Enterprise Management

User Guide

Issue   01

Date   2024-08-12

HUAWEI TECHNOLOGIES CO., LTD.

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:
https://securitybulletin.huawei.com/enterprise/en/security-advisory

Contents

1 Enterprise Center

1.1 Overview

Enterprise Center is an integrated management service that provides cloud organization management and unified accounting management. It helps you manage personnel and cloud resources by organization and standardizes enterprise operations on Huawei Cloud, meeting IT governance requirements.

1.2 Enabling Enterprise Center

Enterprise Center allows you to associate the master account with member accounts. You can also create organizations of multiple layers based on your organizational structure and create and add accounts to the organizations.

Precautions

Prepaid customers cannot enable Enterprise Center. You can submit a service ticket or contact the account manager to change your account to a postpaid account and then enable Enterprise Center.

Prerequisites

You have **set your account type** to **Enterprise** and specified the enterprise name. If your enterprise account is authenticated as a Huawei Cloud partner account, you will no longer be able to access Enterprise Center with the account.

Procedure

Step 1 Go to the **Enterprise Center** console.

Step 2 Click **Enable for Free**.

The **Enable Enterprise Center** dialog box is displayed.

Step 3 Select **I have read and agree to Huawei Cloud Management Service Agreement** and click **Enable Now**.
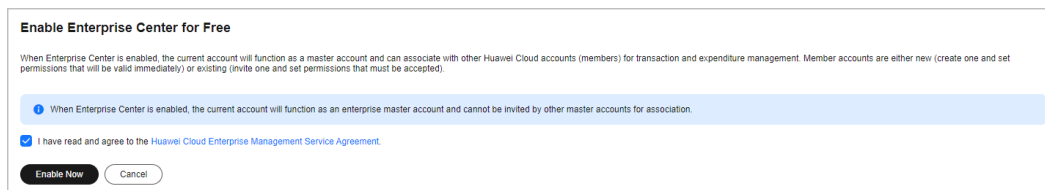
----End

1.3 Accessing the Enterprise Center

Prerequisites

The account used for logging in to Huawei Cloud must be an enterprise account.

Procedure

Step 1 Go to the **Huawei Cloud** homepage.

Step 2 Click **Console** in the upper right corner.

The management console is displayed.

Step 3 Click **Enterprise** in the upper right corner.

By default, the **Overview** page is displayed.

📖 **NOTE**

If the resolution of the screen is low, choose **More** > **Enterprise** to access the Enterprise Center.

----End

1.4 Disabling Enterprise Center

If you no longer use Enterprise Center, you can disable it on the **Overview** page.

Precautions

- Disabling Enterprise Center causes expenditure and budget data of the enterprise to be permanently deleted. The data cannot be restored even if the enterprise master account is re-enabled.

- Disabling Enterprise Center will also delete all organizations created by the master account.

Prerequisites

No valid member accounts are associated with the enterprise master account.

Procedure

Step 1 Go to the **Overview** page.

Step 2 Click **Disable Enterprise Center** in the upper right corner.
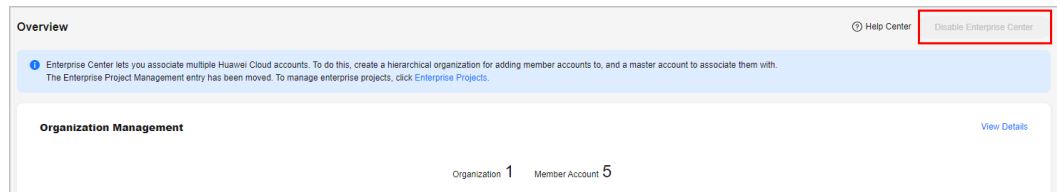
📖 **NOTE**

If the enterprise master account is associated with any member accounts, click **Disassociate** and disassociate it from all member accounts on the **Organizations and Accounts** page.

Step 3 Click **Yes**. The enterprise center is disabled successfully.

----End

1.5 Unified Accounting Management

1.5.1 Enabling Unified Accounting Management

Unified accounting management allows you to centrally manage the funds, bills, and invoices of member accounts. You need to pay the expenditures of the member accounts.

After you enable the Enterprise Center and associate a member account, you can use the unified accounting management function.

After you enable unified accounting management:

- The enterprise master account issues invoices for the expenditure of the member accounts.

