

Cloud Virtual Machine

Images

Product Introduction



Tencent
Cloud

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Images

Overview

What are images?

Tencent Cloud images provide all the information needed to start CVM instances. After you specify an image, you can start any number of instances from it. You can also start instances from any number of images.

The major roles of images are:

- **Batch deployment of software environment**
By creating an image for the CVM instance with its software environment deployed and then using the image in batch-creating CVM instances, you can make these CVMs instances created later have the same software environment as the original one, therefore to achieve batch deployment of software environment.
- **As a backup of CVM operating environment**
After an image is created for a CVM instance, you can use the image to recover the CVM instance if its software environment is corrupted and cannot run normal during subsequent use.

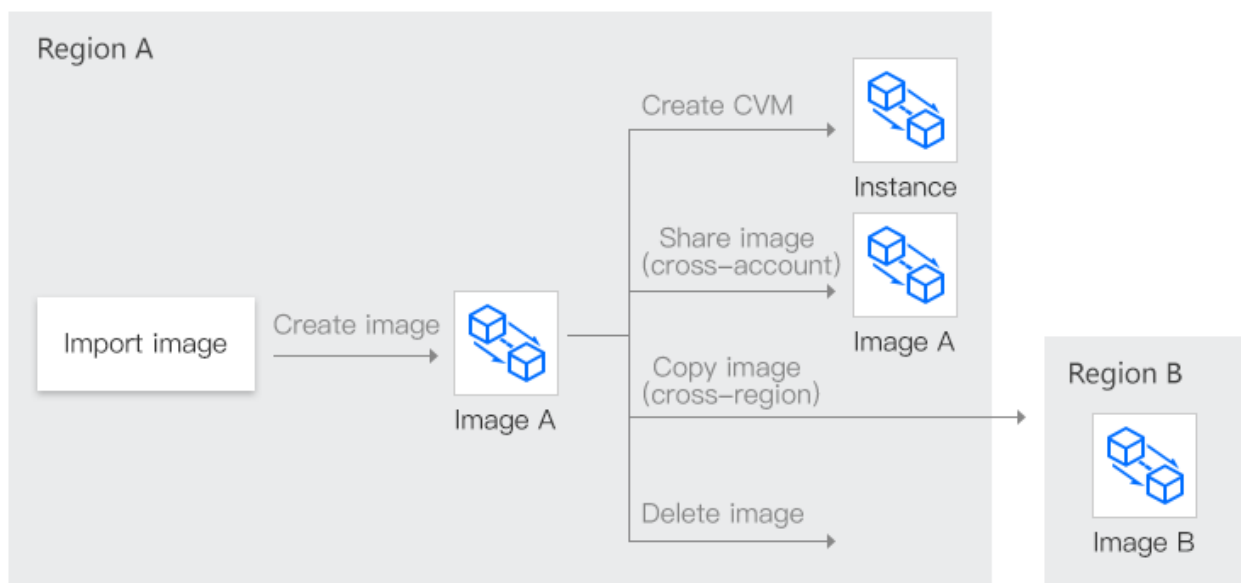
Image types

Tencent Cloud provides the following types of images:

- **Common images:** All users can use them, covering most of the mainstream operating systems.
- **Service market images:** All users can use them, which integrate some special applications in addition to the operating system.
- **Custom images:** Only the creators and shared objects can use them, which are created from existing running instances, or imported externally.
- **Shared images:** Shared by other users and used only to create instances.

Image lifecycle

The following figure summarizes the lifecycle of custom images. After you create or import a new custom image, you can use it to start a new instance (you can also start an instance from an existing common image or a service market image). A custom image can be synchronized to the same accounts in another region, and becomes an independent image in that region. You can also share custom images to other users.



Lifecycle of a custom image

Usage restrictions

Common images: No usage restrictions.

Custom images:

- 1) Cross-regional synchronization of custom images is free.
- 2) Each region supports 10 custom images.
- 3) Each user can only carry out five operations every day (including cloud API operations, counted by

region).

4) Image synchronization is available only in Guangzhou, Beijing, Shanghai, Hong Kong, but not in the North American region.

Shared images:

- 1) Each custom image can be shared up to 50 Tencent Cloud master accounts.
- 2) Shared images do not support modifying names and description, and can only be used to create CVMs.
- 3) Sharing images to the same region as the shared account is supported.

Service market images: No usage restrictions.

Charging standards

Currently, all Tencent Cloud common images are free of charge except that Windows images in overseas regions require some license fees. Service market images are priced by the providers. When you start a CVM instance using an image, the costs consist of two parts: CVM instance costs and image costs. In addition, since your custom images are based on some standard images, they may also incur costs. Specific prices and charge modes will be published on the product page.

