

# Hyper Computing Cluster

## Purchase Guide

### Product Documentation



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# Purchase Guide

## Billing Overview

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## Billing Instructions

Hyper Computing Cluster supports the pay-as-you-go billing mode. For details, see [Billing Mode](#). It also supports purchasing for [a certain duration with a discount](#). The specific discount may differ from that for CVM instances, which is subject to the discount displayed on the purchase page.

## Instance Price

The price of Hyper Computing Cluster instances involves network, storage (system and data disks), and compute (CPU, memory, and GPU) resources. You can directly use the [price calculator](#) for CVM instances to calculate the price and estimate resource costs. You can add the required products to the purchase list and purchase them with one click.

## Renewal

Subscription Hyper Computing Cluster instances cannot be terminated manually. After expiration, they will be retained for seven calendar days and then automatically terminated by the system.

An instance will be shut down on the day it expires and automatically moved to the recycle bin. It is retained for seven calendar days. You can choose to renew it during this period. If you do not renew it within seven calendar days, it will be terminated.

You can set auto renewal during purchase.

### **Note:**

It is recommended to renew instances before they expire to prevent service interruption due to shutdown upon expiration. For more information on renewal, refer to [Renewing Instances](#).

## Recycling

The recycling mechanism of Hyper Computing Cluster instances is the same as that of CVM instances. For details, see [Recycling Instances](#).

## Payment Overdue

The payment overdue rules of Hyper Computing Cluster instances are the same as those of CVM instances. For details, [Payment Overdue](#).

## Refund Instructions

The refunding rules of Hyper Computing Cluster instances are the same as those of CVM instances.

## Note

The prices shown above are standard prices, which may change due to price reductions and other factors. The actual prices on the purchase page shall prevail.

Hyper Computing Cluster instances do not support the policy of no charges when shutdown for pay-as-you-go instances. For details, see [No Charges When Shutdown for Pay-as-You-Go Instances](#).

# Instance Regions

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Hyper Computing Cluster instances are available in the following regions:

Instance Family	Type	Instance Model	GPU Model	Region
Hyper Computing Cluster	GPU	HCCPNV5	NVIDIA H800	Shanghai
		HCCPNV5v	NVIDIA H800	Beijing, Shanghai, and Nanjing
		HCCPNV4sne	NVIDIA A800	Shanghai
		HCCPNV4sn	NVIDIA A800	Guangzhou
		HCCPNV4h	NVIDIA A100	Beijing and Shanghai
		HCCG5vm	NVIDIA V100	Shanghai
		HCCG5v	NVIDIA V100	Shanghai
	Standard	HCCS5	-	Shanghai, Chongqing
	Compute	HCCIC5	-	Shanghai, Chongqing

# Purchasing Hyper Computing Cluster Instances

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Hyper Computing Cluster takes high-performance CVMs as nodes and interconnects with RDMA (Remote Direct Memory Access), providing high bandwidth and ultra-low latency network services, significantly improving network performance, and meeting the parallel computing requirements of large-scale high-performance computing, artificial intelligence, big data recommendation, and other applications.

## Purchase Must-Know

The [Purchase Page](#) and [Console](#) of Hyper Computing Cluster instances are the same as that of CVM, you can go to the CVM Purchase Page to purchase as needed. You can also see [Customizing Linux CVM Configurations](#) for more configuration information.

Before purchasing Tencent Cloud Hyper Computing Cluster instances, please ensure you have understood [Hyper Computing Cluster](#), [Instance Specification](#) and [Billing Modes](#).

Ensure you understand the region where the selected Hyper computing instance is located. For information on available regions, please see [Available Regions](#).

