solution

Building a Remote O&M Environment with JumpServer

 Issue
 1.0

 Date
 2024-04-22





HUAWEI TECHNOLOGIES CO., LTD.

Copyright © Huawei Technologies Co., Ltd. 2024. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

NUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd. All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Security Declaration

Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process.* For details about this process, visit the following web page:

https://www.huawei.com/en/psirt/vul-response-process

For vulnerability information, enterprise customers can visit the following web page: <u>https://securitybulletin.huawei.com/enterprise/en/security-advisory</u>

Contents

1 Solution Overview	1
2 Resource Planning and Costs	3
3 Procedure	5
3.1 Preparations	5
3.2 Quick Deployment	
3.3 Getting Started	
3.4 Quick Uninstallation	
4 Appendix	18
5 Change History	

Solution Overview

Scenarios

This solution helps you quickly set up a remote secure O&M environment with JumpServer on Huawei Cloud Elastic Cloud Servers (ECSs). It provides an efficient, reliable, and secure way for enterprises to manage infrastructure and applications. This solution can be used in sectors such as finance, manufacturing, service, and Internet. It is suitable for a range of scenarios that require server security control.

Solution Architecture

You can use this solution to deploy a remote secure O&M environment with JumpServer on Huawei Cloud ECSs, in just a few clicks. The following figure shows the solution architecture.



Figure 1-1 Architecture

This solution will:

- Create a Linux ECS for installing JumpServer to set up a secure remote O&M environment.
- Create an EIP and bind it to an ECS for Internet access.
- Create security groups with specified rules to control traffic to and from ECSs.

In addition, you can use Cloud Eye to monitor the ECS status and purchase Cloud Backup and Recovery (CBR) to back up ECS data.

Advantages

• High security

This solution adopts a multi-layer security protection system with security measures such as role-based access control, audit logs, and multi-factor authentication to prevent malicious attacks and improper operations from internal personnel.

• Effective management

This solution provides comprehensive management functions, covering user management, asset management, account management, and permissions management. These functions facilitate user management and monitoring, ensuring system stability and reliability.

• Easy deployment

In just a few clicks, you can easily create ECSs and EIPs and install the JumpServer bastion host system.

Constraints

- Before deploying this solution, register a HUAWEI ID, enable Huawei Cloud services, and complete real-name authentication. If you select the yearly/ monthly billing mode, ensure that your account has sufficient balance. If you do not have sufficient balance, you can go to the Billing Center to manually pay for the order.
- If you want to use IAM agencies to deploy resources, ensure that your HUAWEI ID has sufficient IAM permissions. For details, see (Optional) Creating the rf_admin_trust Agency. If you use an account (HUAWEI ID) or you use an IAM user in the admin user group, you do not need to select an agency, and the solution will be deployed based on the permissions of the login user.

2 Resource Planning and Costs

This solution will deploy the resources listed in the following table. The costs are only estimates and may differ from the final prices. For details, see **Huawei Cloud Pricing**.

Huawei Cloud Service	Example Configuration	Estimated Monthly Cost
Elastic Cloud Server (ECS)	 Region: AP-Singapore Billing Mode: Yearly/Monthly Type: x86 General computing s6.xlarge.2 4vCPUs 8GB Image: CentOS 7.9 64bit System Disk: High I/O 100GB Quantity: 1 	\$76.93 USD
Elastic IP (EIP)	 Pay-per-use: \$0.12 USD/EIP/GB Region: AP-Singapore Billing Mode: Pay-per-use Product Type: Dedicated Routing Type: Dynamic BGP Billed By: Traffic EIP Quantity: 1 	\$0.12 USD/GB
Total	•	\$76.93 USD + EIP price

 Table 2-1 Resource planning and costs (yearly/monthly)

Huawei Cloud Service	Example Configuration	Estimated Monthly Cost
Elastic Cloud Server (ECS)	 Pay-per-use: \$0.15 USD/ECS/ hour Region: AP-Singapore Billing Mode: Pay-per-use Type: x86 General computing s6.xlarge.2 4vCPUs 8GB Image: CentOS 7.6 64bit System Disk: High I/O 100GB Required Duration: 1 month Quantity: 1 	\$100.80 USD
Elastic IP (EIP)	 Pay-per-use: \$0.12 USD/EIP/GB Region: AP-Singapore Billing Mode: Pay-per-use Product Type: Dedicated Routing Type: Dynamic BGP Billed By: Traffic EIP Quantity: 1 	\$0.12 USD/GB
Total		\$100.80 USD + EIP price

