# **Cloud Virtual Machine**

Instances

# **Product Introduction**





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Instances

# Instance Lifecycle

# Purchase and Start Instances

Users can start a new instance as follows:

# Purchase and start the instance via image

1) Log in to the Tencent Cloud official website, select "Products" - "Compute" - "Cloud Virtual Machine", then click "Buy Now" button, enter the <u>CVM purchase page</u>.

2) Select a region and availability zone. When you need more than one CVMs, it's recommended that you choose different availability zones so as to ensure disaster tolerance.

3) Select the model and configuration. Tencent Cloud provides three CVM models.

- Standard: With CPUs ranging from low to high core count, this is suitable for medium- and small-sized Web applications and databases.
- High IO: Both system and data disks are high-performance SSDs. This is suitable for I/O intensive applications with low latency.
- Memory: A CPU:memory ratio of 1:8, applicable to applications that need considerable memory operations, search, and compute.
  For the comparison, see <u>here</u>.

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#### **Instances Product Introduction**

1. Select th	1. Select the region and model		an image	3. Select storage	and network	4. Set information		
Billing Mode (i)	Postpaid							
Region	Guangzhou	Shanghai Beijing	Toronto					
	Cloud Services in differ downloading speed. V	ent regions cannot interwork v ïew My CVM Region ≌ De	with each other through tailed Comparison ⊠	the private network. Select t	the region nearest to your cu	stomer to reduce th	ne access latency and improve the	)
Availability Zone	Guangzhou Zone	2 Guangzhou Zone	3 Guangzhou Zo	one 4 <sup>NEW</sup>				
Series (j)	Series 1	Series 2 Detailed Co	omparison <sup>12</sup>					
Model	StandardS1	High IOI1						
	Model	VCPU 7	7	MEM Y	Support Cloue	d Disks (i)	Fee ‡ (i)	
	O StandardS1	1-core		1G	Yes		0.04 USD/ hours up	
	• StandardS1	1-core		2G	Yes		0.05 USD/ hours up	
	Next: Select an image	age The initial price cov	ers only the CPU and N	/IEM fees. The system disk,	data disk, image and bandwi	idth fees are NOT i	ncluded.	

#### 4) Select the image

Those who have just started using Tencent Cloud products can select public images, which contain the vast majority of Linux systems and the legitimate Windows systems. You need to build subsequent operating environment on your own. Select an operating system and the version as needed.

1. Select the region and model			2. Select an	image	3. Select st	orage and ne	twork	4. Set informatio	n
Selected con	figuration								
Billing Mode	Postpaid								
Region	South China (Gua	angzhou)							
Availability Zone	one Guangzhou Zone 2								
Model	Nodel Series 1、StandardS1、1-core CPU, 2 G MEM								
Image Provider	Public Images	Custom Ima	age Shared	Image Sei	rvice market				
Operating	CentOS	CoreOS	Debian	FreeBSD	OpenSUSE	SUSE	Ubuntu	Windows Server	
system	0011100	001000	Doblari		oponocoz	0002	obunta		
System version	Select the system v	version	~						
	Back Nex	d: Select storag	je and network						



- Linux image system provided by Tencent Cloud is an open source system that supports a variety of popular programming languages and databases like MySQL (need to be installed by user).
- Windows image system provided by Tencent Cloud contains legitimate activation key at no extra charge (except for certain overseas regions).

6) Select the type of hard disk and the size of data disk.

Tencent Cloud provides Cloud Block Storage and local hard disk.

- Cloud Block Storage: delivers high data reliability with the distributed three-copy mechanism.
- Local hard disk: a storage located on the physical machine where the CVM resides; it allows low latency but may cause single-point loss risk. For the comparison, see <u>here</u>.

Whichever type of disk you choose, a complimentary 20 GB system disk will be provided for each Linux CVM purchase by default, and you can adjust the capacity to 50 GB through the billing mode; a complimentary 50 GB system disk will be supplied with each Windows CVM purchase by default, and it cannot be adjusted at the moment. You can select the data disk size as needed when making the purchase.

7) Choose the type of network (basic network or VPC) and network billing mode (charge by fixed bandwidth or by traffic).

- Basic network: suitable for new users; CVM private networks of the same user are interconnected.
- Virtual Private Cloud: suitable for higher-level users; there is logic isolation between different VPCs.

NOTE: Windows CVM cannot be used as the <u>Public Network Gateway</u>. Users who need public network gateway can select the Linux image to create CVM.

• Bill by bandwidth: a fixed bandwidth is selected; exceeding this bandwidth will lead to packet



loss. Suitable for scenarios with a low level of network fluctuation.

• Bill by traffic: the fee will be charged by the actually consumed traffic. You may set a peak bandwidth limit to avoid any cost arising from unexpected traffic. Packet loss will happen when the instantaneous bandwidth exceeds that peak value.

8) Determine the number of servers and the length of purchase (only for CVMs with an annual and monthly plan).

