A guide to the use of the HCP platform on AWS

1. What is AWS?

AWS, Amazon Web Services, is Amazon's cloud computing IaaS and PaaS platform services. AWS provides users with a complete set of cloud computing services, including elastic computing, storage, databases, and applications, which can help enterprises reduce IT input costs and maintenance costs.

AWS provides a complete set of infrastructure and application services to run virtually everything in the cloud: from enterprise applications and big data projects to social games and mobile applications.

Website: https://aws.amazon.com/what-is-aws/?nc1=h_ls

2. What is Amazon EC2

Amazon Elastic Compute Cloud (Amazon EC2) provides scalable compute capacity in the Amazon Cloud Technologies (AWS) cloud. Using Amazon EC2 avoids upfront hardware investments, so you can quickly develop and deploy your applications. You can use Amazon EC2 to start as many virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 lets you scale up or down to handle changes in demand or spikes in usage, reducing the need to forecast traffic.

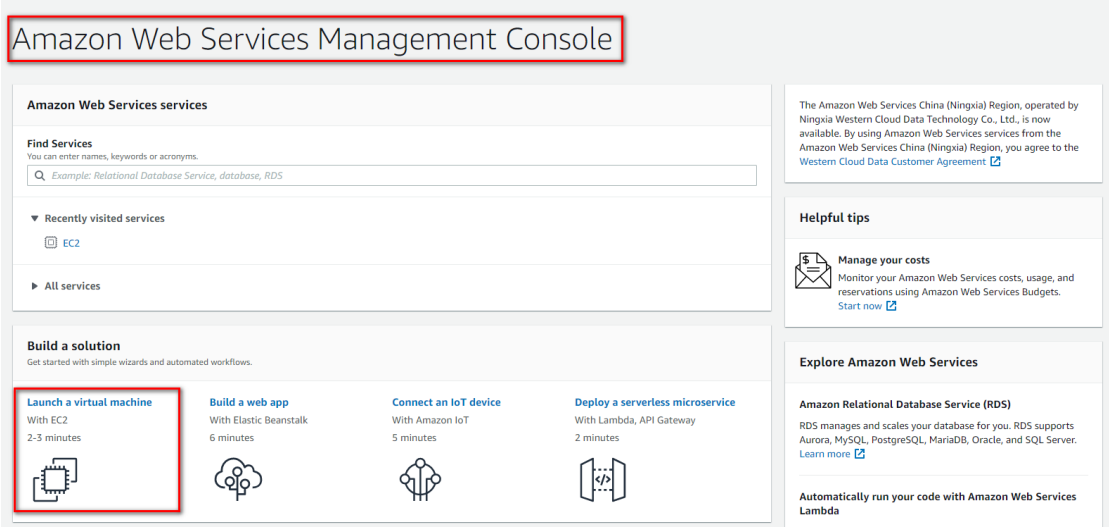
Website:
https://docs.aws.amazon.com/zh_cn/AWSEC2/latest/WindowsGuide/concepts.html

3. How to use Amazon EC2

(1) If you do not have an account, create an AWS account:

https://portal.aws.amazon.com/billing/signup?nc2=h_ct&src=gettingstarted_signup&redirect_url=https%3A%2F%2Faws.amazon.com%2Fregistration-confirmation&language=zh_cn#/start

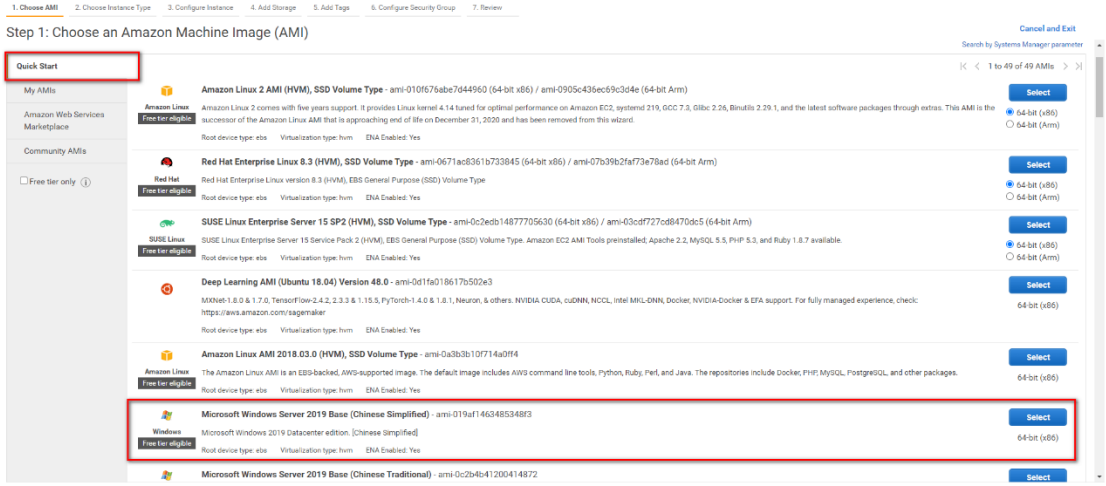
(2) If you already have an account, log in to AWS, enter Amazon Web Services Management Console, and select "Launch a virtual machine".