 Table 2-2 Resource planning and costs (pay-per-use)

3_{Procedure}

- 3.1 Preparations
- 3.2 Quick Deployment
- 3.3 Getting Started
- 3.4 Quick Uninstallation

3.1 Preparations

(Optional) Creating the rf_admin_trust Agency

Step 1 Log in to the **Huawei Cloud console**, hover your mouse over the account name in the upper right corner, and choose **Identity and Access Management**.

Figure 3-1 Huawei Cloud console





Figure 3-2 Identity and Access Management

Step 2 Choose **Agencies** in the navigation pane and search for the **rf_admin_trust** agency.

Figure 3-3 Agency list

IAM	Age	encies (?)						Create Agency
Users		Delete Agencies available for cr	eation: 36			All	▼ rf_admin_trust	X Q
User Groups		Agency Name/ID ↓≣	Delegated Party J≣	Validity Period ↓≣	Created ↓	Description ↓Ξ	Operation	
Permissions •		rf_edmin_trust	Cloud service RFS	Unlimited	Mar 13, 2023 14:49:16 GMT+08:00	-	Authorize Modify Delete	
Agencies								
Identity Providers								
Security Settings								

- If the agency is found, skip the following steps.
- If the agency is not found, perform the following steps.
- Step 3 Click Create Agency in the upper right corner of the page. On the displayed page, set Agency Name to rf_admin_trust, Agency Type to Cloud service, Cloud Service to RFS, and click Next.

Figure 3-4 Creating an agency

Agencies / Create Agen	су
* Agency Name	rf_admin_trust
★ Agency Type	 Account Delegate another HUAWEI CLOUD account to perform operations on your resources. Cloud service Delegate a cloud service to access your resources in other cloud services.
* Cloud Service	RFS *
* Validity Period	Unlimited •
Description	Enter a brief description.
	0/255 Next Cancel

Step 4 Search for **Tenant Administrator**, select it in the search results, and click **Next**.

Figure 3-5 Selecting a policy

K Authorize Agency				
Select PalcyRole Select Scope Select PalcyRole				
Assign selected permissions to rf_admin_Trust1.	Create Policy			
View Selected (1) Copy Permissions from Another Project	All policies/toles All services Tenant Administrator X Q			
Policy/Role Name	Туре			
DME AdministratorAccess Externamedia Data Model Engine Insult administrator with full permissions.	System-defined policy			
Tenart Administrator (Exclude IAM)	System-defined note			
CS Tenart Admin Cloud Stream Service Tenart Administrator, can manage multiple CS users	System-defined role			

Step 5 Select **All resources** and click **OK**.

Figure 3-6 Selecting the authorization scope

<	Authorize Agency
	Select Policy/Role 2 Select Scope (3) Finish
	1 The following are recommended scopes for the permissions you selected. Select the desired scope requiring minimum authorization.
	Scope
	All resources
	IAM users will be able to use all resources, including those in enterprise projects, region-specific projects, and global services under your account based on assigned permissions.
	Show More

Step 6 Check that the **rf_admin_trust** agency is displayed in the agency list.

Figure 3-7 Agency list

IAM	Agencies ③						Create Agency
Users	Delete Agencies available fr	rr creation: 32			All	▼ I_admin_trust	× Q
User Groups	Agency NameID ↓≣	Delegated Party ↓≡	Validity Period ↓≣	Created 4F	Description J≣	Operation	
Permissions • Projects	rf_admin_trust	Account op_svc_IAC	Unlimited	Jan 16, 2023 17:57:41 GMT+08:00	Created by RF, Not delete.	Authorize Modify Delete	
Agencies							
Identity Providers							
Security Settings							

----End

3.2 Quick Deployment

This section describes how to quickly deploy this solution.