9) Set host name and login method

You may choose the host naming method of "Name It Now" at the time of purchase, and fill in a meaningful name limited to 60 characters, such as

my-first-cvm

, or choose to "Name It after Creation". In the latter case, naming is not needed, and the name of the started CVM will be

Unnamed

Tencent Cloud supports multiple CVM login methods, from which users are free to choose:

- For CVMs with Linux images, three login methods are available.
  - Setting a password: users can set a password to log in to the CVM by following the instructions in the page.
  - Associating with the keys immediately: logging in with SSH keys is safer than logging in with passwords. Users need to choose available SSH keys, or create new SSH keys.
    For more information about SSH keys, please refer to <u>SSH Key</u>.
  - Automatically generated password: Tencent Cloud can generate a password automatically and send the initial password to you through internal message after the CVM is started.
- For CVMs with Windows images, two login methods are available.

- Setting a password: users can set a password to log in to the CVM by following the instructions in the page.
- Automatically generated password: Tencent Cloud can generate a password automatically and send the initial password to you through internal message after the CVM is started.

For more information about logging in to server, please refer to <u>Logging in to Windows Instance</u> and <u>Logging in to Linux Instance</u>

10) Choose a Security Group (Make sure the login ports 22 (Linux) or 3389 (Windows) are open. See <u>Security Group</u> for more information), click "Buy Now" button and complete the payment, and then you may enter <u>Console</u> to check and accept your CVM.

After the CVM is created, the user will get an internal message containing such information as instance name, Public IP address, Private IP address, login name, and initial login password (if you choose the method of automatically generated password). You may use the information to log in to and manage instances.

# Start an instance which is the same as the current CVM

Tencent Cloud allows users to start an instance which is the same as the current CVM (operating system, application and configuration, etc.) by making a CVM custom image. The instance will get a new Private IP address and a new optional Public IP address.

1) Open the Tencent Cloud console, choose "Cloud Virtual Machine" tab.

2) After clicking the CVM instance for which an image will be made in the CVM list, choose "Operation" - "More" - "Make Image" buttons.

3) After an image is successfully made, the operation log at the upper right corner will display the completion status. Redirect to the image list through the completed image ID.

4) Click the "Create Cloud Virtual Machine" button after the image to redirect to the CVM purchase page. The operating system will select this image by default.

5) Make a purchase following the steps described in the "Purchase and Start an Instance via Image" above, and then you can create an instance that is the same as the current CVM.

# Automatically mount data disks when using custom image and data disk snapshot to start a new instance

For instances started based on the method above, the data disks can only be used by CVM instances after being mounted or made online. See the Linux System Partitioning, Formatting, Mounting and File System Creation and Windows System Partitioning, Formatting and File System Creation for details. When starting new CVM instances, if a user specifies a custom image anddata disk snapshot, the Cloud Block Storage of Tencent Cloud can support automatic mounting after a CVM instance is started (which means reading and writing for data disks can be achieved directly without the need to perform a series of operations including adding, partitioning and formatting). Users need to perform several operations on the original instances according to the following instructions before making custom images and data disk snapshots:

#### How to set automatic mounting of data disks in Linux system

In a Linux system, if a user hopes that the Cloud Block Storage generated by a specified data disk snapshot can automatically mount new CVM instances, the specified custom image and data disk snapshot must meet the following requirements:

- The data disk should be formatted before a snapshot is made for it, namely it was successfully mounted to the original CVM.
- Before an image is made for the system disk, the following commands need to be added to the

/etc/rc.local

file so that data disk mount points are written in the file:

mkdir -p <mount-point> mount <device-id> <mount-point>



Note: Input the mount point of the file system in

<mount-point>

, such as

/mydata

, and input the actual location of file on the partition in

<device-id>

, such as

/dev/vdb (The device name without partitions and with a file system)

and

/dev/vdb1 (The device name with both a file system and partitions)

Only if the two requirements above are both satisfied can the new Linux CVM instance data disk be automatically recognized and mounted.

#### How to set automatic mounting of data disks in Windows system

In a Windows system, if a user hopes that the Cloud Block Storage generated by a specified data disk snapshot can automatically mount new CVM instances, the specified custom image and data disk snapshot must meet the following requirements:

• The SAN policy in the custom image is



onlineAll

. The Windows public images currently provided by Tencent Cloud have been configured accordingly by default, but users are recommended to check the configuration before making custom images.

• Data disks should be formatted into

ntfs

or

fat32

before snapshots are made.

Only if the two requirements above are both satisfied can the new Windows CVM instance data disk be automatically recognized and made online.



#### **Restart Instances**

Reboot is a necessary method to maintain CVM. Rebooting CVM instances is equivalent to restarting operating systems of local computers. It is recommended that users reboot instances using the reboot operation provided by Tencent Cloud rather than running reboot command in instances (such as restart command in Windows and Reboot command in Linux). Generally speaking, it takes only a few minutes to reboot your instances after the reboot operation is performed, but instances are unable to provide services during rebooting. Therefore, please make sure the CVM has stopped receiving service requests before rebooting.

Since the physical characteristics of instances are not changed after the reboot, the Public IP address and Private IP address of, and any data stored in the instances will not be altered.

Rebooting instances will not start a new billing period. The length of time for use of postpaid instance will be kept, which will not affect its price range.

#### Use console to reboot instances

#### 1) Open <u>CVM console</u>.

2) To reboot a CVM instance running solely, click "Reboot" on the action bar to the right side.

3) To reboot CVM instances running in batch, check all the CVMs to be rebooted, and click "More" -"Reboot" on the top of the list. Reasons will be given for CVMs that cannot be rebooted.