(3) Use the "Quick Start" wizard to create an EC2 instance

Step 1: Choose an Amazon Machine Image (AMI)

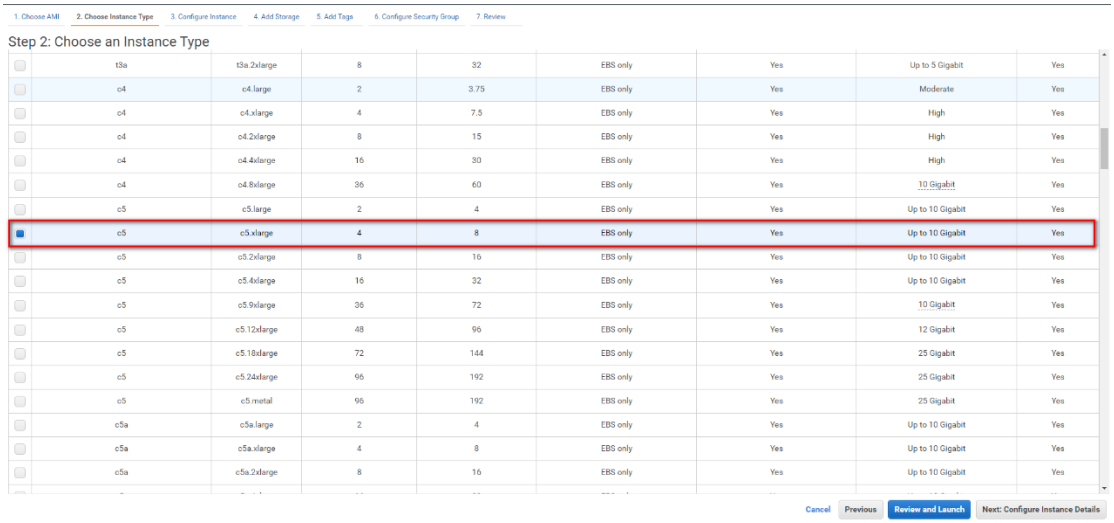
Suggestion: Select a windows version that meets your habits



Step 2: Choose an Instance Type

Recommended:

Low level	High level
Amazon AWS EC2 Instance: c5.xlarge CPU: Intel® Xeon® Cascade Lake @ 3.60 GHz vCPU Count: 4 RAM: 8 GB Storage: EBS NIC: 10 Gbps	Amazon AWS EC2 Instance: m5.xlarge CPU: Intel® Xeon® Platinum 8175M @ 3.10 GHz vCPU Count: 4 RAM: 16 GB Storage: EBS NIC: 10 Gbps