Security

Tencent Cloud common images are manufactured after rigorous testing by the professional security O&M team of Tencent Cloud. We also provide optional built-in Tencent Cloud security components, so you can use them confidently.

Service market images are manufactured by third-party providers, who have been selected carefully by Tencent Cloud and have signed settlement agreements. Those images have been tested rigorously by the providers and reviewed by Tencent Cloud, to guarantee the security of their contents, so you can also use them.

Images shared by other users may be subject to security risks because they are not reviewed by Tencent Cloud. Therefore, it is strongly recommended that you do not accept images from unknown sources.

Image Types

You can select your images type based on the following characteristics:

- Location (see [Regions and Availability Zones](#))
- Operating system type
- Architecture (32-bit or 64-bit)

Tencent Clouds provides the following types of images, and you can select images as needed.

Public Images

Public images are provided, supported and maintained by Tencent Cloud, including the basic operating system and the initialization components by Tencent Cloud. All users can use them and choose whether they are based on the Linux system or Windows system.

Tencent Cloud public images are manufactured after rigorous testing by the professional security team of Tencent Cloud. We also provide optional built-in Tencent Cloud security components.

Tencent Cloud common images support:

- Stable, secure, and high-performance application environment.
- Multiple versions of Java, MySQL, SQL Server, Python, Ruby, Tomcat and other common software, as well as full permissions.
- Regular system updates.
- Integrated with Tencent Cloud software packages (for example APIs.).
- High-compliance operating systems, all official genuine ones.
- Free of charge except that Windows images in some overseas regions require some license fees.

Custom Images

Custom images are created or imported by yourself. They can only be used by your account. You can easily create an image for the CVM instance with its applications deployed, and then quickly create more instances that contain the same configuration. Custom images support user creation,

synchronization, sharing and termination, are an essential component of the rapid deployment feature of Tencent Cloud. For more information about custom images, see [Create Custom Images](#), [Synchronize Custom Images](#), [Share and Unshare Custom Images](#) and [Import Custom Images](#).

Since your custom images are based on public images, they may also incur costs (when the original public images are the Windows types in some overseas regions) Exact prices are those published when you create instances.

- Each region supports up to 10 custom images.
- Image synchronization is available only in Guangzhou, Beijing, Shanghai and Hong Kong, but not in North American and Singapore.

Shared Images

Shared images means that other Tencent Cloud users share their custom images with you through the image sharing feature. Shared images will be displayed in the same region as the original images. Shared images do not support modifying names, synchronization, sharing and other operations, and can only be used to create CVMs.

- Each custom image can be shared to up to 50 Tencent Cloud accounts.
- Shared images do not support modifying names and description, and can only be used to create CVMs.
- Sharing images to the same region as the shared account is supported.

Create Custom Images

General

You can launch an CVM using a public image or a service market image, and install and configure the software environment as needed. Then you can create an image to quickly launch more new instances with the same configurations.

It's recommended to shut down the CVM before creating the image.

If you want to reserve the data on the original instance data disk when starting a new instance, then you can first take a snapshot of the data disk. When starting the new instance, you can use this disk snapshot to create a new CBS disk.

Creating Images on Console

- 1) Log in to [CVM Console](#).
- 2) Select the CVM instance from which you want to create an image, and click Operation -> More -> Create Image.
- 3) When the image is created successfully, the result is displayed near the operation log in the upper right corner. With the image ID, you can jump to the image list.

Creating Images via API

You can use the [CreateImage](#) API to create custom images.

Copy Images

Cross-region Copying allows you to quickly deploy the same CVM instances in different regions. Deploying the same CVM instance in different regions using image synchronization is a reliable way to improve application robustness.

Synchronizing images to different regions on Console

- 1) Log in to [CVM Console](#).
- 2) Click Image in the navigation pane.
- 3) Check all images you want to copy, click the Cross-region Copying at the top.
- 4) Select the destination region, and click OK.
- 5) After successful synchronization, the image list status in the destination region is updated to 100%.

Synchronize images to different regions via API

You can use the SyncCvmImage API to synchronize images. For details, refer to [SyncCvmImage API](#).

Share Custom Images

Shared image means that you share a custom image that you have created with others users. You can easily get shared images from other users, to get necessary components and then add custom contents.