#### Use API to reboot instances

Please refer to <u>RestartInstances API</u>.

## Shutdown Instances

Shutdown instance is equivalent to the shutdown operation of local computers (such as shutdown command in Windows system and Linux system). The following instance attributes are modifiable only if the instance is in the shutdown state:

- Instance configuration (CPU, MEM)
- The size of Cloud Block Storage mounted on the instance
- Reset Password
- Load Key

When you shut down a CVM instance,

- the instance will be shut down with all services stopped. The state of instance will first change to shutting-down and then shutdown completed after it has been shut down.
- all the storage of the instance will remain connected to the instance, and all data are saved.
- data in memory will be lost while the instance is being shut down.
- all the services associated with the instance as well as their associated relationships are maintained, including <u>public IP</u>, <u>private IP</u>, <u>EIP</u> and <u>Classiclink</u>.
- If the instance belongs to a <u>Backend Server Cluster of a CLB Instance</u>, it will stop providing services. If a health check policy is configure for this CLB instance, this CVM instance will be blocked. If no health check policy is configured, the client may receive 502 error. For more information, please see <u>Health Check</u>.
- If the instance is in <u>Auto Scaling Group</u>, the Auto Scaling service will mark shutdown instance as poor performance, move the same out of Auto Scaling group and launch replacement instance. For more information, please see <u>auto scaling documentation</u>.

# Shutting Down Instances on Console

1) Log in to <u>CVM Console</u>.

2) To shut down one running CVM instance, click "Shutdown" on the action bar to the right side.

3) To shut down multiple running CVM instances, check all the CVMs to be shut down, and click More - Shutdown on the top of the list. Reasons will be given for CVMs that cannot be shut down.

# Shutting Down Instances via API

Please refer to StopInstances API.

Follow-up actions

To change the instance type, see <u>Adjust the Instance Configuration</u>.

To reset password, see Login Password.

To load keys, see <u>SSH Key</u>.

# **Reinstall System**

System reinstallation enables instances to recover to a newly started status. It is a recovery method when CVM instances are suffering software failures. CVM instances support reinstallation of different types of systems. Whether you choose to change to a Linux series system or a Windows series system, Tencent Cloud will offer various-sized system disks to you.

It should be noted that reinstalling the system will result in loss of all contents of system disks. Data in data disks will not be affected, but need to be re-recognized. Therefore, in case that system operation data need to be retained, it is strongly recommended that you [Create Custom Image] (/doc/product/213/4942) before reinstalling the system and decide whether to use the image for reinstallation.

# Sizes of system disks of different operating systems

- If the newly purchased Linux CVM comes with a cloud block storage, it can support a system disk of 20GB 50GB.
- If the newly purchased Linux CVM comes with a local disk, it can support a system disk of 20GB.
- A newly purchased Windows CVM with any type of hard disk supports a system disk of 50GB.

# Charges for system disks

- For Linux instance system disks, the first 20GB of Tencent Cloud is free of charge. If the system disk supports capacity adjustment (i.e. if it is a Cloud Block Storage), the part beyond 20GB will be charged as per the charging standard of Cloud Block S
- For Windows instance system disks, the first 50GB of Tencent Cloud is free of charge. Since Windows instances do not support system disk capacity adjustment, no fees will be charged for system disks of Windows instances.

# Use console to reinstall system

1) Open <u>CVM Console</u>.



2) For CVM instances that requires system reinstallation, click "More" - "Reinstall System" on the action bar to the right side.

3) In the pop-up box of system reinstallation, select the image used by the current machine or other images.

4) If other operating systems are needed, choose from the images provided by Tencent Cloud. Click "Reinstall System".

Note:

- Do not perform other operations during system disk reinstallation.
- The data in current system disks cannot be recovered after system disk reinstallation.
- The data in data disks will be retained and will not be affected after system disk reinstallation, which however need to be mounted manually before use.

# Questions about the switching between Windows system instances and Linux system instances

Can the system disk of an old user's Linux CVM that comes with a local disk be scaled out to 20GB?

For a Linux CVM that comes with a local disk of 8GB, the system disk can be scaled out to 20GB by reinstalling the system.

A user has purchased a Linux CVM that comes with an over-20GB Cloud Block Storage. How the charges are calculated if the user reinstalls the operating system and changes it to Windows?

If a user purchases a Linux CVM that comes with an over-20GB Cloud Block Storage, and then



changes the operating system to Windows, the charges will be calculated based on the billing mode:

- If the CVM is based on an annual or monthly plan, a refund will be made (exclusive of the amount of voucher used in payment) or the price will be lowered according to the payment conditions.
- If the CVM is based on charge-by-quantity, the calculation of configuration charge for the part exceeding 20GB of the system disk will be stopped (i.e. the system disk will be free of charge afterwards) after the operating system is changed to Windows;

A user has purchased a Windows CVM that comes with a Cloud Block Storage. How the charges are calculated if the user reinstalls the operating system and changes it to Linux?

Since the current system disk does not support capacity reduction, when a 50GB Windows Cloud Block Storage is changed to Linux, the capacity shall be kept and corresponding fees for the Cloud Block Storage shall be paid. (The first 20GB is free of charge, and fees for another 30GB shall be paid). See <u>Hard Disk Prices</u> for details

# **Terminate Instances**

You can terminate unnecessary <u>postpaid instances</u> any time. (Note: you can not terminate prepaid instances manually. They will be terminated automatically after expiration). A terminated instance will not incur charges.