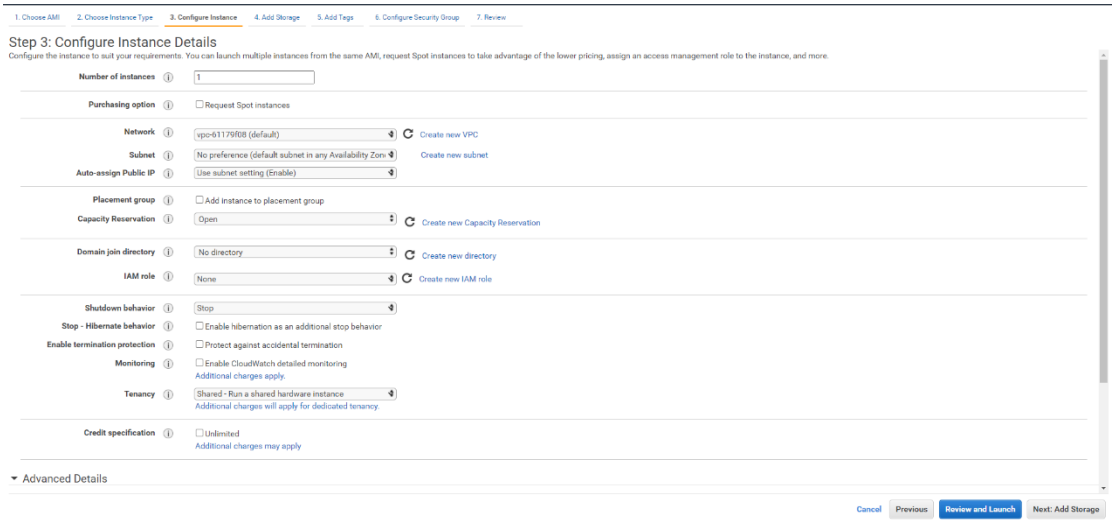


Step 3: Configure Instance Details

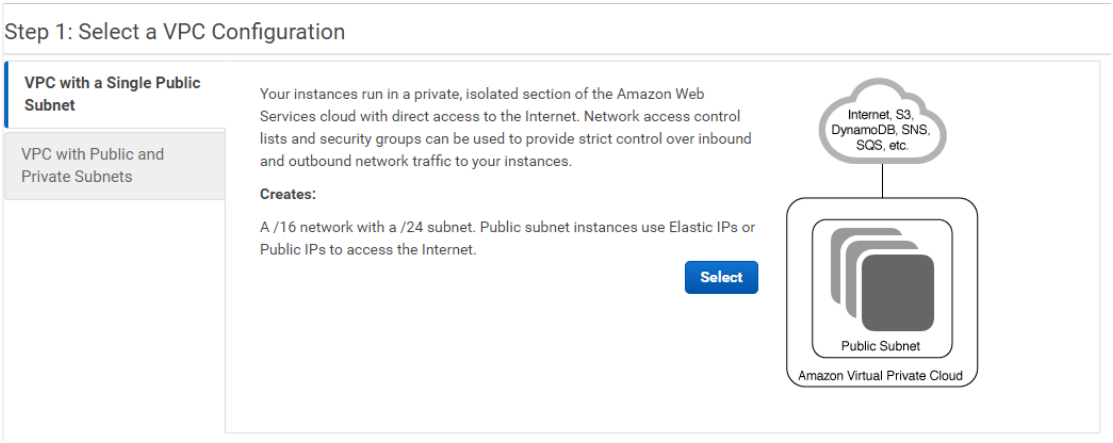
Instructions:

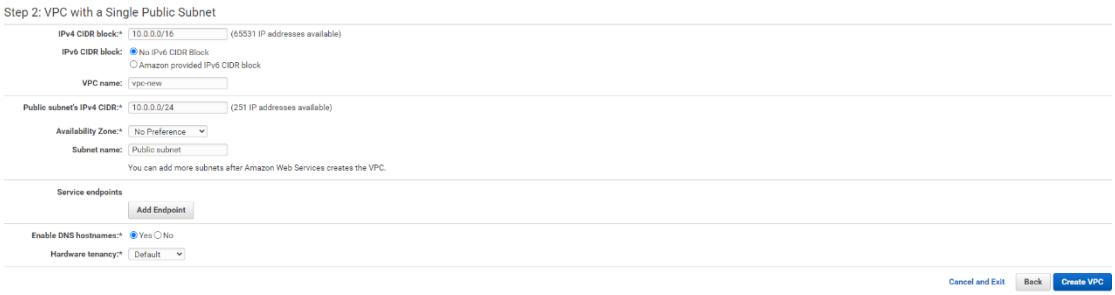
Network: Launch your instance into an Amazon Virtual Private Cloud (VPC). You can create a VPC and select your own IP address range, create subnets, configure route tables, and configure network gateways. Learn more about Amazon VPC.

(Boot your instance into Amazon Virtual Private Cloud (VPC). You can create a VPC and select your own IP address range, create subnets, configure routing tables, and configure network gateways.)

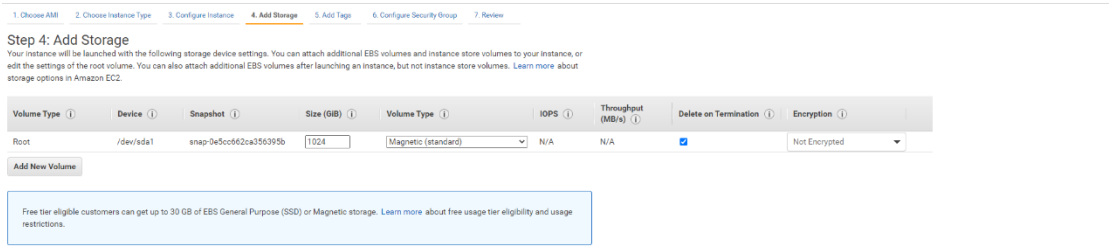


If no VPC is available, create a “VPC with a Single Public Subnet”.

