# Virtual Private Cloud

FAQ

MORE THAN JUST CLOUD | C-) Alibaba Cloud

# FAQ

# **VPC FAQ**

What is the difference between the VPC and the classic network?

How many network interface cards does an ECS instance have?

How many VRouters does a VPC have?

How many custom route entries does a route table have?

How many VSwitches can a VPC have?

How many cloud product instances can a VPC contain?

How many cloud product instances can a VSwitch contain?

### 1. What is the difference between the VPC and the classic network?

The cloud products created in the classic network are uniformly deployed in the public network infrastructure of Alibaba Cloud. The classic network is managed by Alibaba Cloud, which is applicable for the users that have high demand on the usability.

VPC is an isolated private network that users create in Alibaba Cloud. Users have full control over the VPC. Compared to the classic network, VPC is more applicable to the users with the network management capability who want to control their private networks.

### 2. How many network interface cards does an ECS instance have?

The ECS instance created in the classic network has two NICs, one is the public NIC and the other one is the private NIC; while the VPC ECS instance only has one private NIC.

#### 3. How many VRouters does a VPC have?

Each VPC has only one VRouter and each VRouter maintains one route table.

#### 4. How many custom route entries does a route table have?

By default, you can add up to 48 custom route entries to a route table. If you want to add more, submit a ticket.

### 5. How many VSwitches can a VPC have?

A VPC can contain 24 VSwitches at most.

### 6. How many cloud product instances can a VPC contain?

A VPC can contain 15,000 cloud product instances at most.

### 7. How many cloud product instances can a VSwitch contain?

The number of the cloud product instances in a VSwitch depends on the current number of cloud product instances in the VPC, which is 15,000 minus the current amount of the cloud product instances in the VPC.

### **CIDR FAQs**

### 1. What is CIDR?

Classless Inter-Domain Routing (CIDR) is a method for allocating IP addresses and IP routing. Compared to the traditional Class A, B, or C addresses, CIDR block is more efficient in the IP address allocation. For example, the IP 125.203.96.0 - 125.203.127.255 in the CIDR form is:

125.203.0110 0000.0000 0000 to 125.203.0111 1111.1111 1111, or 203.96.0/19.

You have to specify the IP address range for the VPC and VSwitch in the form of a CIDR block when

FAQ

FAQ

creating them.

### 2. How to specify the IP address range for a VPC?

You can use the standard private CIDR blocks (192.168.0.0/16, 172.16.0.0/12, 10.0.0/8) and their subsets as the IP address range of a VPC. When creating a VPC using the API, the allowed block size of the VPC CIDR block is between a /8 netmask and /24 netmask.

### 3. How to specify the IP address range for a VSwitch?

The allowed block size for a VSwitch is between a /16 netmask and /29 netmask, which can provide 8 to 65,536 IP addresses.

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.

The first and the last three IP addresses are reserved by the system. Take the CIDR block 192.168.1.0/24 as an example, the IP addresses 192.168.1.0, 192.168.1.253, 192.168.1.254 and 192.168.1.255 are reserved by the system.

The CIDR block of the VSwitch cannot be the same as that of the destination CIDR block of the route entry in the VPC, but can be the subset of it.

### Change the network type to VPC

Alibaba Cloud activated its switch-to-VPC policy on June 16, 2016 at 12:00 to improve network experience. Users without ECS instances of a classic network type (instances either in running or stop status) in regions that have implemented the policy can only buy ECS instances of the VPC type in these regions. This policy will be implemented in stages according to the region.

### Implementation time in different regions

- China South 1: January 1, 2016 at 12:00

- China North 2, Hong Kong, Asia Pacific SE 1 (Singapore), and US West 1 (Silicon Valley): February 15, 2017 at 12:00
- China East 1 (Hangzhou): March 7, 2017 at 12:00
- China East 2 (Shanghai) and China North 1 (Qingdao): March 31, 2017 at 12:00

**Note**: This policy only affects regions that have implemented the switch-to-VPC policy. Users can continue to buy cloud products of both a classic network type and the VPC type in regions that have not implemented this policy.

### Policy details

Policy 1: Users with Alibaba Cloud ECS instances before June 1, 2016 at 00:00 will not be affected by the switch-to-VPC policy. They can place orders for ECS instances of both classic network type and the VPC type if ECS instances are in stock in the region.

- If policy 1 is not applicable and you do not have ECS instances of classic network type in regions that have implemented the switch-to-VPC policy, you can only buy ECS instances of the VPC type in these regions by the time of implementation.
- If policy 1 is not applicable, but you have ECS instances of classic network type in regions that have implemented the switch-to-VPC policy, you can buy ECS instances of both classic network type and the VPC type by the time of implementation in these regions if they are in stock.

### FAQ

### Q: Why is Alibaba Cloud making this change?

A: VPC is more secure and provides a more flexible approach for users to manage their networks.

#### Q: When will the switch take effect in other regions?

A: Other regions will implement the switch-to-VPC policy after March 2017. Alibaba Cloud will release rolling announcements as to specific region updates when they are made official.

# Q: New users can only place orders for ECS/Server Load Balancer/RDS instances of the VPC type. Can they place orders for other cloud products of classic network type and the VPC type?

A: Currently, yes. It is suggested that you purchase other cloud products of the VPC type as well; otherwise, your ability to use the products might be affected. For new users, the default network type for other cloud products will also be switched to VPC.

#### Q: As I can only buy cloud products of the VPC type, will it affect my ability to use

# the products? For example, will it affect communication with other cloud products?

A: Under normal circumstances, network communication will be unaffected, because most of Alibaba Cloud products now support VPC. Alibaba Cloud will also take great measures to ensure all cloud products in the regions that have implemented the switch-to-VPC policy can fully support VPC.

# Q: How can I check which network type for cloud products I can buy in a specific region?

A: Currently, there is no method to check. Alibaba Cloud plan to support the query feature in OpenAPI and Management Console and will announce support when it is official.

#### Q: Is it possible to purchase a cloud product of a wrong network type?

A: The switch-to-VPC policy only affects the purchase of ECS, Server Load Balancer, and RDS instances of classic network type for new users. New users can continue to purchase other cloud products of classic network type. Ensure care is taken when selecting the network type during a purchase, as selecting an incorrect network type might affect your ability to use the products.

# Q: What should I do if I have purchased cloud products of the wrong network type?

A: You can switch the network using the network switch feature provided by the cloud product. For detailed procedures, refer to your specific Alibaba Cloud product instructions. If the product does not offer a network switching option, you can submit a **ticket** to Alibaba Cloud for help (excluding ECS).

FAQ