When a postpaid instance is terminated, the local disks and non-elastic Cloud Block Storage mounted to the instance will be terminated as well, and the data stored on them will be discarded. But the elastic Cloud Block Storage mounted to the instance will be kept, and the data will not be affected. When a postpaid instance is terminated, it is still visible on Console for a short period.

# Terminate postpaid instances on Console

- 1) Open <u>CVM console</u>.
- 2) Only postpaid CVMs can be terminated.
- 3) To release one postpaid CVM instance, click "Terminate" on the action bar to the right side.

4) To release multiple postpaid CVM instances at once, check the desired CVMs, and click "More" -"Terminate" on the top of the list. Reasons will be given for CVM instances that cannot be terminated.

# Terminate postpaid instances via API

Please refer to <u>Return Instance API</u>.

## **Instance Expires**

Different from postpaid instances, prepaid instance cannot be terminated by users. After a certain time following the its end of life cycle, it will be automatically terminated by the system. Prepaid CVM instances are shut down on the expiry date and automatically put into the Recycle Bin. It will be retained for 7 calendar days during which you can choose to renew. The instance will then be terminated if it is not renewed within 7 calendar days.

# Instance Recycle

Tencent Cloud Recycle Bin is a recovery mechanism and system for cloud services. Cloud services with an annual or monthly plan will be put into the Recycle Bin upon expiration and be kept for a certain time, during which users can find it in the Recycle Bin and renew it. In this way, users can avoid major risks such as loss of cloud service data cleared directly by the system.

If your CVM instance hasn't been renewed before the expiry date (including), the system will end its service (network outage and service shutdown with data saved only) from the expiry date. Within 7 workings days after it has been put into the Recycle Bin, you can still recover it by renewing it. If, during this period, the instance hasn't been renewed, the system will release the resources, and data will be erased and cannot be recovered.

- After putting into the Recycle Bin, CVM will be forced to terminate the mounting relationship with Cloud Load Balance, Elastic Public IP, elastic cloud disk, auxiliary ENI, and basic network interconnection. The mounting relationship cannot be recovered after renewal, you have to reset it.
- For sufficient account balance, the device with auto renewal setting will perform renewal automatically upon expiration.

For objects in the Recycle Bin, users can only renew to recover the recycled object before terminating.

## **Recover instance**

Within 7 days after the expiration of CVM, you can go to the Recycle Bin to recover the CVM by



renewing it:

Open the <u>CVM Recycle Bin Console</u>, locate the CVM that you want to recover in the list, and then select the resources that need to be restored, click on "Recovery". After you've paid for renewal, you can find the recovered resources in the <u>CVM Console</u>.

## **Batch Renew Instances**

Open the <u>CVM Recycle Bin Console</u>, locate the CVM that you want to recover in the list, and then select the resources to be recovered, click on "Batch Recovery". After you've paid for renewal, you can find the recovered resources in the <u>CVM Console</u>.

#### Terminate an Instance

Within 7 days after the expiration of CVM, you can go to the Recycle Bin to terminate the CVM completely:

Open the <u>CVM Recycle Bin Console</u>, select the the CVM that you want to terminate, and click "Terminate" and confirm the operation. The selected item will be terminated and cannot be recovered.

## **Batch Terminate Instances**

Open the <u>CVM Recycle Bin Console</u>, select the the CVMs you want to terminate, and click "Batch Terminate" and confirm the operation. The selected items will be terminated and cannot be recovered.

Note:

- Once terminated, all data will be cleared and cannot be recovered. Please back-up your data before the operation.
- EIPs and elastic cloud disks of the terminated machines are still available. Idle IPs will be charged. Release them in the resource management page if you don't need them any more.

# Log into Windows Instances

Once you've started a Windows instance, you can connect to and log in to it. The login method depends on your local operating system and whether the CVM instance can be accessed by Internet. See the table below for details.

Local operating system	Windows CVM instance with	Windows CVM instance without
	public IP	public IP
Windows	VNC Login	VNC Login
	Remote Desktop Connection	
Linux	VNC Login	
	rdesktop Login	
Mac OS	VNC Login	
	rdesktop Login	

# Prerequisites

You need to use the administrator account ID and the corresponding password to log in to the CVM.

- Administrator account ID: it is Administrator for all Windows instances
- Password:
  - If you select "Auto Generate Password" when starting the instance, then the initial password will be randomly assigned by the system. You can log in to <u>Tencent Cloud</u> <u>Console</u>, and click the "Internal Message" button on the right. In the "Check and accept the newly purchased server" page, the login account ID and initial password of administrator for CVM will be provided.
- If you select "Custom Password" when starting the instance, then the password will be the one you specified when purchasing the CVM instance. To learn more about password, for example, what to do if I forget the login password, refer to Login Password.

Windows system: use Remote Desktop Connection to log in to Windows instance



On the local Windows machine, click "Start" - "Run", enter

mstsc

command to open the Remote Desktop Connection dialog box.

In the input box, input the public IP of Windows Server (Log in to <u>CVM Console</u> to check the public IP of CVM).