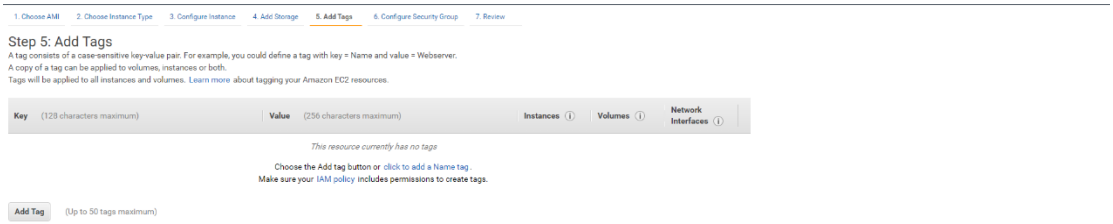




Step 4: Add Storage



Step 5: Add Tags

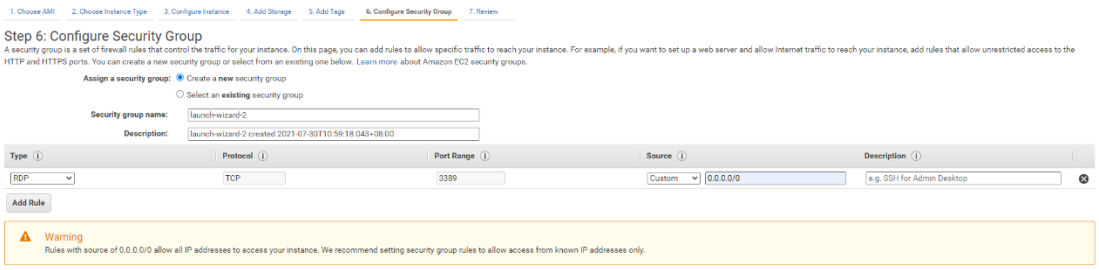


Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic of your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a Web server and allow Internet traffic to reach your instance, add rules to allow unrestricted access to HTTP and HTTPS ports.

Suggestion:

1. Configure the port opening rules required by users
2. Configure an external port rule based on the external port provided by the HCP platform, for example, the external port of HTTP port 80

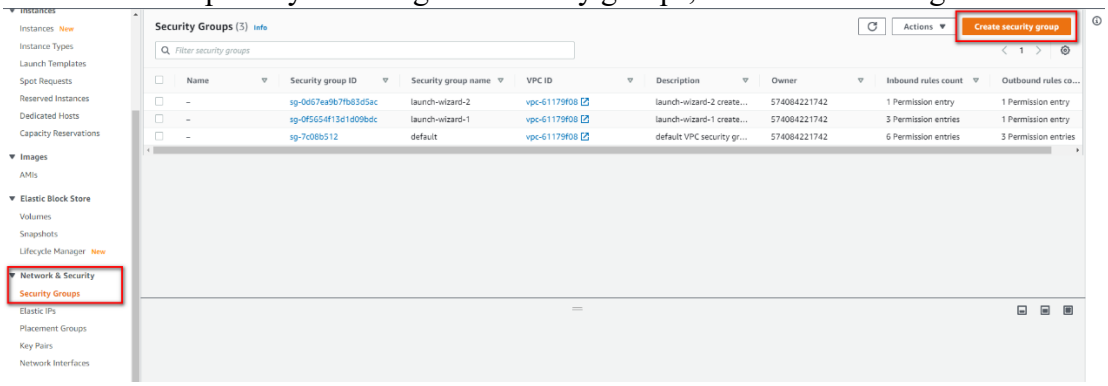


What is a security group:

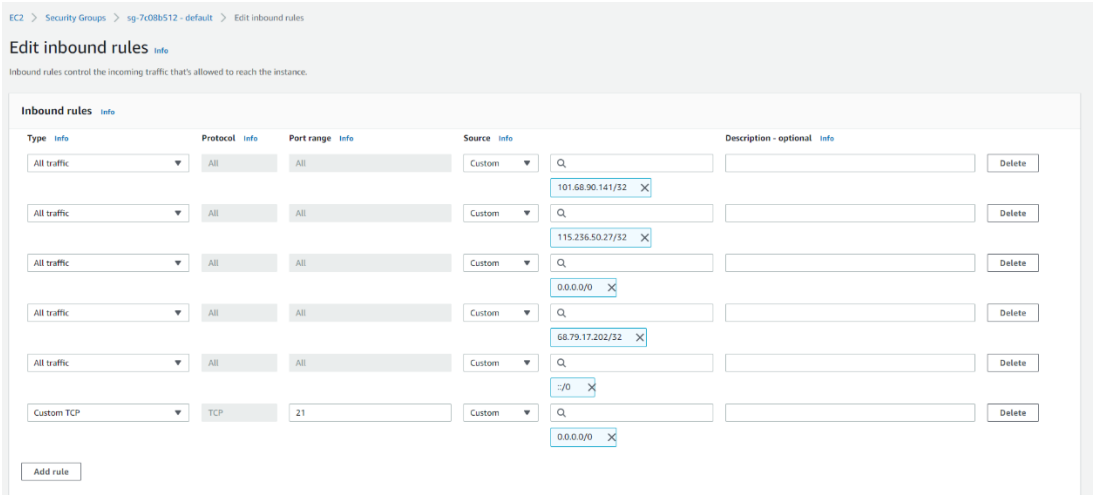
A security group acts as a virtual firewall that controls the traffic of one or more instances. When you start an instance, you can specify one or more security groups. You can modify security group rules at any time. The new rule is automatically applied to all instances associated with the security group. When deciding whether to allow traffic to reach an instance, we evaluate the rules from all the security groups associated with that instance.