Paramete r	Туре	Mandatory	Description	Default Value
vpc_name	String	Yes	Virtual Private Cloud (VPC) name. This template uses a newly created VPC. The VPC name must be unique. It can contain 1 to 54 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.	remote- OM- environ ment- with- jumpser ver- demo
secgroup_ name	String	Yes	Security group name. This template uses a newly created security group. For details about how to configure a security group rule, see (Optional) Modifying Security Group Rules. It can contain 1 to 64 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.	remote- OM- environ ment- with- jumpser ver- demo
ecs_name	String	Yes	ECS name. It must be unique. It can contain 1 to 60 characters. Only letters, digits, underscores (_), hyphens (-), and periods (.) are allowed.	remote- OM- environ ment- with- jumpser ver- demo
ecs_flavor	String	Yes	ECS flavor. For more flavors, see A Summary List of x86 ECS Specifications.	s6.xlarge .2

Table 3-1 Parameter description

Paramete r	Туре	Mandatory	Description	Default Value
ecs_passw ord	String	Yes	Initial password of an ECS. It can contain 8 to 26 characters and must include at least three of the following character types: uppercase letters, lowercase letters, digits, and the following special characters (!@\$%^= +[{()}]:,./?~#*). For Windows ECSs, the password cannot contain the username, the username spelled backwards, or more than two consecutive characters in the username. The default administrator account is root .	Left blank
ecs_disk_si ze	Number	Yes	ECS system disk size, in GB. The default disk type is high I/O. The disk size cannot be decreased. Value range: 40-1,024	100
bandwidth _size	Number	Yes	EIP bandwidth size, in Mbit/s. EIPs are billed by traffic. Value range: 1-300	300
charging_ mode	String	Yes	Billing mode. It can be prePaid (yearly/monthly) or postPaid (pay-per-use).	postPaid
charging_u nit	String	Yes	Unit of an ECS subscription term. This parameter is only mandatory if charging_mode is set to prePaid . Value range: month or year	month
charging_p eriod	Number	Yes	 ECS subscription term. This parameter is only mandatory if charging_mode is set to prePaid. Value range: 1-9 (charging_unit set to month) 1-3 (charging_unit set to year) The default subscription term 	1

Step 1 Access Huawei Cloud Quick-Start Guides and choose Building a Remote O&M Environment with JumpServer. Click Deploy to switch to the Create Stack page.



Step 2 On the Select Template page, select a template and click Next.

Figure 3-9 Selecting a template

< Create Stack		
Select Template	O Configure Parameters	
* Creation Mode	Existing Temptakes Visual Designar	
* Template Source	My Templates URL Upload Template	
* Template URL	A stack to theme badly a strateging theme in the object meta containing the strateging meta containing and meta	
	0 RPS only uses the data you upload for resource management. Your template will not be encrypted. XXX and DEW are recommended for encryption of tentilive variables. Currently, the RPS console can automatically use XXX to encrypt your sensitive variables.	
		Next

Step 3 On the **Configure Parameters** page, configure parameters based on **Table 3-1**, and click **Next**.

Figure 3-10 Configuring parameters

Select Template —	2 Configure Parameters 3 Configure Stack 4 Confirm Configurations		
* Stack Name	Building-a-Remote-OM-Environment-with-JumpServer		
TT	re stack name must start with a letter and can contain a maximum of 128 characters, including letters, digits, underscores i	(_), and hyphens (-). Th	he stack name must be unique.
Description	Enter a description of the stack.		
	0755		
Configure P	arameters		
Enter a keyword.	Q Encrypt some resources based on the template requirements.		
Parameter	Value	Туре	Description
* vpc_name	remote-OM-environment-with-jumpserver-demo	string	Virtual Private Cloud (VPC) name. This template uses a newly created VPC. The VPC name must be unique. It can contain 1 to 54 characters. Only is
* security_group_na	remote-OM-environment-with-jumpserver-demo	string	Security group name. This template uses a newly created security group. For details about how to configure a security group rule, see the deployment
* ecs_name	remote-OM-environment-with-jumpserver-demo	string	ECS name. It must be unique, it can contain 1 to 60 characters. Only letters, digits, underscores (_), hyphens (-), and periods () are allowed. The defa
* ecs_flavor	s6 xlarge 2	string	ECS flavor. For details, see the deployment guide. The default value is s6 xlarge 2. (4vCPUs 8GiB)
* ecs_password	······································	string	Initial password of an ECS. After an ECS is created, reset the password by following the instructions in the deployment guide. It can contain 8 to 26 ch
* system_disk_size	100	number	ECS system disk size, in OB. The default disk type is high I/O. The disk size cannot be decreased. The default value is 100. Value range: 40-1,024
			Previous Next

Step 4 On the **Configure Stack** page, select **rf_admin_trust** from the **Agency** drop-down list and click **Next**. This step is optional if you use an account (HUAWEI ID) or use an IAM user in the **admin** user group.