Click "Connect", and, in the screen that opens, enter the administrator account ID and corresponding password obtained from the Prerequisites step.

Click "OK" to log in to Windows CVM.

If the login fails, check if your CVM instance allows inbound traffic over port 3389. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

#### Linux system: Use rdesktop to log in to Windows instance

To log in to a remote Windows instance, you need to install an appropriate remote desktop connector, for which rdesktop is recommended. For more information about rdesktop, see <u>Here</u>.

1) Install rdesktop Run the

rdesktop

command to check if it is installed. If not, <u>download the latest installation package</u>, and run the following command to extract and install it to the appropriate directory.

tar xvzf rdesktop-<x.x.x>.tar.gz ## Replace x.x.x with the downloaded version number. cd rdesktop-1.8.3 ./configure



make

make install

2) Connect to remote Windows instance

Run the command below (Replace parameters in the example with yours):

rdesktop -u Administrator -p <your-password> <hostname or ip address>

"-u" is followed by the username, which is

#### Administrator

, "-p" is followed by password you obtained from the Prerequisites step and is the public IP or custom domain name of your Windows instance.

If the login fails, check if your CVM instance allows inbound traffic over port 3389. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

# Mac operating system: Use Microsoft Remote Desktop Connection Client for Mac to log in to Windows instance

Go to the Microsoft official website to download Remote Desktop Connection Client for Mac OS.

After the installation is completed, use the username and password you obtained from the Prerequisites step to log in to the remote Windows instance.

If the login fails, check if your CVM instance allows inbound traffic over port 3389. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

## Use VNC to log in to instance

VNC login is a way Tencent Cloud provides for users to connect to their CVMs through Web browser. When the remote login client is not installed or cannot be used, you can connect to your CVM using VNC login and check the CVM status. This also allows you to perform basic CVM management operations with the CVM account.

VNC login scenarios include at least the following:

- Check the progress of a CVM startup
- Log in to the server with VNC when client SSH or mstsc login is not available

In the Action column of CVM list, click "Log In" button to connect to Windows CVM via VNC.

Tencent Cloud	preview Console Home Pro	ducts 🕶					time t	🔹   Billing Center 🕶   Ticket 🕶   🎒
Cloud Virtual Machine	Cloud Virtual Machin	e						CVM Usage Guide 12
	Guangzhou(0) Shanghai(0) E	Beijing(0) Toronto(1)						
Cloud Virtual Machine	+ New Start up Shutde	own Restart Renew	Reset password More a	ctions ~			Use ' ' to split more	than one keyword, and press 🔍 🕂 🔯 💷
Image	✓ ID/Name	Monitor/Status	Availability Zone	Model	Configuration	Primary IP	Project	Operation
Cloud Block Storage		, .h			1-core 2GB 1Mbps			
Snapshots 🗸		Running	Toronto Zone 1	S1 👬	System disk:Local disk Network: Basic Network		Default Project	Log In More V
SSH Key								
Security Groups								
EIP								
	Selected 1 items, Total 1 items						Lines	ber page: 50 ▼ K < 1/1 > X

By clicking the Ctrl+Alt+Del command at the top left corner, enter the system login screen:



Send CtrlAltDel	
Ctrl-Alt-Delete Ctrl-Alt-Backspace	ux 7 (Core) 0.0-514.21.1 _centos logi
Ctrl-Alt-F1	
Ctrl-Alt-F2	
Ctrl-Alt-F3	
Ctrl-Alt-F4	
Ctrl-Alt-F5	
Ctrl-Alt-F6	
Ctrl-Alt-F7	
Ctrl-Alt-F8	
Ctrl-Alt-F9	
Ctrl-Alt-F10	
Ctrl-Alt-F11	
Ctrl-Alt-F12	

Note:

- Ctrl + Alt + Delete is a shortcut key combination for you to log in to Windows or open task manager after the screen is locked.
- This terminal is exclusive, that is, only one user can log in using VNC at a time.
- To log in with VNC in the normal way, you need to use modern browsers such as Chrome, Firefox, IE10 or above.
- Copy and Paste are not supported at the moment.
- File upload and download are not supported at the moment.

# Log into Linux Instances

Once you've purchased and started a Linux instance, you can connect to and log in to it. The login method depends on your local operating system and whether the CVM instance can be accessed by Internet. See the table below for details.

Local operating system	Linux CVM instance with public	Linux CVM instance without
	IP	public IP
Windows	VNC Login	VNC Login
	Remote Login Software	
	Key Login	
Linux	VNC Login	
	SSH Login	
	Key Login	
Mac OS	VNC Login	
	SSH Login	
	Key Login	

# Prerequisites

With password login, you need to use the administrator account ID and the corresponding password to log in to the CVM. With key login, you need to create and download a private key to log in to the CVM.

#### Prerequisites for login with remote login software and SSH

• Administrator account ID: the administrator account ID varies with the type of Linux instance. See the table below.

Instance Operating System	Administrator Account ID
SUSE/CentOS/Debian	root
Ubuntu	ubuntu

• Password:



If you select "Auto Generate Password" when starting the instance, then the initial password will be randomly assigned by the system. You can log in to <u>Tencent Cloud</u> <u>Console</u>, and click the "Internal Message" button on the right. In the "Check and accept the newly purchased server" page, the login account ID and initial password of administrator for CVM will be provided as shown below.