- Your taxes cover the taxes of member accounts' expenditure. No separate tax determination will be performed for the member accounts.

- By default, member accounts use the commercial discounts and cash coupons of the master account to purchase resources.

- If the **Cost Center** is enabled for an enterprise master account, it will be enabled for all its member accounts by default. In the **Cost Center**, the master account can centrally manage the total cost of its enterprise, including cost analysis, budgets, cost tags, and cost recommendations. For details, visit **Cost Management for Enterprises.**

📖 **NOTE**

A master account that has enabled unified accounting management is a postpaid account by default. For details, visit **Postpayment Instructions.**

Precautions

- If you are a direct sales customer or a customer associated with a solution partner in the referral model, and you have outstanding bills, pay the bills first and then enable Enterprise Center, or accept the invitation of becoming a member account and enable unified accounting management.

- If an account has cash coupons and balance before being associated with another account, the cash coupons and balance of the account can be used to repay the bills generated before the association.

- After association, no cash coupons can be issued to member accounts.

- After association, the master account cannot apply commercial discounts for member accounts.

- Member accounts cannot use their balances after association. However, they can withdraw the balances, or use the balances after being disassociated from the master account.

- After disassociation, the master account cannot view data of disassociated member accounts.

- Member accounts can view their resource costs and usage generated during unified accounting management in the Cost Center only when they are still associated with the master account.

1.5.2 Organization Management

1.5.2.1 Creating an Organization

An enterprise master account can create an organization and add member accounts to this organization. In this way, the master account can view financial information by organization.

Creating an Organization

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Click **Create Organization** in the upper left corner of the page.

Step 3 Specify the organization name, parent organization, and organization description.

To change the parent organization, click **Edit** next to the **Parent Organization** field.

Step 4 Click **Next**.

📖 NOTE

A maximum of 5 organizational levels can be created.

A maximum of 100 organizations (excluding root node organizations) can be created.

The system displays a message indicating that the organization is created successfully.

Step 5 Click **Add Member Account** to invite accounts to join this organization or click **Add Member Account Later**.

----End

Modifying or Deleting an Organization

- To modify an organization name or description, locate the organization and click **Edit** in the **Operation** column.

- To delete an organization, locate the organization and click **Delete** in the **Operation** column.

  📖 NOTE

  If an organization has subsidiary organizations or member accounts, the organization cannot be deleted.

1.5.2.2 Associating Accounts

1.5.2.2.1 Creating a Member Account

Precautions

- After you create a member account, you need to pay all expenditures of the member account, and the member account owns the resources purchased using the account.

- You need to pay and issue invoices for the member account's expenditures. The member account can only view its expenditures.

- If you disassociate the member account from your master account, the member account can continue using the resources paid by you until the resources expire. Any refund involved in billing mode changes, specification downgrade, and unsubscription of resources paid by you will be returned to you.
- If your master account uses monthly settlement, the member account will also use monthly settlement.
- If your master account is suspended due to arrears or no payment method is configured, the member account will also be suspended.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the row containing the enterprise or organization for which a member account is to be created, and click **Add Member Account** in the **Operation** column.

Step 3 Click **Create Member Account**.

The **Create Member Account** page is displayed.

Step 4 Specify **Account Name**, **Member Account Alias**, and **Email Address**. Enter the verification code. Set the password of the member account. Select a payment method. Select the checkbox to confirm your acceptance of the service agreements.

Step 5 Click **Submit**.

The system displays a message indicating that the member account is created.

Step 6 After the member account is created, use either of the following methods to access the **Cost Center** and set a budget for the member account to control its expenditures.