When you start an instance in a VPC, you must specify a security group to be created for that VPC. After you start an instance, you can change its security group. A security group is associated with a network interface. Changing the security group of an instance also changes the security group associated with the primary network interface (eth0). For more information, see "Changing an Instance's Security Group" in the Amazon VPC User Guide. You can also change the security group associated with any other network interface.

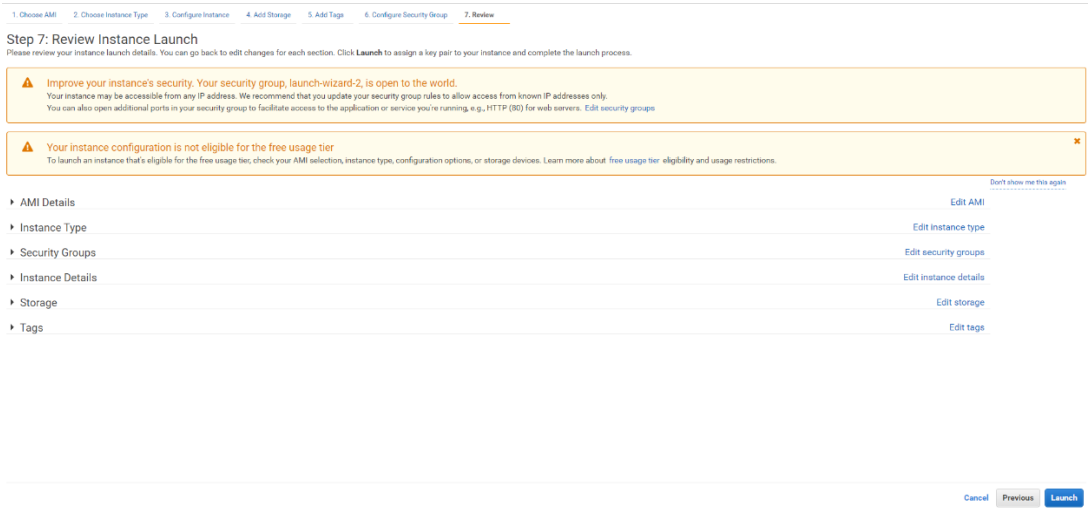
AWS has the capability to manage all security groups, as shown in the figure below.



To edit a security group, you can modify rules.



Step 7: Review Instance Launch



a. The Key pairs page lists all of your key pairs in the currently selected AWS Region.

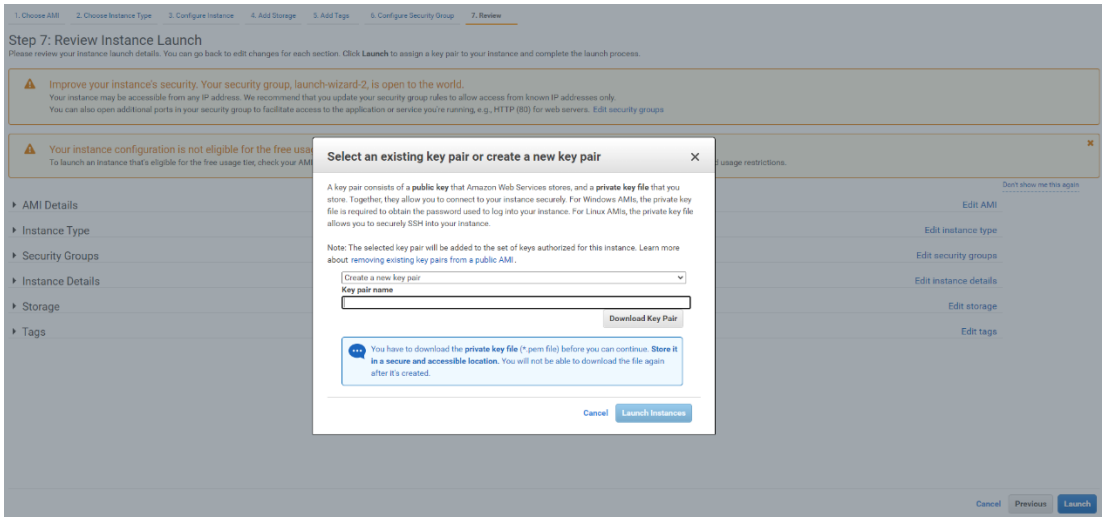
b. You can change which columns are visible in the table. Choose the settings icon in the top-right corner of the page, and select the columns to display.

