

Alibaba Cloud Virtual Private Cloud

FAQ

Issue: 20190906

Legal disclaimer

Alibaba Cloud reminds you to carefully read and fully understand the terms and conditions of this legal disclaimer before you read or use this document. If you have read or used this document, it shall be deemed as your total acceptance of this legal disclaimer.

1. You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloud-authorized channels, and use this document for your own legal business activities only. The content of this document is considered confidential information of Alibaba Cloud. You shall strictly abide by the confidentiality obligations. No part of this document shall be disclosed or provided to any third party for use without the prior written consent of Alibaba Cloud.
2. No part of this document shall be excerpted, translated, reproduced, transmitted, or disseminated by any organization, company, or individual in any form or by any means without the prior written consent of Alibaba Cloud.
3. The content of this document may be changed due to product version upgrades, adjustments, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and the updated versions of this document will be occasionally released through Alibaba Cloud-authorized channels. You shall pay attention to the version changes of this document as they occur and download and obtain the most up-to-date version of this document from Alibaba Cloud-authorized channels.
4. This document serves only as a reference guide for your use of Alibaba Cloud products and services. Alibaba Cloud provides the document in the context that Alibaba Cloud products and services are provided on an "as is", "with all faults" and "as available" basis. Alibaba Cloud makes every effort to provide relevant operational guidance based on existing technologies. However, Alibaba Cloud hereby makes a clear statement that it in no way guarantees the accuracy, integrity, applicability, and reliability of the content of this document, either explicitly or implicitly. Alibaba Cloud shall not bear any liability for any errors or financial losses incurred by any organizations, companies, or individuals arising from their download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, bear responsibility for any indirect, consequential, exemplary, incidental, special, or punitive damages, including lost profits arising from the use

or trust in this document, even if Alibaba Cloud has been notified of the possibility of such a loss.

5. By law, all the content of the Alibaba Cloud website, including but not limited to works, products, images, archives, information, materials, website architecture, website graphic layout, and webpage design, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade secrets. No part of the Alibaba Cloud website, product programs, or content shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates).
6. Please contact Alibaba Cloud directly if you discover any errors in this document.

Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK.
Courier font	It is used for commands.	Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	It indicates that it is an optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
<code>{}</code> or <code>{a b}</code>	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand slave}</code>

Contents

Legal disclaimer.....	I
Generic conventions.....	I
1 VPC FAQ.....	1
2 CIDR block FAQ.....	3
3 VPC communication FAQ.....	5
4 FAQ- Classic-network ECS instances sales policy.....	7

1 VPC FAQ

This topic describes FAQ about VPCs.

- [What is the difference between a VPC and a classic network?](#)
- [How many NICs can an ECS instance be associated with?](#)
- [Can a VPC have multiple VRouters?](#)
- [How many custom route entries can I create in a route table?](#)
- [How many VSwitches can I create in a VPC?](#)
- [How many cloud resource instances can a VPC contain?](#)
- [How many cloud resource instances can a VSwitch contain?](#)

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

The difference between a VPC and a classic network is as follows:

- A classic network is a network whose cloud resources are planned and managed by Alibaba Cloud. Compared with a VPC, a classic network is more suitable for users with high ease-of-use requirements.
- A VPC is an isolated private network whose cloud resources are created and managed by the user. Compared with a classic network, a VPC is more suitable for users who are familiar with network management.

How many NICs can an ECS instance be associated with?

A classic-network ECS instance can be associated with two NICs. One is a public NIC and the other is a private NIC. A VPC ECS instance can be associated with only one private NIC by default. Some specific VPC ECS instances can be associated with multiple ENIs. For more information, see [#unique_4](#).

Can a VPC have multiple VRouters?

No, each VPC can have only one VRouter and each VRouter can have multiple route tables.

How many custom route entries can I create in a route table?

By default, you can create up to 48 custom route entries in a route table. To increase the quota, [open a ticket](#).

How many VSwitches can I create in a VPC?

By default, you can create up to 24 VSwitches in a VPC. To increase the quota, [open a ticket](#).

How many cloud resource instances can a VPC contain?

A VPC can contain up to 15,000 cloud resource instances.

How many cloud resource instances can a VSwitch contain?

The number of cloud resource instances that a VSwitch can contain is 15,000 minus the number of existing cloud resource instances in the VPC to which the VSwitch belongs.

2 CIDR block FAQ

This topic describes FAQ about CIDR blocks.

- [What is CIDR?](#)
- [How do I specify the CIDR block of a VPC?](#)
- [How do I specify the CIDR block of a VSwitch?](#)

What is CIDR?

Classless Inter-Domain Routing (CIDR) is a new addressing method on the Internet. Compared with traditional Class A, B, or C addressing, CIDR allocates IP addresses more efficiently. For example, the IP addresses ranging from 125.203.96.0 to 125.203.127.255 can be converted into the following CIDR format:

125.203.0110 0000.0000 0000 to 125.203.0111 1111.1111 1111, or 125.203.96.0/19.

When you create a VPC or a VSwitch, you must specify its IP address range in the form of a CIDR block.

How do I specify the CIDR block of a VPC?

You can specify the CIDR block of a VPC to 192.168.0.0/16, 172.16.0.0/12, 10.0.0.0/8, and their subnets. The valid netmask range is between /8 and /24.

For more information, see [#unique_6](#).

How do I specify the CIDR block of a VSwitch?

When you specify the CIDR block of a VSwitch, the following rules apply:

- The CIDR block of the VSwitch must belong to the CIDR block of the corresponding VPC. If the CIDR block of the VSwitch is identical to that of the VPC, you can only create one VSwitch.
- The netmask range of the VSwitch is between /16 and /29.
- The CIDR block of the VSwitch cannot be identical to the CIDR blocks of any existing VSwitch.
- The CIDR block of the VSwitch cannot be identical to the destination CIDR block of any route entry in the VPC.
- The CIDR block of the VSwitch cannot contain the destination CIDR block of any route entry in the VPC, but can be the subnet of the destination CIDR block.