- Click **Set Budget** in the **Association Request Submitted** dialog box.
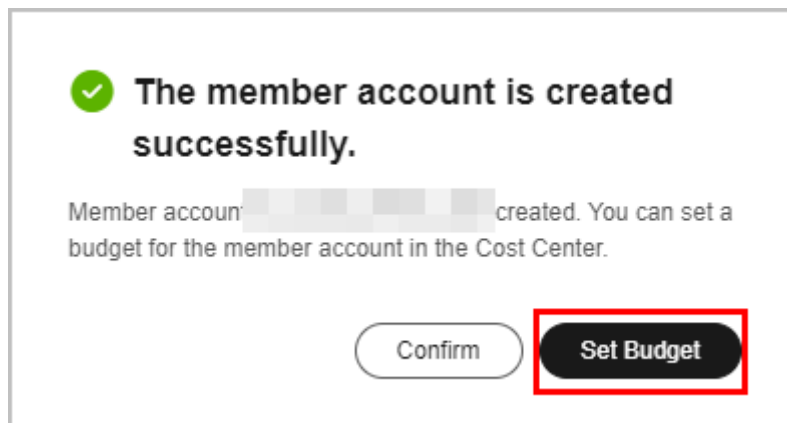
- Click **Budget Management** on the top of the **Organizations and Accounts** page.
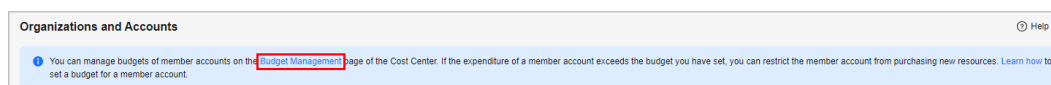
📖 **NOTE**

> For details about how to create a budget, see **Creating a Budget**. For details about how to manage budgets for member accounts, see **Budgets**.
>
> – If you associate an account with your master account, the member account's expenditure incurred before the association is not regarded as the expenditure of your master account. If you disassociate a member account from your master account, the member account's expenditure incurred after the disassociation is not regarded as the expenditure of your master account.
>
> – You can only allocate budgets to member accounts that have been associated with you.
>
> – You need to select at least one member account before creating budgets for them. You can select one or more target member accounts from the **Linked Account** drop-down list next to **Budget Scope**.

----End

Follow-up Operations

After the member account is created, Huawei Cloud will send a notification to the specified email address. The notification indicates that the association application is approved and the member account administrator can activate the account and reset the password.

The member account administrator can set a password using the link in the received email. The link is valid only for 24 hours. If the link expires, click **Forgot Password** on the login page to set a password. Then, the member account can use the password to log in to Huawei Cloud.

1.5.2.2.2 Inviting an Existing Account

Precautions

If you enable enterprise management for your account, your account becomes a master account. You can use the master account to invite another account to be its member account on the **Invite Existing Account** page. To invite another

account as a member account, the two types of accounts must meet the following requirements:

- The account to be invited is an enterprise account with the enterprise name specified, and is not a master account.

- The account to be invited is not associated with any enterprise master account as a member account.

- The account to be invited must not be frozen.

- The account to be invited has the same contracting party as the enterprise master account.

- The account to be invited does not have unpaid orders.

- There are no service support plans purchased with the invited accounts.

- The maximum number of member accounts associated with the enterprise master account has not been reached.

- The account to be invited does not belong to a solution partner.

- If you are a direct sales customer, you can only invite accounts of other direct sales customers.

- If your master account uses monthly settlement, you can only invite accounts that also use monthly settlement.

- The account to be invited has the same payment method as the enterprise master account.

- If you have enabled unified accounting management for your master account, you can only invite accounts that use monthly settlement.

- If you have enabled unified accounting management for your master account, you can only invite accounts that do not belong to technology partners.

- If you have enabled unified accounting management for your master account, you can only invite accounts that are not suspended or frozen.

After association, the member account will have the following impacts if you have enabled unified accounting management for your master account:

- If your master account is suspended, the member account will also be suspended.

- The member account can only view its expenditures. Pay and issue invoices for the member account's expenditures.

You can set a budget for each member account in the **Cost Center**. For details about how to create budgets, see **Creating a Budget**.

- If you associate an account with your master account, the member account's expenditure incurred before the association is not regarded as the expenditure of your master account. If you disassociate a member account from your master account, the member account's expenditure incurred after the disassociation is not regarded as the expenditure of your master account.

- No budget can be allocated to an account before it is successfully associated with your master account.

- When creating a budget, select the target member account from the **Linked Account** drop-down list next to **Budget Scope**.

Inviting an Account to Function as a Member Account
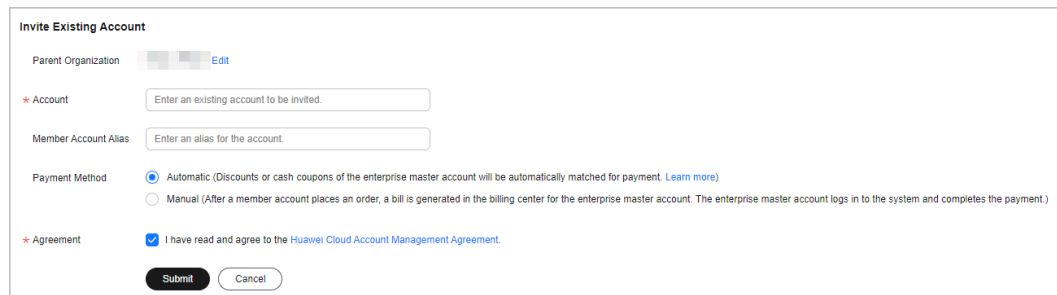
Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the enterprise or organization that an account is to be associated to.