Dea	ar user,						
You	ir newly purchas	ed cloud serve	er (1 unit(s)) has bee	n allocated succe	ssfully,Thanks for yo	ur	
supp	port of Tencent	Cloud.					
Sen initia	ver operating sy al password is	stem is Ubuntu	u Server 16.04.1 LTS	64位, the default	account is ubuntu, t	he	
	CVM name	CVM ID	Network ID	Private IP	Public IP		
	ccs_cls-	ins-	VDC-	10	111 230		
			(pc	10.	111.200.		
Rem	ninder:						
Rem	ninder:	sod data dicks	it's recommended	to partition and f	ormat the server by	the	
Rem	ninder: If you've purcha	sed data disks to it. For detai	, it's recommended	to partition and f	ormat the server by	the	

 If you select "Custom Password" when starting the instance, then the password will be the one you specified when purchasing the CVM instance. To learn more about password, for example, what to do if I forget the login password, refer to <u>Login</u> <u>Password</u>.

#### Prerequisites for login with key

To log in with an SSH key, first you need to create an SSH key, download the private key and bind it to Linux CVM. To learn more about key operations, refer to <u>SSH Key</u>.

Log in to <u>Tencent Cloud Console</u>, click "Cloud Virtual Machine" - "SSH Key" to enter the key window. Click "Create Key" button, and type a key name to create a new key. After the key is created, click "Download" button to download a private key.



Then right click on the newly created key ID, and select "Bind the Linux server to log in" to bind it. Key login is only available for CVM instances that have been bound with an SSH key.

# Windows system: use remote login software to log in to the Linux instance

On a Windows computer, you can log in to the Linux instance using remote login software. PUTTY is taken as an example in this case. There are also other types of login software for you to choose from.

#### Install Windows remote login software

To log in to the Linux CVM from a local Windows computer, you need to use client software to establish a connection. Here PUTTY is taken as an example. Reference download link: <a href="http://www.putty.nl/download.html">http://www.putty.nl/download.html</a>

#### Use PUTTY to connect to Linux CVM

Open the Putty client, enter the following information in the "PuTTY Configuration" window:

- Host Name: Public IP of the CVM (Go to the <u>"Cloud Virtual Machine" page under Tencent</u> <u>Cloud Console</u>, and you can get the public IP of the CVM on the list and detail pages).
- Port: port of the CVM, which must be 22. (Make sure port 22 of the CVM is open. See <u>Security</u> <u>Group</u> and <u>Network ACL</u> for details.)
- Connect type: select "SSH".

When all the information is entered, click "Open" to create a new dialog.



🕵 PuTTY Configuration		×
Category:		
Session	Basic options for your PuTTY session	
	Specify the destination you want to connect to	
	Host Name (or IP address) Port	Т
Bell	- 22	
Features	Connection type:	-
i⊒∾Window	○ Raw ○ Telnet ○ Rlogir ● SSH ○ Serial	
Appearance Behaviour	Load, save or delete a stored session 2	
Translation	Saved Sessions	
···· Selection		
Colours	Default Settings Load	
Data	Save	
Proxy	3476	
Telnet	Delete	
In Riogin In SSH		
Serial	Class window on ovit:	
	Always Never Only on clean exit	
About	3 Open Cancel	

In the Putty dialog window, enter the administrator account ID obtained from the "Prerequisites" step, and press Enter. Enter the login password obtained from the "Prerequisites" step, and press Enter to log in.

PuTTY	
login as: root	A
root( 's password:	

If the login fails, check if your CVM instance allows inbound traffic over port 22. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

# Windows system: log in to the Linux instance with an SSH key

Likewise, you need to use remote login software to log in to the Linux instance from a Windows computer. PUTTY is taken as an example in this case. There are also other types of login software for you to choose from.

#### Install Windows remote login software

To log in to the Linux CVM from a local Windows computer, you need to use client software to establish a connection. Here PUTTY is taken as an example. Reference download link: <a href="http://www.putty.nl/download.html">http://www.putty.nl/download.html</a>. Download putty.exe and puttygen.exe.

#### Key format conversion

Open puttygen.exe, and click "Load" button. In the window that pops up, go to the path under which you store the private key downloaded in the Prerequisites step, and then select "All File (\*.\*)", select the downloaded private key (in this case it is file david, which is the name of the key), and click "Open".

Enter the key name in the key comment column, enter the password for the private key (optional), and click "Save private key". In the window that pops up, select directory where you store the key, then type key name + ".ppk" in the file name column, and click "Save".

#### Log in to Remote Linux CVM

Open putty.exe, and enter into "Auth" configuration page.



🕵 PuTTY Configurati	ion	X
Category:		
- Session	*	Basic options for your PuTTY session
Logging		Specify the destination you want to connect to
		Host Name (or IP address) Port
Bell		22
Features		Connection type: Raw  Telnet  Rlogin  SSH  Serial
Appearance Behaviour Translation Selection	E	Load, save or delete a stored session Saved Sessions test
Colours		Default Settings Load
···· Data ···· Proxy		Save
Telnet Rlogin		Delete
⊡- SSH Kex ⊡- Auth 1		Close window on exit: Always Never Only on clean exit
X11	-	
About		Open Cancel

Click the "Browse" button. In the window that pops up, go to the path where the key is stored, select the key, then click "Open" to return to the configuration page, and go to the "Session" configuration page.