## Purchase Steps

This document takes the standard Hyper Computing ClusterS5 as an example to guide you on how to quickly purchase a Hyper Computing Cluster instance:

### Step 1: Create a Hyper Computing Cluster.

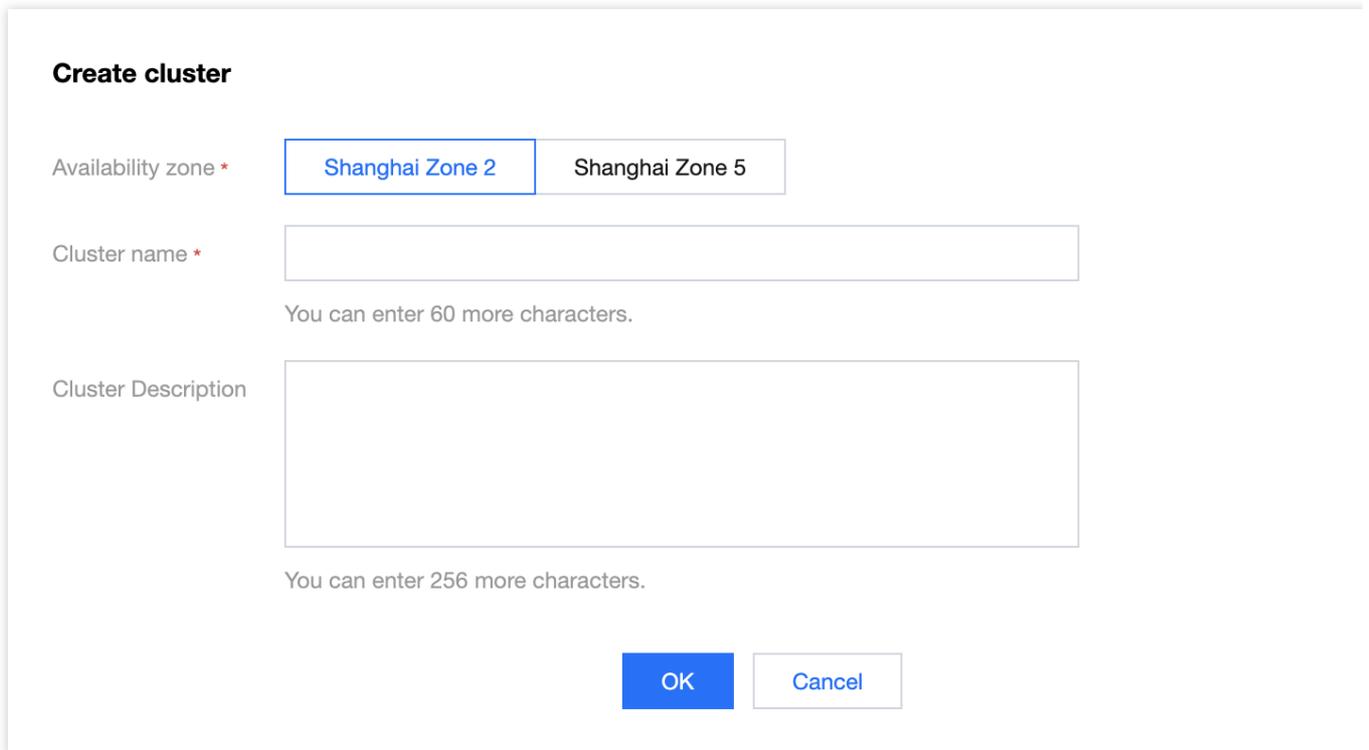
#### Note:

If you have never purchased a Hyper Computing instance, please see this step to create Hyper Computing Cluster. If you already have a Hyper Computing instance, please choose whether to create it as needed.

Instances within the same cluster are interconnected with the RDMA network, while instances across clusters are isolated.

1. Log in to the [CVM Console](#), and choose Hyper Computing Cluster in the left sidebar.
2. At the top of the **Hyper Computing Cluster** page, select the region, and click **Create**. In this document, **Shanghai** is selected as an example. For regions where standard Hyper Computing ClusterS5 instances are available for sale, please see [Available Regions](#).

3. In the pop-up **Create cluster** window, select the availability zone as needed, enter the cluster name and description as shown below:



**Create cluster**

Availability zone \* Shanghai Zone 2 Shanghai Zone 5

Cluster name \*

You can enter 60 more characters.

