displays the ECS purchase configuration page. Under 'Selected specifications', 's3.large.2' is chosen. In the 'Image' section, the 'Private image' tab is selected, and the dropdown menu shows 'image-windows2012(40GB)' as the selected option, highlighted with a red box. The 'System Disk' section shows 'General Purpose SSD' with a capacity of 40 GB.

Step 3 Go back to the ECS list to view the ECS created using the private image.



3. Creating a Linux System Disk Image from an ECS

If you have created and configured a Linux ECS based on your service requirements (for example, by installing software and setting up an application environment), you can create a system disk image based on this configured ECS. Then, all new ECSs created from this image will have the same software and environment preinstalled.

To create a Linux system disk image using an ECS, you need to configure a Linux ECS and then use it to create a system disk image.

3.1 Configuring a Linux ECS

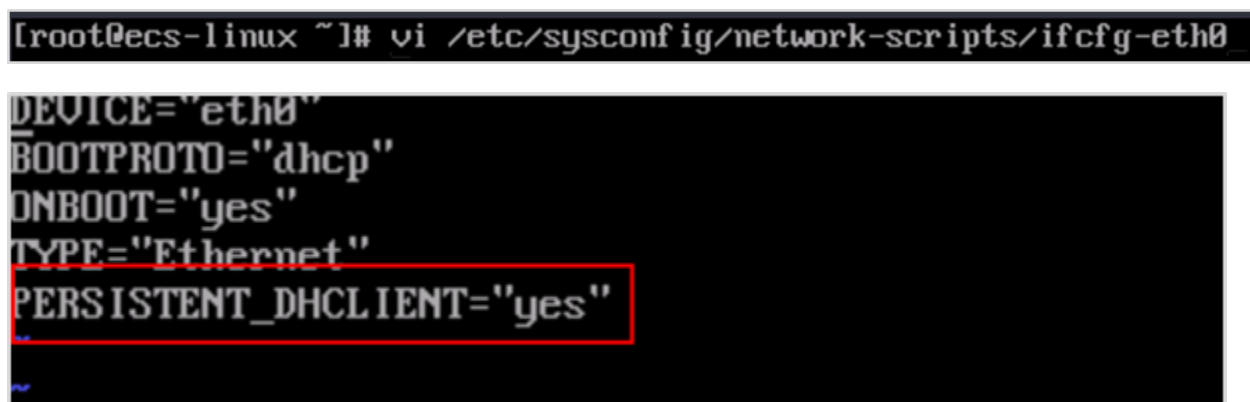
Take the ecs-linux ECS you created as an example.

Step 1 Remotely log in to the ECS.

Step 2 Check whether DHCP is configured for the ECS NICs. If it is not, configure it.

For CentOS, you can configure DHCP by adding `PERSISTENT_DHCLIENT="y"` to the `/etc/sysconfig/network-scripts/ifcfg-ethX` configuration file using the vi editor.

Copy Code `vi /etc/sysconfig/network-scripts/ifcfg-eth0`



Step 3 Check whether the one-click password reset plug-in has been installed on the ECS. If it is not, install it.

Note: To ensure that you can reset the passwords of the new ECSs created from a private image, you are advised to install the one-click password reset plug-in (CloudResetPwdAgent) on the ECS used to create the image. For details, see [Installing the One-Click Password Reset Plug-In \(https://support.huaweicloud.com/intl/en-us/usermanual-ims/ims_01_0408.html\)](https://support.huaweicloud.com/intl/en-us/usermanual-ims/ims_01_0408.html).

λ In this exercise, the ECS is created from a public image. Therefore, the one-click password reset plug-in has been installed on it by default. You do not need to manually install it. You can run the following command to check whether CloudResetPwdAgent has been installed:

Copy Code ls -lh /Cloud*

λ If the following information is displayed, the plug-in has been installed:

```
[root@ecs-linux ~]# ls -lh /Cloud*  
/CloudResetPwdUpdateAgent :  
total 20K  
drwx----- 2 root root 4.0K Jun 11 09:51 bin  
drwxr-xr-x 2 root root 4.0K Feb 26 16:37 conf  
drwx----- 3 root root 4.0K Feb 26 16:37 depend  
drwx----- 2 root root 4.0K Feb 26 16:37 lib  
drwx----- 2 root root 4.0K Jun 11 09:51 logs  
  
/CloudResetPwdAgent :  
total 16K  
drwx----- 2 root root 4.0K Jun 11 09:51 bin  
drwxr-xr-x 2 root root 4.0K Feb 26 16:37 conf  
drwx----- 2 root root 4.0K Feb 26 16:37 lib  
drwx----- 2 root root 4.0K Jun 11 09:51 logs  
[root@ecs-linux ~]# _
```

Step 4 Check whether Cloud-Init is installed. If it is not, install it.