c. You can manage a key pair's tags and delete a key pair. Select a key pair by selecting its check box, and then choose an action from the Actions menu.

d. You can have Amazon EC2 create a new key pair for you. You can also use a third-party tool to create a new key pair and import the key pair to Amazon EC2. To have Amazon EC2 create a key pair, choose Create key pair. To import a key pair that was created using a third-party tool, choose Import key pair from the Actions menu.

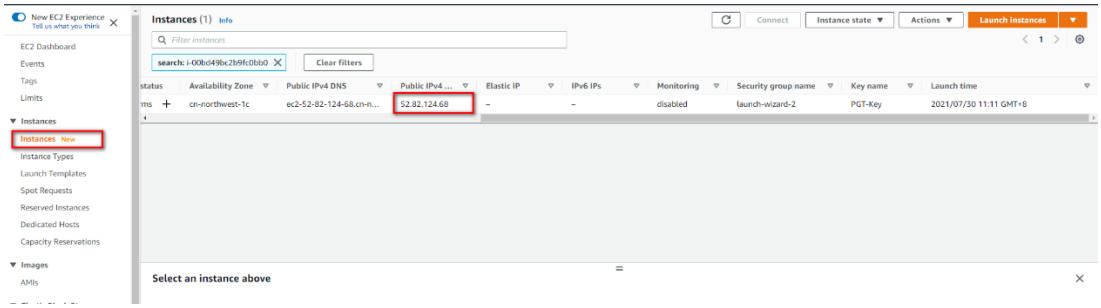
Note:

If you create a new key pair, download the corresponding key pair file to the local PC. This file is required when you obtain the administrator password of the windows operating system.