Cluster Description

You can enter 256 more characters.

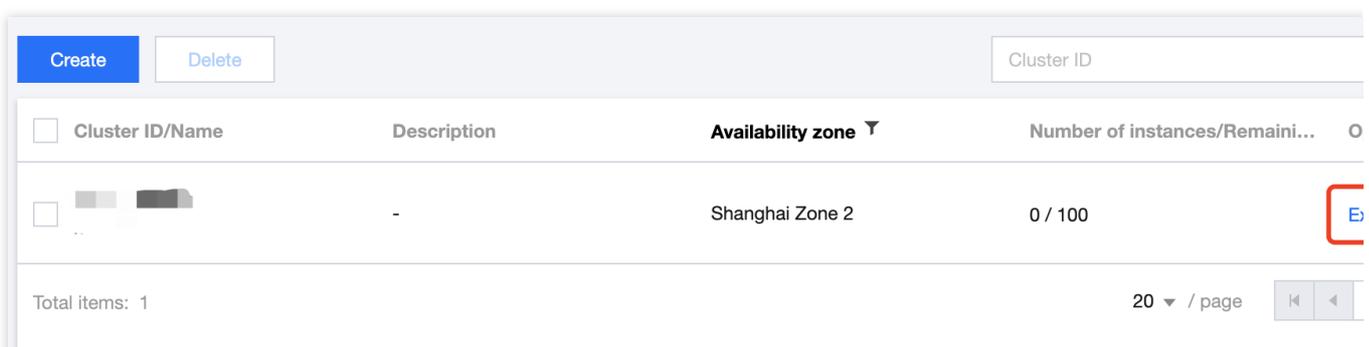
4. Click **OK** to create the cluster.

## Step 2: Go to the purchase page.

You can enter the purchase page to start purchasing instances through the following two ways:

Choose **Instance** in the left sidebar, enter **Instance** page, and then click **Create**.

On the **Hyper Computing Cluster** page, click Scale-out on the right side of the cluster row. As shown in the figure below:



<input type="checkbox"/>	Cluster ID/Name	Description	Availability zone <span>⌵</span>	Number of instances/Remaini...	<input type="checkbox"/>
<input type="checkbox"/>		-	Shanghai Zone 2	0 / 100	<input type="button" value="E"/>

Total items: 1 20 / page

## Step 3: Select the billing mode, network, region, and model.

After you enter the purchase page, select the billing mode, network, region, and model. This document takes

**Shanghai District V** and **Standard Hyper Computing ClusterS5** as examples. See the actual information on the purchase page for reference:

**Billing modes:** **Pay-as-you-go**. See [Billing Modes](#) for details.

**Regions and availability zones:** The available availability zones are subject to the instance purchase page.

**Instances:** This document takes **Standard Hyper Computing ClusterS5** as an example. You can select as needed.

#### Step 4: Select the image and Hyper Computing Cluster.

1. Select the instance image as needed. Hyper Computing instances support four types of images: public image, custom image, shared image, and some images verified for compatibility in the mirror market.
2. Select the desired Hyper Computing Cluster cluster to join, as shown below:

The screenshot shows a configuration interface for a Hyper Computing Cluster. At the top, there is a dropdown menu for 'HPC cluster' with the text 'Please select' and a refresh icon, followed by a 'Create a cluster' button. Below this is a note: 'Note: Instances in the same cluster are interconnected through the RDMA network, and instances in diff'. Under the 'Image' section, there are three tabs: 'Public image' (which is selected and underlined), 'Custom image', and 'Shared image'. Under the 'Public image' tab, there is a box containing the TencentOS logo and the text 'TencentOS'. Below this is a dropdown menu showing 'TencentOS Server 2.4 (TK4)'. At the bottom, there is a checkbox labeled 'Install GPU driver automatically' which is currently unchecked.

#### Note:

GPU Hyper Computing instances must have the corresponding GPU driver to run normally. You can install the relevant driver in the following two ways:

If you select a public image, some instances support the option of Automatically install GPU driver in the background to pre-install the corresponding version of the driver. It is recommended to choose this method. This method only supports certain Linux public images.