Note:

λ If Cloud-Init is not installed on the ECS, custom information cannot be injected into the new ECSs created from the private image and you can only log in to the ECSs with the password specified in the image.

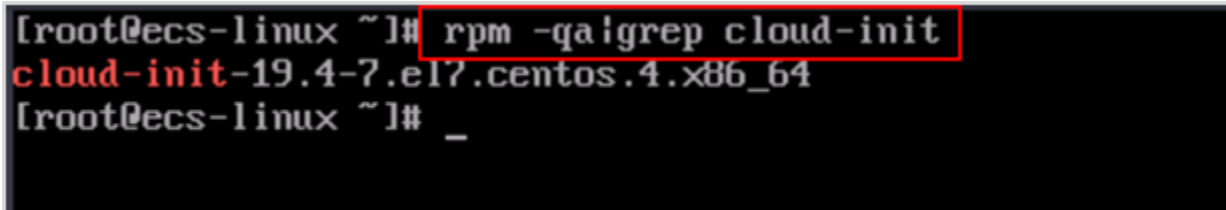
λ For an ECS created from a public image, Cloud-Init has been installed on it by default. You do not need to manually install Cloud-Init for it.

λ For an ECS created using an external image file, you need to install Cloud-Init for the ECS before you use it to create a private image. For details, see [Installing Cloud-Init \(https://support.huaweicloud.com/intl/en-us/usermanual-ims/en-us_topic_0030730603.html\)](https://support.huaweicloud.com/intl/en-us/usermanual-ims/en-us_topic_0030730603.html) and [Configuring Cloud-Init \(https://support.huaweicloud.com/intl/en-us/usermanual-ims/ims_01_0407.html\)](https://support.huaweicloud.com/intl/en-us/usermanual-ims/ims_01_0407.html).

In this exercise, the ECS is created from the public image CentOS 7.6 64bit(40GB). Cloud-Init has been installed on it by default. You can run the following command to check whether Cloud-Init has been installed:

Copy `Code` `rpm -qa |grep cloud-init`

λ If information similar to the following is displayed, Cloud-Init has been installed:



```
[root@ecs-linux ~]# rpm -qa |grep cloud-init
cloud-init-19.4-7.el7.centos.4.x86_64
[root@ecs-linux ~]# _
```

λ If no command output is displayed, Cloud-Init is not installed. Run the following commands to install it (before the installation, make sure an EIP is bound to the ECS so that the ECS can access the Internet):

Copy `Code` `Yum install https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm`

Copy `Code` `yum install cloud-init`

```

[root@ecs-linux ~]# yum install https://archives.fedoraproject.org/pub/epel/7/x86_64/Packages/e/epel-release-7-13.noarch.rpm
Loaded plugins: fastestmirror
epel-release-7-13.noarch.rpm                               | 15 kB  00:00:00
Examining /var/tmp/yum-root-JXr0Za/epel-release-7-13.noarch
/var/tmp/yum-root-JXr0Za/epel-release-7-13.noarch.rpm: does not update installed package.
Error: Nothing to do
[root@ecs-linux ~]# yum install cloud-init
Loaded plugins: fastestmirror
Determining fastest mirrors
base                                                       | 3.6 kB  00:00:00
epel                                                         | 4.7 kB  00:00:00
extras                                                      | 2.9 kB  00:00:00
updates                                                     | 2.9 kB  00:00:00
(1/7): base/7/x86_64/group_gz                             | 153 kB  00:00:00
(2/7): epel/x86_64/updateinfo                             | 1.8 MB  00:00:00
(3/7): epel/x86_64/group_gz                               | 96 kB  00:00:00
(4/7): extras/7/x86_64/primary_db                         | 242 kB  00:00:02
(5/7): base/7/x86_64/primary_db                           51% [=====] | 1.5 MB/s | 12 MB 00:00:07 ETA

```

Step 5 Delete files from the network rule directory.

Note: To prevent NIC name drift on the new ECSs created from a private image, you need to delete network rule files of the ECS used to create the image.