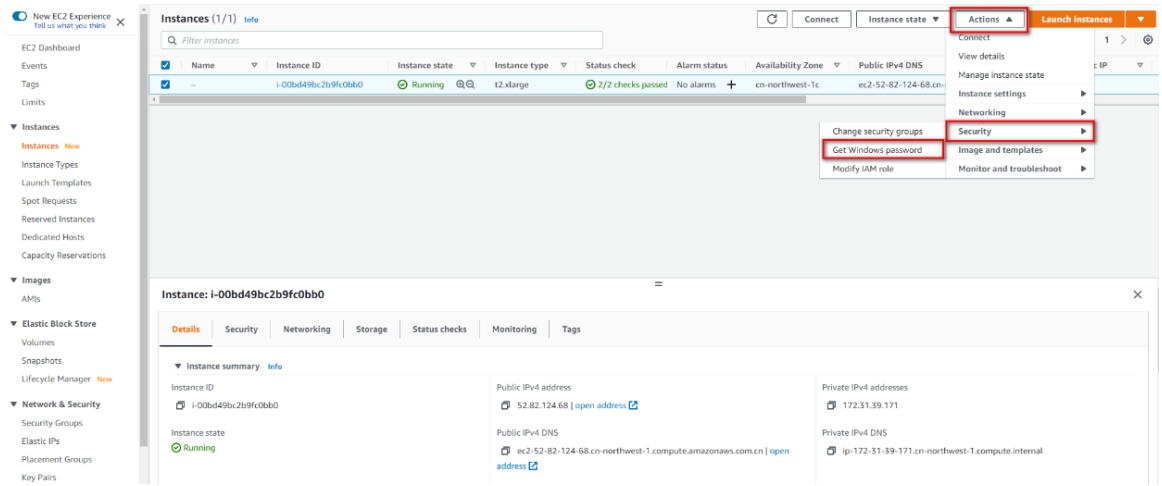


(4) How to connect the EC2 instance after it is successfully created

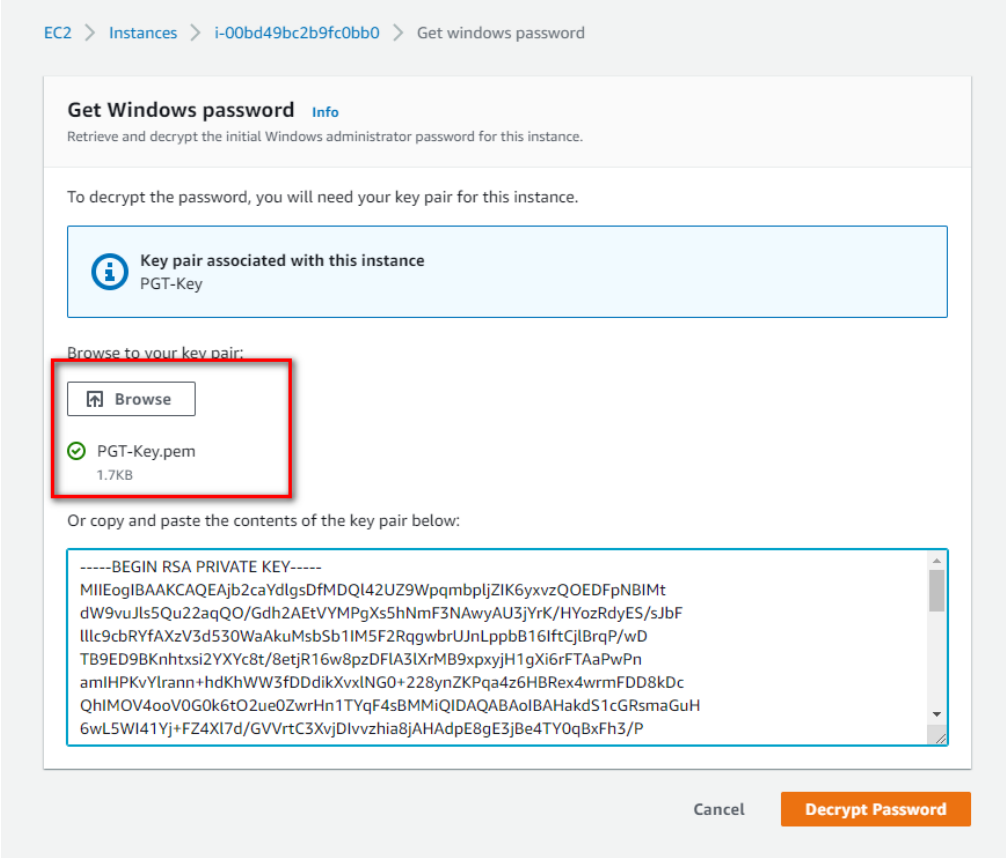
a. Provide the external IP address and DNS address. The default IP address and DNS address assigned will change each time you start up. It is recommended to purchase a fixed IP address or DNS service from AWS.

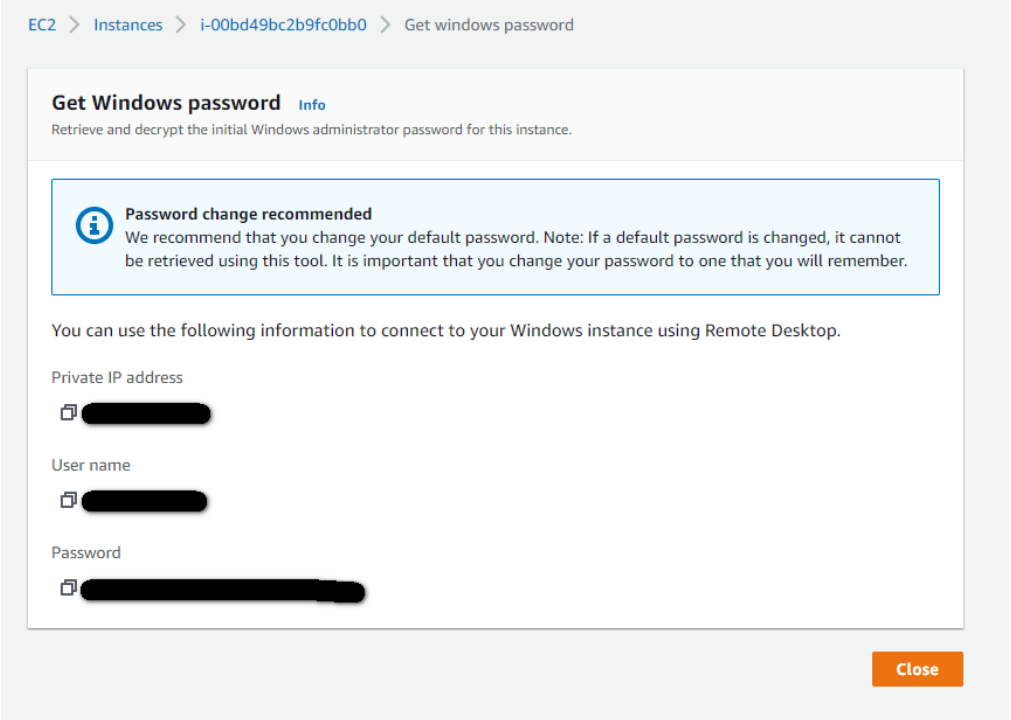


b. Obtain the password of the windows operating system.