If you select a public image, you can [manually install the corresponding GPU driver](#) after the GPU instance is successfully created.

#### Step 5: Select the storage method.

1. Select the storage for high-performance computing instances as shown below:

Usage	Model	Capacity	Quantity
System disk	Balanced SSD	50 GiB	1
Data disk	Local NVMe SSD	5960GiB	4

[+ Add data disk](#) You ca

Main parameters are described as follows:

System disk and data disk: The type and size can be flexibly selected (the local system disk instances do not support the adjustment of storage capacity).

2. Click **Next: Set Network and Host** after setting is completed.

### Step 6: Set the network, security group and host.

1. Select the network and bandwidth of Hyper Computing instance. As shown in the figure below:

#### Network and bandwidth

Network: vpc subne+

If the existing VPCs/subnets do not meet your requirements, [create a VPC](#) or [a subnet](#) in the console. You can also change the

Manually assign IP

Public IP:  Assign Independent Public IP

Line type: BGP

Bandwidth billing mode: Bill by traffic

Note: The traffic fee is settled on an hourly basis. When the account balance is not enough, the data transfer service will be suspended.

Bandwidth: 1Mbps 20Mbps 40Mbps

**Network:** Select an existing VPC or create a new VPC.

**Public IP:** If your instance requires public network access, select the option. A public IP will be assigned after creation.

**Bandwidth billing mode:** Please see [Public Network Billing Mode](#) for public network bandwidth billing mode.

**Bandwidth value:** Set the public network bandwidth upper limit for the instance as needed.

**IPv6 address:** Enable IPv6 address for the instance.

2. Select or create a Security group to control the port range as shown below:

### Security group

Security group

New security group
Existing security group

Allow common IPs/ports To open

<input checked="" type="checkbox"/> ICMP (Ping the CVM from public network)	<input checked="" type="checkbox"/> TCP:22 (SSH remote login for Linux)	<input checked="" type="checkbox"/> TCP:3389 (RDP remote login for Windows)
<input type="checkbox"/> TCP:80 (HTTP Web server)	<input type="checkbox"/> TCP:443 (HTTPS Web server)	<input checked="" type="checkbox"/> Open for public access

**Note** When "0.0.0.0/0" is entered for source/destination, it means all IP addresses are allowed. Please enter your frequently used IP address

Please make sure port 22 (Linux SSH login) and port 3389 (Windows remote login) are open in the selected security group. You can go to the [Security group console](#) to check.

[View security group rules](#) ▼

3. Set the login password or key of Hyper Computing Cluster instances

4. Set other custom configurations as needed.

5. Click **Next**: Confirm configuration information.

## Step 7: Confirm the configuration information.

1. In the **Confirm configuration** step, verify the following details as shown below:

## Cloud Virtual Machine (CVM)

Prod

## Custom configuration

 Select basic configurations

 Configure network and host

## Selected configurations

## Basic and instance configurations

CVM billing mode	Monthly subscription	Region	Shanghai	Availability zone
Instance		HPC cluster		Image
System disk	Enhanced cloud SSD   100 GiB	Data disk	Local NVMe SSD x 4, 5960GiB	

## Network and security group

Network		Subnet		Private IP
Public IP	Assign	Bandwidth billing mode	Bill by traffic 5Mbps	Line type
Security group	Custom template			

Selected

Period

1 month

Quantity

-

1

+

Configuration fee

Amount saved

Public traffic fees

Confirm whether the configuration items such as instance specification, image selection, storage, public network configuration, and security groups meet expectations.

You can select or verify the quantity and duration of purchase.

2. Read and check **Agree to the Tencent Cloud Terms of Service, Refund Rules, and Tencent Cloud Statement on the Prohibition of Virtual Currency Related Activities**, and click **Purchase Now**.

### Step 8: Check the order and make the payment.

Verify the order information and select the payment method.

After the payment is made, enter the console. Once the instance is created and started, you can log in to proceed.