Run the following command to check if there is a network rule file on the ESC:

```
Copy Code ls -l /etc/udev/rules.d
```

If information similar to the following is displayed, no network rule files exist:

```

[root@ecs-linux ~]# ls -l /etc/udev/rules.d
total 0

```

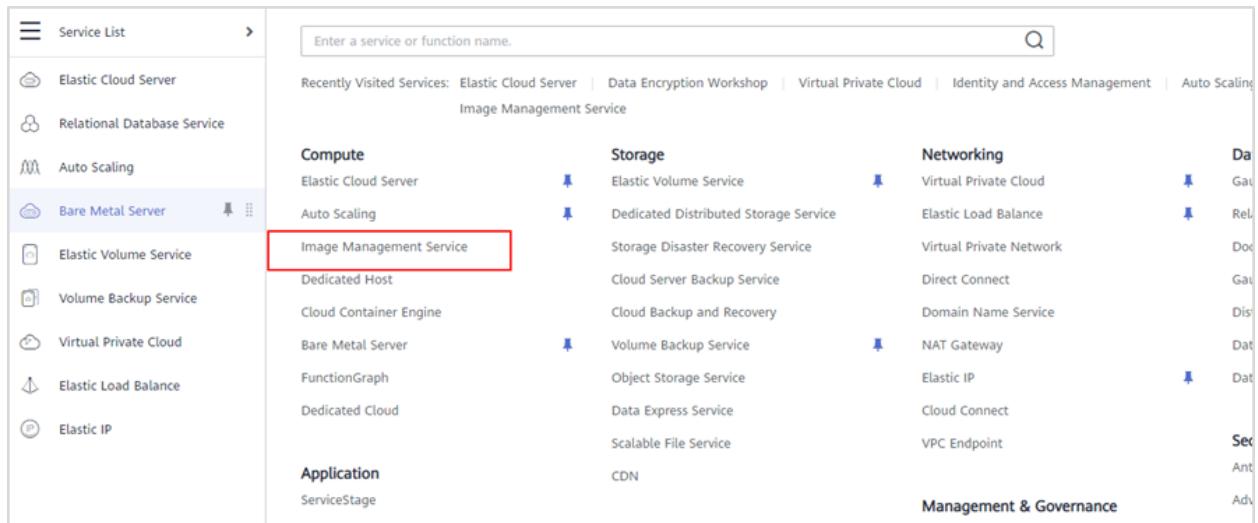
Note:

λ An ECS created from a public image does not have network rule files by default.

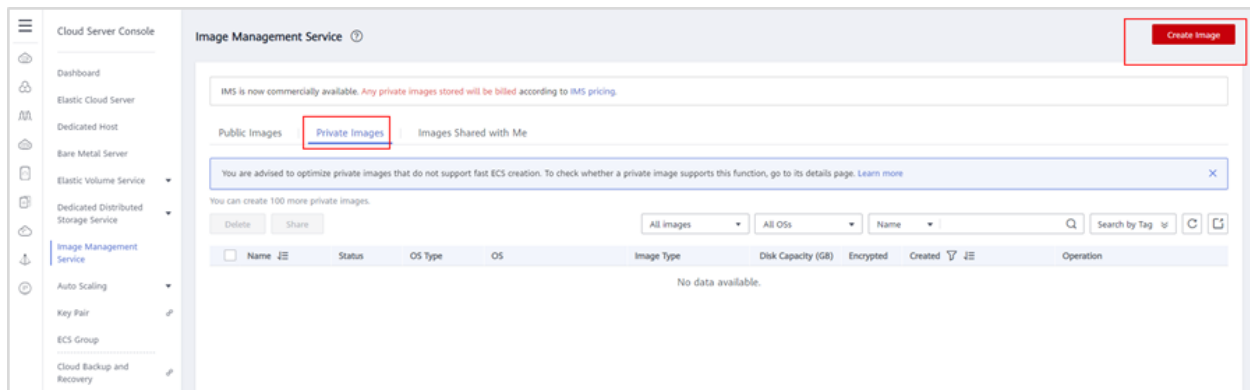
λ An ECS created using an external image file may have network rule files, delete the files by following the instructions provided in Deleting Files from the Network Rule Directory (https://support.huaweicloud.com/intl/en-us/usermanual-imss/ims_01_0406.html).

3.2 Creating a Linux Private Image

Step 1 Go back to the management console and in **Service List** choose **Compute > Image Management Service**.