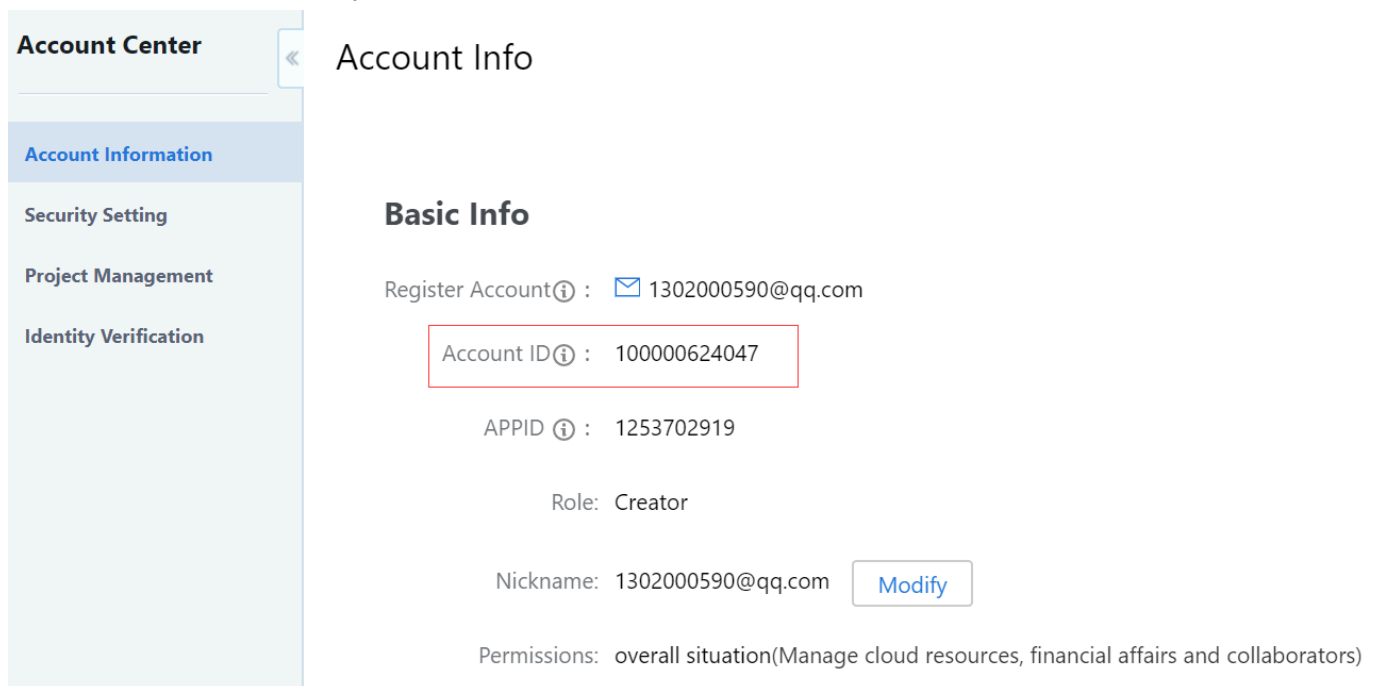
Note that Tencent Cloud cannot guarantee the integrity or security of the shared images from other users. Please use only shared images from reliable sources.

Sharing Images

Obtaining Account of the Counterpart

To share an image with another user, you need to obtain his/her unique account ID. You can inform him of obtaining your ID in this way:

- 1) Log in to Tencent Cloud console, and click the account name in the upper right corner.
- 2) View the account ID in your personal information.



The screenshot displays the 'Account Center' interface. On the left is a navigation menu with 'Account Information' selected. The main content area is titled 'Account Info' and shows 'Basic Info' for a user. The 'Account ID' is highlighted with a red box and is 100000624047. Other details include the registered account email (1302000590@qq.com), APPID (1253702919), role (Creator), and nickname (1302000590@qq.com) with a 'Modify' button. The permissions are listed as 'overall situation(Manage cloud resources, financial affairs and collaborators)'.

Field	Value
Register Account	1302000590@qq.com
Account ID	100000624047
APPID	1253702919
Role	Creator
Nickname	1302000590@qq.com
Permissions	overall situation(Manage cloud resources, financial affairs and collaborators)

Sharing Images on Console

- 1) Log in to [Tencent Cloud Console](#).
- 2) Click CVM – Image in the navigation pane.
- 3) Click the Custom Images tab, and select the custom image you want to share.
- 4) Click the Share button, enter the unique Tencent Cloud account ID of the counterpart, and click OK.
- 5) Inform him of logging in to [Tencent Cloud Console](#) and select "CVM" - "Image" - "Share Image", to view the image that you has shared with him.
- 6) To share this image with multiple users, repeat the above steps until you have added all users.

Sharing Images via API

You can use the [ShareImage API](#) to share images.

Using Shared Images

Shared images can only be used to launch CVM instances. For details, refer to [Purchase and Start Instances](#).