Figure 3-11 Configuring a stack

gency	huavedclud * Tr_admin_that * C How to Create an Agency?
	An agency can clearly define RFS's operation permissions (such as creation, update, and deletion) on stack resources. If the agency permissions are insufficient, subsequent operations such as deployment and execution plan creation may fail. Cre Agency on IAM
uto-Rollback	If auto-rollback is enabled, the stack automatically rolls back to the previous successful resource status when the operation fails. After the stack is created, you can modify the stack configurations on its details page.
eletion Protection	Deletion protection prevents the stack from being deleted accidentally. You can modify it on the stack details page.

Step 5 On the **Confirm Configurations** page, confirm the configurations and click **Create Execution Plan**.

 \times

Figure 3-12 Confirming configurations

Select Template	- 🕑 Configure Parameters 🥑 Configure Stack	Confirm Configurations	
RFS is free of charge, b	ut the resources in the stack are not. Currently, you need to create an	execution plan (free of charge) to obtain the es	Ilmated price.
Template Info Stack Name	Building-e-Remote-OM-Environment-with-JumpS	erver	Description –
Parameters 🖉			
Parameter Name	Value	Туре	Description
vpc_name	remote-OM-environment-with-jumpserver-de	mo string	Virtual Private Cloud (VPC) name. This temptate uses a newly created VPC. The VPC name must be unique. It can contain 1 to 54 characters. Only letters, digits, undersc
security_group_name	remote-OM-environment-with-jumpserver-de	mo string	Security group name. This template uses a newly created security group. For details about how to configure a security group rule, see the deployment guide. It can contain
ecs_name	remote-OM-environment-with-jumpserver-de	mo string	ECS name. It must be unique. It can contain 1 to 60 characters. Only letters, digits, underscores (_), hyphens (-), and periods (-) are allowed. The default value is remote
ecs_flavor	s6.xlarge.2	string	ECS flavor. For details, see the deployment guide. The default value is s6xlarge 2. (4vCPUs 8GiB)
ecs_password		string	Initial password of an ECS. After an ECS is created, reset the password by following the instructions in the deployment guide. It can contain 8 to 26 characters and must in
system_disk_size	100	number	ECS system disk size, in GB. The default disk type is high I/O. The disk size cannot be decreased. The default value is 100. Value range: 40-1,024
bandwidth_size	300	number	EIP bandwidth size, in Mbit/s. EIPs are billed by traffic. The default value is 300. Value range: 1-300
charging_mode	postPaid	string	Billing mode. It can be prePaid (yearly/monthly) or postPaid (pay-per-use). The default value is postPaid.
charging_unit	month	string	Unit of an ECS subscription term. This parameter is only mandatory if charging_mode is set to prePaid. The default value is month. Value range. month or year
			Paulan Andre Faurilie Pine

Step 6 In the displayed **Create Execution Plan** dialog box, enter an execution plan name and click **OK**.

Figure 3-13 Creating an execution plan

0	
To preview your res	ource billing information, you can create an execution plan.
Execution Plan Name	executionPlan_20240416_1633_uls0
Description	Enter a description of the execution plan.
	07
	072
	OK Cancel

Step 7 Wait until the status of the execution plan changes to **Available**, and then click **Deploy** in the **Operation** column. In the displayed dialog box, click **Execute**.