Step 3 Click **Add Member Account** in the **Operation** column.

Step 4 Click **Invite Existing Account**.

The **Invite Existing Account** page is displayed.

Step 5 Enter the account to be invited, select a payment method, select the checkbox to confirm your acceptance of the service agreements, and click **Submit**.

Step 6 In the dialog box that is displayed, click **OK**.

----End

Accepting an Association Invitation from a Master Account

Step 1 Log in to the **My Master Account** page.

The inviter (master account) information is displayed.

Step 2 Select the checkbox to confirm your acceptance of the service agreements, and click **Accept** to accept the invitation from the master account.

----End

1.5.2.3 Managing Organization Policies

Organization policies define cloud resource permissions of all member accounts within an organization. For example, you can set an organization policy that allows certain member accounts to purchase the VPC service.

Precautions

- If no policy is attached to an organization, all accounts of the organization and its sub-organizations have all permissions by default.
- Policies attached to an organization will take effect for all accounts of the organization and its sub-organizations.
- Policies will allow or forbid accounts to perform specified operations on relevant cloud services.
- To avoid affecting services, you are advised to apply policies to a testing organization before using them for other organizations.

Creating an Organization Policy

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Policy** tab.

Step 3 Click **Create Policy**.

Step 4 On the **Create Policy** page, set policy information.

📖 NOTE

For details about JSON syntax, see **Policy Syntax**.

● Creating a Policy

a. Enter the basic information such as the policy name and description.

b. Set **Effect**.

📖 NOTE

■ The options for permission effect include:

1. **Deny**: The specified operations are rejected and other operations are allowed.

2. **Allow**: The specified operations are allowed and other operations are rejected.

■ Implementation of organization policies:

1. By default, new member accounts associated with your master account have all the permissions required for all cloud services. To control the access of a member account to specific cloud services, you can attach policies to the organization to which the member account belongs. A deny policy refuses the specified operations and permits all the other operations, while an allow policy refuses all operations and permits only the specified operations.

2. If a member account is associated with multiple deny policies, all these policies take effect. However, if a member account is associated with multiple allow policies, only the first allow policy authenticated by the system takes effect according to the implementation logic of allow policies. Therefore, to ensure that all allow permissions take effect for a member account, configure all these allow permissions in the same policy and attach the policy to the organization to which the member account belongs.

      c.   Set **Service** and **Action**.

      d.   Click **OK**.

- Copying an Existing Policy

      a.   Enter the basic information such as the policy name and description.

      b.   Click **Copy Existing Policy**.

          The **Copy Existing Policy** dialog box is displayed.

      c.   Select the policy you will copy.

      d.   Click **OK**. The actions of the selected policy are displayed in the **Policy Content** text box.

      e.   Change the actions for the new policy.

      f.   Click **Check Syntax**.

          If the syntax of the new policy is correct, the message "**Policy content validated successfully.**" is displayed.

      g.   Click **OK**.

    ----End

Adding a Policy to an Organization

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Organization** tab.

Step 3 In the **Organization** tree on the left, select the organization to which a policy will be added.

All policies of this organization, including the newly added and inherited policies, are displayed on the right of the page.

Step 4 Click **Add Policy**.

Step 5 Select the policies to be added.

Step 6 Click **OK**.

    📖 NOTE

- You can click ⌄ before the policy name to view the content of the selected policy.
- You can click **Cancel Policy** in the **Operation** column to disassociate the policy from the organization.

    ----End

Follow-up Operations

Modifying an Organization Policy

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Policy** tab.

Step 3 Locate a policy to be modified, and click **Edit** in the **Operation** column.

Step 4 Modify **Policy Name**, **Description**, and **Policy Content**.

Step 5 Click **OK**.

----End

Deleting an Organization Policy

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Policy** tab.

