Virtual Private Cloud

Quick Start

Quick Start

This tutorial guides you through creating a VPC ECS instance and binding an Elastic IP (EIP) to make the ECS instance accessible from the Internet. This is useful when Internet communication is required for a VPC ECS instance, for example hosting a personal blog or website.

> Note: A VPC is an isolated private network. By default, cloud product instances in a VPC cannot communicate with the Internet. When creating a VPC ECS instance, a public IP will be allocated to the ECS instance if you set the network bandwidth peak to a value larger than 0. Then, the ECS instance can communicate with the Internet. However, in this tutorial, we do not use the system allocated public IP. As an alternative, we bind an EIP to the ECS instance. Because the EIP can be dynamically bound and unbound to and from an ECS instance, it is more flexible and cost-saving.

Before you begin, ensure that you have an available Alibaba Cloud account. If not, see Create an Alibaba Cloud account.

First, create a VPC ECS instance.

> VPC provides the default VPC and VSwitch function. Therefore, you can use the default VPC and VSwitch to create an ECS directly.
>
> For details, see Create an ECS instance with default VPC and VSwitch.
>
> If you do not want to use the default VPC and VSwitch, you have to create a VPC and VSwitch, and then create an ECS instance in the specified non-default VPC.
>
> For details, see Create an ECS instance with non-default VPC and VSwitch.

Then, you need to bind an EIP to the ECS instance to access it from the Internet. For details, see Bind an EIP.

Procedure

> Log on to the ECS console.

In the left-side navigation pane, click **Instances**, and then click **Create Instance**.
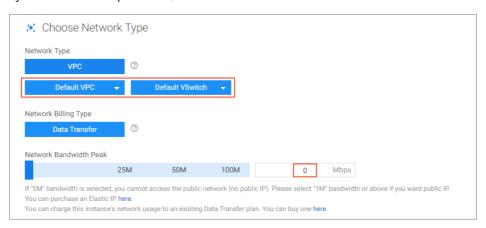
Configure the ECS instance according to your needs.

The network configuration of the ECS instance is as follows :

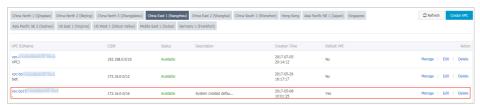**Network Type**: Choose **Default VPC** and **Default VSwitch**.

Network Bandwidth Peak: Set to **0**.

When network bandwidth peak is set to **0**, no public IP will be allocated to the created ECS instance.

In the next task, we will allocate an EIP to the ECS instance. Compared to the system allocated public IP, EIPs are more flexible.

After the ECS instance is created, a default VPC and VSwitch in the selected region are created at the same time.

Create an ECS instance in a non-default VPC

Prerequisite

You have an Alibaba Cloud account.

Before creating a VPC, refer to **Plan and design VPC** to design your private network.

Procedure

Log on to the **VPC console**.

In the left-side navigation pane, click **VPC**.

Choose the region where the VPC is created.
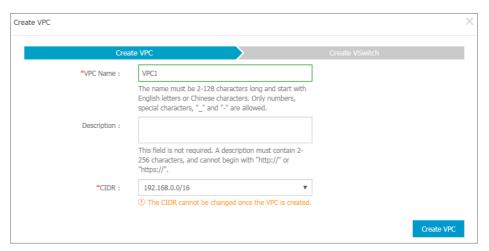
Click **Create VPC** in the upper-right corner.

In the pop-up dialog, enter a VPC name and select the IP address range for the VPC in the form of a Classless Inter-Domain Routing block.

Use the one of the following standard CIDR blocks as the IP address range. The CIDR block cannot be modified after you create the VPC. For more details, refer to **Create a VPC**.

10.0.0.0/8 (10.0.0.0 - 10.255.255.255)
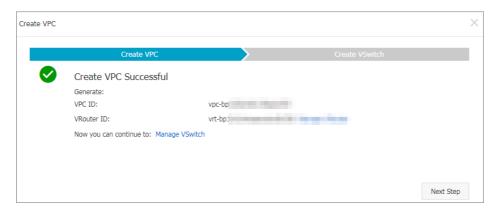
172.16.0.0/12 (172.16.0.0 - 172.31.255.255)

192.168.0.0/16 (192.168.0.0 - 192.168.255.255)

Click **Create VPC**.