Figure 3-14 An execution plan created

Suilding-a-Remote-OM-Environment-with-JumpServer								Delete Up	date Template/Paramet
Basic Information	Resources	Outputs	Events	Template	Execution Plans				
Deploy								Enter a keyword.	
Executio	n Plan Name/ID		Status		Estimated Price (?)	Created	Description		Operation
O execution	Plan_20240416_1633_	UIS0	Available		View Details	Apr 16, 2024 16:34:48 GMT+08:00	-		Deploy Delete

Figure 3-15 Confirming the execution plan

Are you sure you want to execute the plan? Execution Plan Name Status Created executionPlan_20240416_150 Available Apr 16, 2024 15:05:36 GMT+ Image: After the plan is executed, the stack is updated accordingly, and resources in the template are enabled, which may incur fees based on resource payment requirements	Execution Plan								
Execution Plan Name Status Created executionPlan_20240416_150 Available Apr 16, 2024 15:05:36 GMT+ Image: After the plan is executed, the stack is updated accordingly, and resources in the template are enabled, which may incur fees based on resource payment requirements	Are you sure you want to execute the	plan?							
executionPlan_20240416_150 Available Apr 16, 2024 15:05:36 GMT+ After the plan is executed, the stack is updated accordingly, and resources in the template are enabled, which may incur fees based on resource payment requirements	Execution Plan Name	Status	Created						
After the plan is executed, the stack is updated accordingly, and resources in the template are enabled, which may incur fees based on resource payment requirements	executionPlan_20240416_150	Available	Apr 16, 2024 15:05:36 GMT+						
	After the plan is executed, the stack is updated accordingly, and resources in the template are enabled, which may incur fees based on resource payment requirements.								

- Step 8 (Optional) If you select the yearly/monthly billing mode and your account balance is insufficient, log in to the Billing Center to manually pay for the order. You can refer to Table 2-1 to see the total price.
- **Step 9** Wait until the deployment completes and click the **Events** tab to view details.

Figure 3-16 Resources created

<	Building-a-Remote-OM-Env	rironment-with-JumpServ	er		Delete Update Template/Parameter C
Ba	sic Information Resources	Outputs Events T	emplate Execution Plans		
					Resour • Enter a keyword. Q
	Time ↓₽	Туре 🏹	Description	Resource Name/Type	Associated Resource ID
	Apr 16, 2024 15:35:26 GMT+08:00	Log	Apply required resource success.		-
	Apr 16, 2024 15:35:23 GMT+08:00	Creation Complete	huaweicloud_compute_instance.compute_instance: Creation complete after 1m6s [id-794cf949.3fbd. 801d-d53ee08be113]	4412- compute_instance ECS	794cf949-3fbd-4412-801d-d53ee08be113
	Apr 16, 2024 15:35:23 GMT+08:00		Apply completel Resources: 8 added, 0 changed, 0 destroyed.	-	-

Step 10 Refresh the page to view the JumpServer access description on the **Outputs** tab.

Figure 3-17 Access description



----End

3.3 Getting Started

(Optional) Modifying Security Group Rules

A security group is a collection of access control rules to control traffic to and from cloud resources, such as cloud servers, containers, and databases. Cloud resources associated with the same security group have the same security requirements and are mutually trusted within a VPC.

You can modify security group rules, for example, by adding, modifying, or deleting a TCP port, as follows:

- Adding a security group rule: Add an inbound rule and enable a TCP port if needed.
- Modifying a security group rule: Inappropriate security group settings may introduce serious security risks. You can modify security group rules to ensure the network security of your ECSs.
- Deleting a security group rule: If the source or destination IP address of an inbound or outbound security group rule changes, or a port needs to be disabled, you can **delete the security group rule**.

NOTICE

If default parameter settings are retained, the initial solution deployment takes about 10 minutes. The time required for deployment varies depending on factors such as ECS flavors and EIP bandwidth.

Step 1 Log in to JumpServer. Open the browser and enter the URL in step 10 in "Quick Deploy.... The JumpServer login page is displayed. Enter the username and password and click LOGIN. (The initial username and password are admin.)

Login	📿 English 🛩	S JumpServer
admin		
1 days auto login	Forgot password?	
Loon		

Figure 3-18 Login page

Step 2 Reset the password and access the management console. Follow the instructions to enter and confirm the new password. Then, click **Setting** and use the new password to access the JumpServer console.