Step 3 Locate the policy to be deleted, and click **Delete** in the **Operation** column.

Step 4 Click **Yes**.

----End

1.5.2.4 Modifying a Member Account

1.5.2.4.1 Permissions

Function

In enterprise accounting management, the master account creates member accounts or associates member accounts to establish the association between the master account and member accounts, and assigns permissions to the member accounts to centrally manage enterprise funds.

Overview

You can assign multiple permissions policies to member accounts under your master account to meet your accounting management requirements. **Table 1-1** describes the permissions policies provided by Enterprise Center.

Table 1-1 Permissions policies

Category	Permissions Policy	Function Description	Remarks
Unified accounting management	N/A	Member accounts cannot make payments for resources they use after association.	Permissions for the master and member accounts that have enabled unified accounting management cannot be changed.
		The master account pays expenditures of its member accounts.	
		The master account can view the accounting information of member accounts.	

Category	Permissions Policy	Function Description	Remarks
		The master account can view expenditures of member accounts.	
		The master account manages invoices of member accounts.	
		Member accounts cannot request invoices.	
		Member accounts can use commercial discounts of the master account.	

1.5.2.4.2 Modifying the Member Account Alias

An enterprise master account can use aliases to name its member accounts so that member accounts can be easily identified. It can modify the alias of a member account.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate an organization whose member account's alias needs to be changed, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the target member account and click **Modify Alias** in the **Operation** column.

The **Modify Alias** dialog box is displayed.

Step 4 Change the alias, and click **OK**.

The system displays a message indicating that the alias has been successfully changed.

----End

1.5.2.4.3 Changing the Organization for a Member Account

A master account can change the organizations which its member accounts belong to.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate an organization whose member account's organization needs to be changed, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the target member account and choose **More** > **Change Organization** in the **Operation** column.

The **Change Parent Organization** dialog box is displayed.

Step 4 Select another organization and click **OK**.

The parent organization of the member account is changed successfully.

----End

1.5.2.4.4 Modifying the Payment Method of a Member Account

The payment method of a member account can be automatic or manual. A master account can change the payment method of its member accounts.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate an organization whose member account's payment method needs to be changed, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the member account whose payment method is to be modified and choose **More** > **Modify Payment Method** in the **Operation** column.

The **Modify Payment Method** dialog box is displayed.
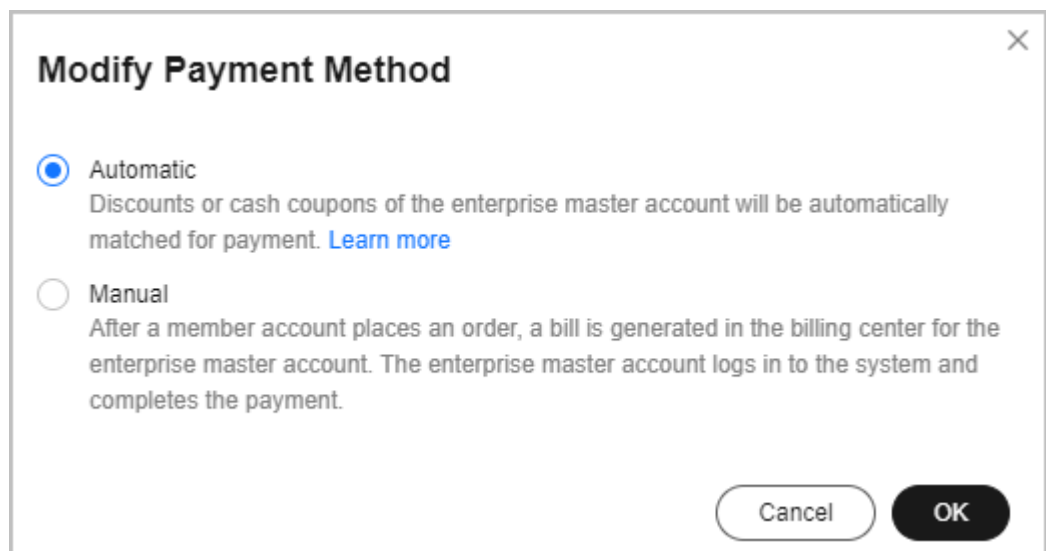
Step 4 Select a payment method and click **Submit**.

The system displays a message indicating that the payment method is changed successfully.