A VPC ID is generated after the VPC is created, and a VRouter is created by the system for the VPC.

Click **Next Step** to create a VSwitch.

In the **Create VSwitch** tab, provide the following information and click **Create VSwitch**.
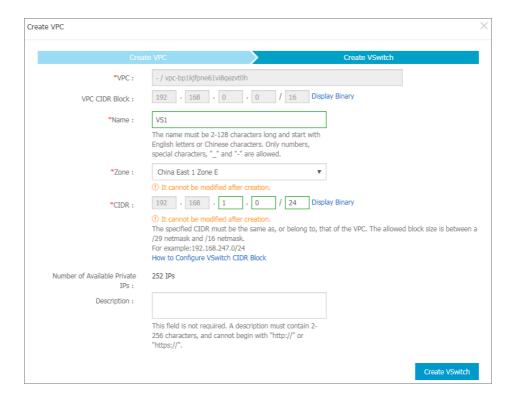
Name: Enter a name for the VSwitch.

Zone: Select a zone for the VSwitch.

CIDR block: Specify the IP address range of the VSwitch in the form of a Classless Inter-Domain Routing block.

The allowed block size for a VSwitch is between a /16 netmask and /29 netmask, and the CIDR block of the VSwitch can be the same as that of the VPC that it belongs to, or the subset of the VPC CIDR block.

Note: If the CIDR block of the VSwitch is the same as that of the VPC, you can only create one VSwitch.

Click **Done** to close the dialog.

Prerequisite

Create a VPC and VSwitch

Procedure

Log on to the **VPC console**.

In the left-side navigation pane, click **VPC**.

Click the ID of the target VPC to open the details page of the VPC.

On the left-side **VPC Details** pane, click **VSwitch**.

Find the target VSwitch where the ECS instance is created and then click **Create an Instance** > **Create ECS Instance**.

Configure the ECS instance and click **Buy Now** to complete the creation.

> **Note**: In this tutorial, the value of the **Network Bandwidth Peak** field is set to **0**. That is, no public IP will be allocated to the ECS instance after it is created.
>
> In the next task, we will allocate an EIP to the ECS instance. Compared to the system allocated public IP, EIP is more flexible.

Procedure

Log on to the **EIP console** and click **Apply for Elastic IP**.

On the purchase page, select the region, bandwidth, and purchase quantity for the EIP, and then click **Buy Now**.

Complete the payment.

On the **Elastic IP Address List** page, choose a region.

All the Elastic IP addresses under the selected region are displayed.

Click **Bind** next to the target EIP.

In the **Bind** dialog, select the ECS instance that you want to bind. Click **OK**.

Note: You can only bind an EIP to an ECS instance in Running or Stopped status.

On the **Elastic IP Address List** page, click **Refresh** on the upper-right corner.

When the EIP address status changes to **Allocated**, it indicates that the ECS instance bound with the EIP can communicate with the Internet.

Procedure

Log on to the **EIP console**.

On the **Elastic IP Address List** page, click the region of the Elastic IP address to be released.

Next to the target EIP, click **Unbind**

In the **Unbind Elastic IP Address** dialog, click **OK** to confirm your operation.

Click **Refresh** on the upper-right corner. When the EIP address status changes to **Available**, it indicates that the EIP is successfully unbound.

If you want to release the EIP, click **More** > **Release**. The released EIP will be deleted from the list.

Prerequisite

You have released or transferred all the resources in the VPC.

Note:

- Deleting a VPC will delete all associated security groups.
- After a VPC is deleted, all data in the VPC will be unrecoverable.

Procedure

Delete VSwitches.

Log on to the **VPC consoleVPC console**.

In the left-side navigation pane, click **VPC**.

Click the ID of the target VPC.

In the left-side **VPC Details** pane, click **VSwitch** and then click **Delete** next to the target VSwitch.

Click **Confirm** to delete the VSwitch.

Repeat these steps to delete all the VSwitches.

Delete a VPC.

On the **VPC Details** page, click **Delete**. Or click **Delete** next to the target VPC on the VPC list page.

Click **Confirm** to delete the VPC.