Cancel Image Sharing

You can at any time cancel the status of sharing images with others. This operation does not affect instances that other users have created using this shared image, but other users can no longer see the image or create more new instances using this image.

Cancel image sharing on Console

- 1) Open [Tencent Cloud Console](#).
- 2) Click CVM – Image in the navigation pane.
- 3) Click the Custom Images tab. Find out the custom image you want to cancel sharing and click More – Cancel Sharing. Select the account you want to unshare, click the "Unshare" button and confirm the operation to unshare the image.

Cancel image sharing via API

You can use the [CancelShareImage API](#) to cancel image sharing.

Delete Custom Images

After using the custom image, you can delete it. When you delete a custom image, you will not be able to use this image to [start a new CVM instance](#), but any instances that are already started will not be affected. If you want to remove all instances that were purchased and started from this image, you can refer to [Expiration of Prepaid Instances](#) or [Terminate Postpaid Instances](#).

- If you have already shared a custom image to others ([see here](#)), you cannot delete it. You need to cancel all of its sharing before deleting a custom image.
- You can only delete the custom image, but neither the common image nor the shared image.

Deleting custom images on Console

- 1) Open [Tencent Cloud Console](#).
- 2) Click CVM – Image in the navigation pane.
- 3) Click the "Custom Images" tab, and select the custom image you want to share in the list.
- 4) Click the "Delete" button and confirm the operation, to delete all selected custom images. In case of failed deletion, the reasons will be prompted above the image.

Deleting custom images via API

You can use the [DeleteImages API](#) to delete images. For details, refer to

Import Images

In addition to the [Create Custom Image](#) feature, Tencent Cloud also supports importing local or other platform system disk image files into CVM custom images with the import feature. After importing, you can use the imported image to create a CVM or reinstall the operating system of an existing CVM.

Importable Linux images

The local Linux image to be imported needs to meet the following criteria:

Image property	Criteria
Operating system	CentOS, Redhat, Ubuntu, Debian, CoreOS, OpenSUSE, SUSE releases. Supports 32-bit and 64-bit
Image format	raw, vhd, qcow2, vmdk
File system type	ext3 or ext4 file systems using MBR partition (GPT partition not supported)
System disk size	Up to 50 GB. Supports only system disk images, but not data disk images
Network	Do not support multiple network APIs, but only eth0. Do not support IPv6 addresses. When you use the imported image to create a CVM, Tencent Cloud will create a network configuration file in the system and save it in <code>/etc/qcloud-network-config.ini</code> . This configuration file contains IP, subnet mask, gateway, DNS and other information. The user can log in to the CVM to configure the network after creating a CVM using this image.
Driver	The virtio driver for the KVM platform must be installed
Kernel restriction	Native kernel is preferred, for modifications may

Image property	Criteria
	<p>cause failed importing of virtual machines.</p> <p>The Red Hat Enterprise Linux (RHEL) image imported must have the BYOL license. You need to purchase the product serial number and service from the manufacturer.</p>

Importable Windows images

The local Windows image to be imported needs to meet the following criteria:

Image property	Criteria
Operating system	<p>Microsoft Windows Server 2008 R2 (standard edition, datacenter edition, enterprise edition),</p> <p>Microsoft Windows Server 2012 R2 (standard edition),</p> <p>Supports 64-bit systems only</p>
Image format	raw, vhd, qcow2, vmdk
File system type	NTFS file system with MBR partition (GPT partition not supported)
System disk size	Not more than 50 GB. Supports only system disk images, but not data disk images
Network	<p>Do not support multiple network APIs, but only eth0.</p> <p>Do not support IPv6 addresses.</p> <p>When you use the imported image to create a CVM, Tencent Cloud will create a network configuration file in the system and save it in `C:\qcloud-network-config.ini`. This configuration file contains IP, subnet mask, gateway, DNS and other information. The user can log in to the CVM to configure the network after creating a CVM using this image.</p>
Driver	The virtio driver for the KVM platform must be

Image property	Criteria
	installed. However, the virtio driver is not installed on the Windows system by default. You can install the driver by using Tencent Cloud Software Package on the original external platform machine and then export it as the local image.
Others	The imported Windows image DO NOT provide Windows Activation services

Import images via console

Please make sure your Tencent Cloud account has applied for the import permission. If not, please apply for it by submitting a ticket.

- 1) Log in to [CVM Console](#).
- 2) Click Image from the left panel.
- 3) Click Custom Image tab and select Import Image.
- 4) Activate Tencent Cloud COS as required, upload the image files that meet the requirements to the COS, and click Next.
- 5) Enter information required. Make sure the COS file URL you enter is accurate, and then click Start Importing.
- 6) The operation result is sent to your phone (SMS) or registered Email account.