----End

1.5.2.5 Restricting Member Accounts from Purchasing New Resources

If you have enabled unified accounting management for your master account, you can restrict member accounts from purchasing new resources on the **Organizations and Accounts** page. With the restriction, member accounts cannot purchase new resources, but can still perform operations on purchased resources.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Click **Expand All** next to the number of associated accounts in the row containing the organization whose member account will be prevented from purchasing new resources.

Step 3 Choose **More** > **Prevent Purchase** in the **Operation** column of the row containing the target member account.

A dialog box requesting you to confirm the restriction is displayed.

Step 4 Click **OK**.

The system displays a message indicating that the member account cannot purchase new resources.

☐ **NOTE**

To allow the member account to purchase new resources, choose **More** > **Cancel Purchase Prevention** in the **Operation** column.

----End

1.5.2.6 Disassociating Member Accounts

You can submit a request for disassociating member accounts on the **Organizations and Accounts** page. Member accounts can accept or reject such request on the **My Master Account** page.

Precautions

To disassociate a member account from its master account, both accounts must meet the following requirements:

- The member account does not have unpaid orders.

- The member account is not suspended due to insufficient balance or other reasons.

- The master account is not suspended.

After the member account is disassociated from your master account:

- The member account needs to pay, issue invoices, and calculate taxes for its own expenditures.

- If the member account unsubscribes from a resource purchased when the account was still associated, the refund will be returned to your master account.

- You can use your master account to query the member account's orders generated when the account was still associated.

- If the member account was created using your master account, the member account will be suspended after disassociation because the member account has no credit card bound to it. The member account administrator can bind a credit card to restore the account.

Submitting a Disassociation Request to a Member Account

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the row containing the organization whose member account will be disassociated from, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the member account. In the **Operation** column, choose **More** > **Disassociate Account**.

The **Confirm** dialog box is displayed.

☐ NOTE

Before the member account accepts the disassociation request, you can choose **More** > **Cancel Disassociation** in the **Operation** column to cancel the disassociation request.

Step 4 Click **Yes**.

The system displays a message indicating that the operation is successful.

----End

Accepting a Disassociation Request from a Master Account

Step 1 Go to the **My Master Account** page, and view the disassociation request.

Step 2 Click **Accept** to accept the disassociation request.

----End

1.5.2.7 Setting a Budget for a Member Account

You can use either of the following methods to access the **Cost Center** and set budgets for your unified accounting members to control their expenditures.

- After a member account is created, the **Association Request Submitted** dialog box is displayed. You can click **Set Budget** in the dialog box and then you will be navigated to the **Cost Center**.
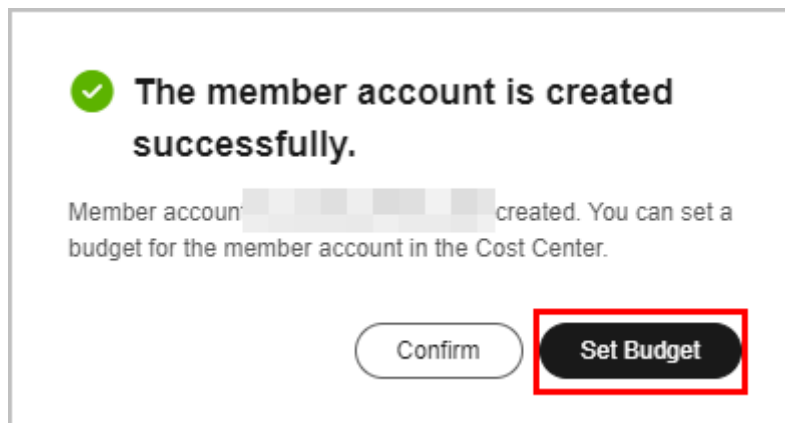
- Click **Budget Management** on the top of the **Organizations and Accounts** page.
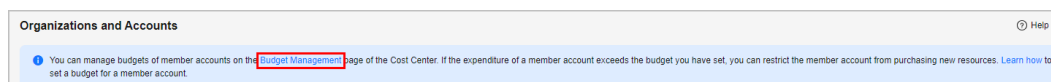
📖 **NOTE**

For details about how to create a budget, see **Creating a Budget**. For details about how to manage budgets for member accounts, see **Budgets**.