Step 2 On the Image Management Service page, click **Create Image**.



Step 3 Set the following parameters on the **Create Image** page and click **Next**.

λ **Type:** **System disk image**

λ **Source:** Select a Linux ECS, for example, **ecs-linux**.

λ **Name:** Enter a name, for example, **image-centos7.6**

The time required for creating an image depends on the image size. Generally, it takes about 10 to 20 minutes. When the image creation completes, its status changes to Normal.

3.3 Sharing an Image

You can share your images with other users. Before sharing images with a user, you need to obtain their Project ID. You can share a single image or multiple images as needed.

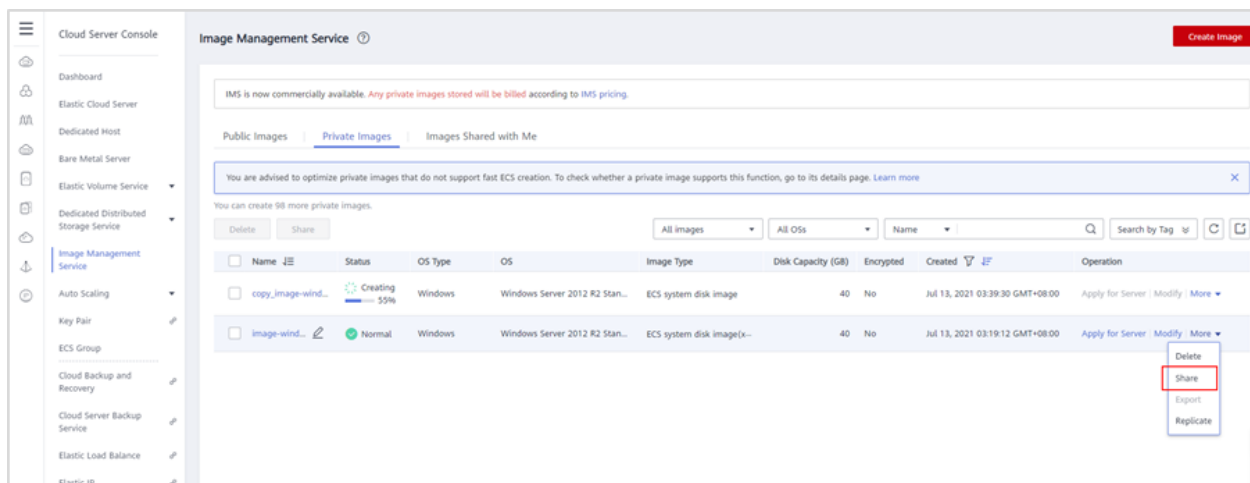
This document uses Windows ECS as an example. You need to use Linux ECS when performing operations.

Step 1 Before sharing image with yourself, you need to find your Huawei Cloud account project ID. Log in to the management console using your **Huawei Cloud account** (not SandBox user).

Step 2 Click the username in the upper right corner and select My Credentials from the drop-down list.

Step 3 On the My Credentials page, view the project ID in the project list. You should use Project ID of region “AP-Singapore”.

Step 4 Return to the SandBox console. Using SandBox account, on the **Private Images** tab page, select the private image to be shared and in the **Operation** column choose **More > Share**.




Step 5 In the **Share Image** dialog box, enter your Project ID and click **Add**. Click **OK**.

Share Image

Enter the account name of the image recipient. [Learn how](#) to obtain an account name.

*

Account Name	Project Name	Project ID	Operation
	ap-southeast-3	07376da301000f682f5ec001ea4...	Delete

This image can be shared with a maximum of 256 tenants. You can share this image with 256 more tenants.

Step 6 Log in to the management console using your **Huawei Cloud account**(not SandBox User), go to the IMS console of “AP-Singapore”, click the **Shared Images** tab, and click **Accept**.

Image Management Service ?


Feedback Create Image

IMS is now in commercial use. *Any private images stored will be billed according to IMS pricing.*

Public Images Private Images Images Shared with Me [Go to Marketplace to publish images.](#)

Reject Rejected Image

All Images All OSs Name Q C

	Name	OS Type	OS	Image Type	Disk Capacity (...)	Source Tenant	Source Project...	Source...	Operation
▼	image-windows...	Windows	Windows Server 201...	ECS system disk ima...	40		ap-southeast-3	0c337ab...	Apply for Server More ▼