For more information, see [#unique_7](#).

3 VPC communication FAQ

This topic describes FAQ about VPC communication.

- [Can different VSwitches in a VPC communicate with each other?](#)
- [Can different VPCs communicate with each other through the intranet?](#)
- [Does VPCs support physical connection access?](#)
- [Does a VPC provide the VPN function?](#)
- [Can a VPC access Internet services?](#)
- [Can cloud services in a VPC be accessed from the Internet?](#)
- [Can a VPC directly communicate with the classic network?](#)

Can different VSwitches in a VPC communicate with each other?

Yes, different VSwitches in a VPC can communicate with each other as long as the security group rules allow the VSwitches to communicate.

Can different VPCs communicate with each other through the intranet?

Yes, different VPCs can communicate with each other through Express Connect, VPN Gateway, and CEN instances although these VPCs are logically isolated from each other. For more information, see [#unique_9](#).

Does VPCs support physical connection access?

Yes, VPCs allow access from on-premises data centers through a physical connection. For more information, see [Connect a local data center to a VPC through a physical connection](#).

Does a VPC provide the VPN function?

Yes, a VPC provides the VPN function. For more information, see [#unique_11](#).

Can a VPC access Internet services?

Yes, a VPC can access Internet services by using the following methods:

- Assign a public IP address to the VPC.
- Associate an EIP with the VPC.
- Configure a NAT Gateway for the VPC.

For more information, see [How to choose an Internet-facing product?](#)

Can cloud services in a VPC be accessed from the Internet?

Yes, you can access cloud services in a VPC from the Internet by using the following methods:

- Assign a public IP address to the VPC.
- Associate an EIP with the VPC.
- Configure a NAT Gateway for the VPC.
- Configure an Internet SLB instance for the VPC.

For more information, see [How to choose an Internet-facing product?](#)

Can a VPC directly communicate with the classic network?

No, a VPC cannot directly communicate with the classic network. However, you can configure a public IP address for the ECS instances in the VPC to enable the ECS instances to communicate with cloud resource instances in the classic network through the Internet. For more information, see [How to choose an Internet-facing product?](#)

Alternatively, you can use ClassicLink to establish low-latency and high-speed connections between classic-network ECS instances and VPC ECS instances. For more information, see [#unique_13](#).

4 FAQ- Classic-network ECS instances sales policy

At 12:00 on June 16, 2016, Alibaba Cloud established a new sales policy that outlined specific dates to stop the sales of classic-network ECS instances in China (Shenzhen), China (Beijing), China (Hong Kong), China (Hangzhou), and China (Qingdao), Singapore, and US (Silicon Valley).

Regions and schedule

- The policy is effective from 12:00 on December 1, 2016 in China (Shenzhen).
- The policy is effective from 12:00 on February 15, 2017 in China (Beijing), China (Hong Kong), Singapore, and US (Silicon Valley).
- The policy is effective from 12:00 on March 7, 2017 in China (Hangzhou).
- The policy is effective from 12:00 on March 31, 2017 in China (Hangzhou) and China (Qingdao).



Note:

The policy only applies to the preceding regions. In other regions, you can still use classic-network ECS instances and VPC instances.

Policy details

- The policy does not apply to customers who have purchased classic-network ECS instances before 00:00 on June 1, 2016, regardless of whether these instances are in the running or stopped state. These customers can still purchase classic-network ECS instances and VPC ECS instances as long as such instances are available in the corresponding regions.
- If a customer has not purchased any classic-network ECS instances before 00:00 on June 1, 2016, or in the regions to which the policy applies before the effective date, the customer can only purchase VPC ECS instances.
- If a customer has not purchased classic-network ECS instances in Alibaba Cloud before 00:00 on June 1, 2016, but has purchased such instances in the regions to which the policy applies before the effective date, the customer can still purchase classic-network ECS instances and VPC ECS instances as long as such instances are available in the regions.

FAQ

Why did Alibaba Cloud stop selling classic-network ECS instances in some regions?

Alibaba Cloud stopped selling classic-network ECS instances in some regions because VPCs are more secure and flexible than classic networks. Specifically, VPCs provide higher performance and better user experience and support hybrid cloud scenarios. VPCs represent the direction of future development of private networks.

When will the policy take effect in regions other than the preceding regions?

The policy will be implemented in other regions after March 2017 upon further notice .

Can new customers purchase classic-network and VPC cloud resources other than VPC ECS instances, VPC SLB instances, and VPC RDS instances?

A: Yes, they can. However, we recommend that new customers choose the VPC network type when they purchase other cloud resources because VPC will be the default network type for other cloud products later.

If I can only purchase VPC cloud resources, can they communicate with other cloud resources normally?

Yes, they can. Most cloud resources provided by Alibaba Cloud support VPCs. Alibaba Cloud will ensure that the cloud resources in the regions where the policy is effective are connected to VPCs.

Can I check which network type of cloud products I can purchase in a specific region?

No, you cannot check which network type of cloud products you can purchase in a specific region.

Is it possible that I purchase a cloud resource of an incorrect network type?

Yes, it is possible for new customers to purchase cloud resources of the classic network type by mistake. To avoid this, we recommend that you make sure you select the correct network type when you purchase any cloud resources.

What should I do if I have purchased a cloud resource of an incorrect network type?

You can switch the network in the corresponding cloud product console. If the network switching function is unavailable, submit a ticket to Alibaba Cloud for technical support (excluding ECS).