- A member account's expenditures which are generated before the association will not be counted as budget expenditures. If a member account disassociates from their master accounts, the member account's expenditures which are generated after the disassociation will not be counted as budget expenditures.
- Budgets cannot be allocated to enterprise member accounts that have not been successfully associated.
- You need to select at least one member account before creating budgets for them. You can select one or more target member accounts from the **Linked Account** drop-down list next to **Budget Scope**.

1.5.3 Benefits Management

Sharing Resource Packages

You can enable or disable resource package benefits sharing with your unified accounting members.

Your members cannot share resource package benefits with others. They can only enjoy your benefits after their own benefits have been used up.

Step 1 Sign in to the Enterprise Center and click **Accounting Management** > **Benefits Management**.

Step 2 Select the **Resource Packages** tab.

Step 3 Switch on **Enable benefits sharing**.

- After the benefits sharing is enabled, the new unified accounting members can automatically enjoy all the benefits of your resource packages.
- After the benefits sharing is disabled, the new unified accounting members cannot automatically enjoy benefits of your resource packages. However, the unified accounting members with whom you have shared the benefits before the benefits sharing is disabled will not be affected.

Step 4 Batch enable or disable benefits sharing.

Select target accounts and click **Batch Enable** or **Batch Disable** to share benefits or cancel benefits sharing with multiple accounts at the same time.

- After you batch enable benefits sharing, the selected accounts can enjoy all the benefits of your resource packages. After you batch disable benefits sharing, the selected accounts cannot enjoy benefits of your resource packages and may be in arrears.

- You can select up to 100 accounts at a time for batch enabling or disabling benefits sharing. If you need to batch enable or disable benefits sharing with more than 100 accounts, you are advised to repeat the operations.

Step 5 Enable or disable benefits sharing with a single account

Click **Enable** or **Disable** in the **Operation** column to share benefits or cancel benefits sharing with an account.

After you enable benefits sharing, the selected account can enjoy all the benefits of your resource packages. After you disable benefits sharing, the selected account cannot enjoy benefits of your resource packages and may be in arrears.

----End

1.6 Restrictions

Scenarios and Restrictions

Table 1 describes the restrictions on using Enterprise Center for an enterprise master as a **resale**, **referral**, or **direct** customer in the unified accounting model, and **Table 2** describes the restrictions in independent accounting model.

Table 1-2 Scenarios and restrictions (unified accounting)

Scenario	Resale Customer	Referral Customer	Direct Customer
Creating member accounts	Members must be direct sales customers.	Members must be direct sales customers.	Members must be direct sales customers.
Inviting member accounts	Invited members must be direct sales customers.	Invited members must be direct sales customers.	Invited members must be direct sales customers.
Inheriting commercial discounts	Members inherit commercial discounts from their enterprise masters.	Members inherit commercial discounts from their enterprise masters, excluding partner discounts.	Members inherit commercial discounts from their enterprise masters.

Scenario	Resale Customer	Referral Customer	Direct Customer
Disassociating from members	The relationship between an enterprise master and their partner will not be affected. Members must not be associated with any partner.	The relationship between an enterprise master and their partner will not be affected. Members must not be associated with any partner.	Partner associations not involved.
Paying bills	Enterprise masters pay bills for their members.	Enterprise masters pay bills for their members.	Enterprise masters pay bills for their members.
Generating bills	Member expenditures are included in bills of their enterprise masters.	Member expenditures are included in bills of their enterprise masters.	Member expenditures are included in bills of their enterprise masters.
Invoicing	Enterprise masters are invoiced for expenditures of their members. Enterprise masters need to request invoicing.	Enterprise masters are invoiced for expenditures of their members. Enterprise masters need to request invoicing.	Enterprise masters are invoiced for expenditures of their members. Enterprise masters need to request invoicing.

Table 1-3 Scenarios and restrictions (independent accounting)

Scenario	Resale Customer	Referral Customer	Direct Sales Customer
Creating member accounts	Creating member accounts not allowed.	Members will be associated with their masters' partners by referral model.	Members must be direct sales customers.
Inviting member accounts	Inviting members not allowed.	Invited members must be referral or direct sales customers.	Master accounts can invite referral or direct customers.