Configure an IP address, port and connection type on the Session configuration page.

- IP: Public IP of the CVM. Go to the <u>"Cloud Virtual Machine" page under Tencent Cloud</u> <u>Console</u>, and you can get the public IP of the CVM on the list and detail pages.
- Port: port of the CVM, which must be 22. (Make sure port 22 of the CVM is open. See <u>Security</u> <u>Group</u> and <u>Network ACL</u> for details.)

Enter a session name in the "Saved Sessions" input box (it is test in this case), then click the "Save" button, and double click the session name or click the "Open" button to issue a login request.



RuTTY Configuration	×			
Category:				
	Basic options for your PuTTY session			
	Specify the destination you want to connect to <b>1</b>			
Keyboard	Host Name (or IP address) Port			
Features	22			
. Window	Connection type:			
Appearance	🔘 Raw 🔘 Telnet 🔘 Rlogin 💿 SSH 🔘 Serial			
Behaviour	Load, save or delete a stored session			
	Saved Sessions			
Colours	test 2			
	Default Settings			
Data	test S			
Telnet	Save			
Riogin	Delete			
Serial				
	Close window on exit:			
	Always Never Only on clean exit			
	4			
About	Open Cancel			

If the login fails, check if your CVM instance allows inbound traffic over port 22. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

# Linux/Mac OS system: log in to the Linux instance with SSH

If you are a Mac OS user, open the Terminal that comes with the system and enter the following command. If you are a Linux user, run the following command directly:

ssh <username>@<hostname or ip address>

#### username

is the administrator account ID obtained from the Prerequisites step, and is the public IP or custom



domain name of your Linux instance.

Enter the password obtained from the Prerequisites step (Note that there is only input and no output displays at this time), then press Enter to log in.

If the login fails, check if your CVM instance allows inbound traffic over port 22. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

# Linux/Mac operating system: log in to the Linux instance with key

If you are a Mac OS user, open the Terminal that comes with the system and enter the following command. If you are a Linux user, run the following command directly to set the private key file to readable only to you.

chmod 400 < The absolute path of the private key associated with the cloud server>

Run the following remote login command:

ssh -i "<The absolute path of the private key associated with the cloud server>" <username>@< hostname or ip address>.

#### username

is the administrator account ID obtained from the Prerequisites step, and is the public IP or custom domain name of your Linux instance.

For example:

ssh -i "Mac/Downloads/shawn\_qcloud\_stable" ubuntu@119.xxx.xxx

If the login fails, check if your CVM instance allows inbound traffic over port 22. Refer to <u>Security</u> <u>Group</u> to check the Port. If your CVM is in [Virtual Private Cloud/VPC], check related subnet <u>Network</u> <u>ACL</u> as well.

# Use VNC to log in to instance

VNC login is a way Tencent Cloud provides for users to connect to their CVMs through Web browser. When the remote login client is not installed or cannot be used, you can connect to your CVM using VNC login and check the CVM status. This also allows you to perform basic CVM management operations with the CVM account.

VNC login scenarios include at least the following:

- Check the progress of a CVM startup
- Log in to the server with VNC when client SSH or mstsc login is not available

In the Action column of CVM list, click "Log In" button to connect to Windows CVM via VNC.

Cloud Virtual Machir	ne					CVM Usage Guide 🛙
Guangzhou(4) • Shang	hai(0) Beijing(1)	Hong Kong(0) Sin	gapore(0) Toronto(1)	Silicon Valley(0)	Frankfurt(0) Seoul(0)	
+ New Start up	Shutdown	lestart Reset passw	ord More actions	♥ Use ' ' to spl	it more than one keyword, and pr	ess Q 😔 🔯 🖳
ID/Name	Monitor/Status	Availability Zone	Model	Configuration	Primary IP	Operation
ins- ccs_cls- 696wkkse_node	<b>II</b> Running	Guangzhou Zone 2	s2 😋	1-core 1GB 1Mbps System disk:Cloud Block Storage Network: BestTest2	119. (Public) 🖵 10. (Private)	Log In More ∨
ins ccs_cls- pg10q94s_node	<b>II</b> Running	Guangzhou Zone 2	s2 😋	1-core 1GB 1Mbps System disk:Cloud Block Storage Network: test2	119. (Public) 🖵 10. (Private)	Log In More ∨

By clicking the Ctrl+Alt+Del command at the top left corner, enter the system login screen:



Ctri-Alt-Delete Ctri-Alt-F1 Ctri-Alt-F2 Ctri-Alt-F3 Ctri-Alt-F4 Ctri-Alt-F5 Ctri-Alt-F6 Ctri-Alt-F7 Ctri-Alt-F7 Ctri-Alt-F8 Ctri-Alt-F9 Ctri-Alt-F9 Ctri-Alt-F10	Send CtrlAltDel	
Ctrl-Alt-Backspace     Ctrl-Alt-F1     Ctrl-Alt-F2     Ctrl-Alt-F3     Ctrl-Alt-F4     Ctrl-Alt-F5     Ctrl-Alt-F6     Ctrl-Alt-F7     Ctrl-Alt-F8     Ctrl-Alt-F9     Ctrl-Alt-F10	Ctrl-Alt-Delete	
Ctrl-Ait-F1     Press Ctrl + Alt + Delete To Log in       Ctrl-Ait-F2     Ctrl-Ait-F3       Ctrl-Ait-F3     Ctrl-Ait-F4       Ctrl-Ait-F5     Ctrl-Ait-F5       Ctrl-Ait-F6     Ctrl-Ait-F7       Ctrl-Ait-F7     Ctrl-Ait-F8       Ctrl-Ait-F9     111.522	Ctrl-Alt-Backspace	
Ctri-Ait-F2 Ctri-Ait-F3 Ctri-Ait-F5 Ctri-Ait-F6 Ctri-Ait-F7 Ctri-Ait-F8 Ctri-Ait-F9 Ctri-Ait-F10	Ctrl-Alt-F1	Press Ctrl + Alt + Delete To Log in
Ctrl-Alt-F3 Ctrl-Alt-F4 Ctrl-Alt-F5 Ctrl-Alt-F6 Ctrl-Alt-F7 Ctrl-Alt-F8 Ctrl-Alt-F9 Ctrl-Alt-F9 Ctrl-Alt-F10	Ctrl-Alt-F2	
Ctri-Alt-F4 Ctri-Alt-F5 Ctri-Alt-F6 Ctri-Alt-F7 Ctri-Alt-F8 Ctri-Alt-F9 Ctri-Alt-F9 Ctri-Alt-F10	Ctrl-Alt-F3	
Ctrl-Alt-F5 Ctrl-Alt-F6 Ctrl-Alt-F7 Ctrl-Alt-F8 Ctrl-Alt-F9 Ctrl-Alt-F10	Ctrl-Alt-F4	
Ctri-Alt-F6 Ctri-Alt-F7 Ctri-Alt-F9 Ctri-Alt-F10	Ctrl-Alt-F5	
Ctri-Ait-F7 Ctri-Ait-F8 Ctri-Ait-F9 Ctri-Ait-F10	Ctrl-Alt-F6	
Ctri-Alt-F8 Ctri-Alt-F9 Ctri-Alt-F10	Ctrl-Alt-F7	
Ctri-Ait-F9 Ctri-Ait-F10	Ctrl-Alt-F8	<b>イ・ト</b> つ
Ctrl-Alt-F10	Ctrl-Alt-F9	
	Ctrl-Alt-F10	
	Ctrl-Alt-F11	

Note:

- Ctrl + Alt + Delete is a shortcut key combination for you to log in to Windows or open task manager after the screen is locked.
- This terminal is exclusive, that is, only one user can log in using VNC at a time.
- To log in with VNC in the normal way, you need to use modern browsers such as Chrome, Firefox, IE10 or above.
- Copy and Paste are not supported at the moment.
- File upload and download are not supported at the moment.



# **Configure Instances**

Specifications of CVM instances can be adjusted easily and quickly. In the initial stage of application when the request volume is low, you can choose low hardware configuration. As the application quickly expands and the request volume surges, you can quickly adjust the hardware configuration to process the services faster and better cater to your changing demand.

# **Upgrading Configuration**

#### Upgrading on Console

This operation is only available to CVM instances which are shut down and both the system and data disks of which are cloud disks.

1) Select the desired CVM instance, and click More - Adjust Configuration to its right.

2) In the Adjust Configuration box that pops up, select the target configuration, and complete payment or confirm to adjust the CVM configuration instantly.



Adjust configuration					
You have selected <b>1 unitsCloud Virtual Machine</b> , Learn More Current configuration 1-core 2GB 0.05 USD/hour					
New CPU cores	1-core 2-core 4-core 8-core 12-core 16-core 24-core				
New MEM	New MEM 2GB 4GB 8GB 12GB				
Cost 0.10 USD/hr i					
Important Note After configuration adjustment, the private IP of the CVM may change. After configuration adjustment, the amount-based charging starts from the first step in the stepwise price. Exercise caution when adjusting the configurationLearn More <sub>e</sub>					
	OK Cancel				

#### Upgrading via API

You can use the ResizeInstance and ResizeInstanceHour APIs to upgrade the instance configuration. For details, see <u>Adjust Postpaid Instance Configuration API</u>.

# **Degrading Configuration**

Degrading Postpaid Instances

The adjustment can only be made to CVM instances that are shut down and both the system and data disks of which are cloud disks. 1) Log in to <u>CVM Console</u>, and select CVM from the left.

2) Select the desired postpaid CVM instance, click More - Adjust Configuration to its right.

3) In the Adjust Configuration box popped up, select the target configuration, and click OK to degrade the CVM configuration instantly.

#### Adjust configuration

 $\times$ 

You have selected <b>1 unitsCloud Virtual Machine</b> , Learn More						
Current configuration	irrent configuration 1-core 2GB 0.05 USD/hour					
New CPU cores	1-core 2-core	4-core	8-core	12-core	16-core	24-core
New MEM	1GB 2GB 4GB					
Cost	0.04 USD/hr 🗊					
Important Note	•					

After configuration adjustment, the private IP of the CVM may change.

After configuration adjustment, the amount-based charging starts from the first step in the stepwise price.

Exercise caution when adjusting the configurationLearn More,