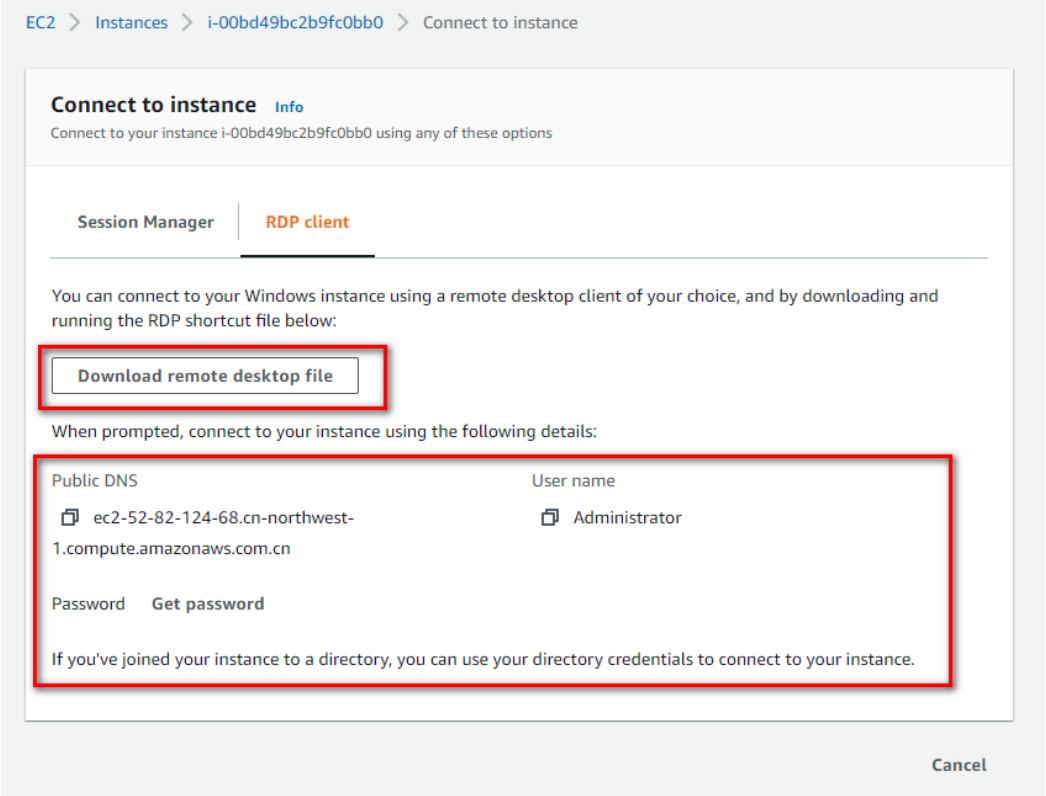


If a key pair is used during creation, upload the corresponding key pair file x.pem when obtaining the password.





c. Download the tool RDP for remotely connecting EC2 instances. After downloading and installing the tool, you can use the following information to connect EC2 instances. Or use windows Remote desktop to login.



Note:

a. When you apply for VM configuration, see Chapter 2 in the Software Requirements document of the HCP platform software.

https://www.hikvision.com/en/support/download/software/hikcentral-professional-v2-4-1/

b. Amazon has banned ports 80 and 443, so after HCP is installed, 80 and 443 need to be changed to other ports such as 81 and 444 in the external network configuration of SYS.

4. Acquisition, installation and use of HCP

(1) HCP Download
https://www.hikvision.com/en/support/download/software/hikcentral-professional-v2-4-1/

(2) Installation the HCP

"Quick Start Guide" for HCP document, download link:
https://pinfo.hikvision.com/hkwsen/unzip/20230314155521_74796_doc/

(3) Use of HCP
Obtain HCP User Manual of Control Client, User Manual of Web Client, etc., download link:
https://pinfo.hikvision.com/hkwsen/unzip/20230712151753_98833_doc/

(4) More HCP information please refer to the website:
https://www.hikvision.com/en/support/download/software/