New password*	
•••••	
Confirm password*	
	C

Figure 3-19 Resetting the password

Figure 3-20 JumpServer console

🛞 JumpServ	ver		🗘 🗈 🛞 🥐 English ~ 🙆 Administrator ~
Console	=	← Dashboard	
Dashboard Assets Accounts	* * *	Real-time data User data Ordre sessions Current connection suess Number of failed sessions today User total 0 0 0 1 New titls seesist: 1	Asset data Accet tata O & New this week: 0
Permissions	~	User/asset activity status Active users Active assets	
⊖ More	Ŷ	1 0.8 0.6	n account today Active asset today 0 proportion 100%
		Proportion of asset types No data	
		Session user ranking Today Last 7d Last 3d Session asset Ran	King Today Last 7d Last 30d
		Ranking Username Login count Ranking Asset	name Number of visits
		No Data	No Data

Step 3 Access JumpServer documentation. Hover your mouse over the position marked in the upper right corner and click **Docs**. The JumpServer documentation page is displayed for you to learn more about JumpServer.

Figure 3-2	21 Viewing	documentation
------------	------------	---------------

🕸 JumpSer	ver					ſ) E © 0	English \vee	🙆 Administrator 🗸
Console	#	Cashboard				Ī	Docs		
ET Dashhoard						- L	Sunnart		
		Real-time data			User data	A	Enterprise edition		
& Users		Online sessions	Current connection users	Number of failed sessions today	User total	A	About		
 A		0	0	0	1	(
En	d								

3.4 Quick Uninstallation

Step 1 Log in to the **RFS console**. On the **Stacks** page, locate the resource stack you created and click **Delete** in the **Operation** column.

Figure 3-22 Deleting a stack

RFS OBT	s	itacks ⑦					(> User Guide	Create Stack
Dashboard						Stack Name 👻 Search by stack name by default.		Q @ C
Stacks		Stack Name/ID	Status 🖓	Description	Created 1	Updated ↓≣	Operation	
Stack Sets Visual Designer d ^p		Building-a-Remote-OM-Environment-with-JumpServer cb9c8388-8987-4e9a-b7a7-be88d1b3a5c0	Deployment Complete	-	Apr 16, 2024 15:05:36 GMT+08:00	Apr 16, 2024 15:35:26 GMT+08:00	Delete Update	

Step 2 In the displayed **Delete Stack** dialog box, set **When Deleted** to **Delete resource**, enter "Delete" and click **OK**.

 \times

Figure 3-23 Confirming the deletion

Delete Stack

Are you sure you want to delete the stack and resources in the stack? Cannot be restored after being deleted. Exercise caution when performing this operation.

Stack Name		Status	Created			
Building-a-Remote-OM-Environm		Deployment	Apr 16, 202	24 15:05:36 GMT+08:00	D	
Resources (8)						
Cloud Product N	Physical Resource Name/ID			Resource Status		
Elastic Cloud Server	remote-OM-environment-with-jumpserver 794 08be113			Creation Complete	Î	
Virtual Private Cloud	remote-OM-er 430436	nvironment-with-jum	pserver 30abaa2	Creation Complete		
Virtual Private Cloud	06b992		13cf7b3	Creation Complete		
Virtual Private Cloud	5169		2664	Creation Complete		
Virtual Private Cloud	369e		efa989	Creation Complete		
Virtual Private Cloud	remote-OM-er 0a5c1	nvironment-with-jum	2a77	Creation Complete		
When Deleted Delete resource Type Delete in the box below to continue. Delete OK Cancel						

----End

4 Appendix

Terms

Concepts, cloud service introduction, and terms:

- Elastic Cloud Server (ECS): ECS provides secure, scalable, on-demand compute resources, enabling you to flexibly deploy applications and workloads.
- Elastic IP (EIP): EIP enables your cloud resources to communicate with the Internet using static public IP addresses and scalable bandwidth. EIPs can be bound to or unbound from ECSs, BMSs, virtual IP addresses, load balancers, and NAT gateways.
- Virtual Private Cloud (VPC): A VPC is an isolated and private virtual network environment. You can configure IP address segments, subnets, and security groups, as well as assign elastic IP addresses and allocate bandwidth in a VPC.
- Security group: A security group is a collection of access control rules for ECSs that have the same security protection requirements and are mutually trusted in a VPC. After you create a security group, you can create different access rules for the security group to protect the ECSs that are added to that security group.

5 Change History

Released on	Description	
2024-04-16	This issue is the first official release.	