Scenario	Resale Customer	Referral Customer	Direct Sales Customer
Inheriting commercial discounts	N/A	Members inherit commercial discounts from their enterprise masters, excluding partner discounts.	Members inherit commercial discounts from their enterprise masters.
Disassociating from members	N/A	Relationships with partners will not be affected.	N/A
Generating bills	N/A	Enterprise masters and their members are billed independently.	Master accounts and member accounts are billed independently.
Invoicing	N/A	Invoices are issued for enterprise masters and their members respectively. Enterprise masters can also request invoicing for their members.	Invoices are issued for master and member accounts respectively. Master accounts can also request invoices for member accounts.
Granting credits	N/A	Enterprise masters can grant their members credits. If a member already has credits granted, granting credits will not be supported.	Enterprise masters can grant their members credits. If a member already has credits granted, granting credits will not be supported.
Paying bills	N/A	Master accounts pay bills for member accounts who have been granted with credits.	Master accounts pay bills for member accounts who have been granted with credits.

System Restrictions.

There is a limitation on how many organizations and enterprise project one can use for enterprise management. **Table 1** lists the maximum allowed.

NOTE

If the following quotas cannot meet your requirements, please contact your account manager.

Table 1-4 Quotas

Item	Quota	Description
Member account	10	Maximum number of enterprise member accounts that can be associated with an enterprise master account by default.
Organization level	5	The maximum organizational levels supported. For example, you can use a master account to create organization 1, organization 2, organization 3, organization 4, and organization 5.
Organization	100	Maximum number of organizations that can be created.
Enterprise project group level	1	Maximum number of project group levels that can be created, for example, **Account \Project Group 1**.
Enterprise project group	100	Maximum number of enterprise project groups that can be created.
Enterprise project	100	Maximum number of enterprise projects that can be created.
User groups in an enterprise project	10	Maximum number of user groups that can be associated with an enterprise project.
User group	10	Maximum number of user groups that can be created.
User	50	Maximum number of users that can be created.

1.7 Permissions Policies and Supported Actions

1.7.1 Permissions Policy

This chapter describes fine-grained permissions management for Enterprise Center. If your Huawei Cloud account does not require individual IAM users, you can skip this chapter.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using **roles** and **policies**. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

📖 **NOTE**

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user wants to query jobs using an API, the user must be granted permissions that allow the **dlf:job:list** action.

Supported Actions

Enterprise Center provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- Permissions: Statements in a policy that allow or deny certain operations.

- Actions: Specific operations that are allowed or denied.

- Authorization Scope: A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM. For details about the differences between IAM and enterprise projects, see **What Are the Differences Between IAM Projects and Enterprise Projects?**

- APIs: REST APIs that can be called by a user who has been granted specific permissions.

1.7.2 Enterprise Center Permissions

Table 1-5 Enterprise Center Permissions

Permission	Action	Description
Modifying the status of Enterprise Center	bss:enterpriseOrganization-Function:update	Enabling or disabling Enterprise Center
Viewing an organization or member account	bss:enterpriseOrganiza-tion:view	Querying details about an organization or member account
Updating an organization or member account	bss:enterpriseOrganiza-tion:update	Creating a member account, inviting an existing account, adding, deleting, and modifying an organization, and changing the organization to which a member account belongs
Updating an organization policy	bss:enterpriseOrganization-ControlPolicy:update	Creating, modifying, and deleting a custom organization policy
Updating the fund quota settings of an enterprise project	bss:enterpriseProjectFund-Quota:update	Enabling the configuration of enterprise project fund quota, modifying the fund quota, and setting alarm contacts
Querying the fund quota settings of an enterprise project	bss:enterpriseProjectFund-Quota:view	Querying the fund quota settings of an enterprise project
Updating an enterprise project group	bss:enterpriseProjectGroup:update	Creating, modifying, and deleting an enterprise project group
Viewing an enterprise project group	bss:enterpriseProjectGroup:view	Viewing details about an enterprise project group
Managing enterprise project groups (Unavailable soon)	bss:projectGroup:update	Creating an enterprise project group and viewing its details

Permission	Action	Description
Modifying the fund quota of an enterprise project	bss:enterpriseProjectFund-QuotaFinance:update	Modifying the fund quota of an enterprise project
Querying the fund quota of an enterprise project	bss:enterpriseProjectFund-QuotaFinance:view	Viewing the fund quota adjustment records of an enterprise project
Enabling the enterprise project function	bss:enterpriseProjectFunc-tion:update	Enabling the enterprise project function

1.8 CTS

1.8.1 Key Operations Supported by CTS

Scenario

Cloud Trace Service (CTS) records user operations performed in Enterprise Center and related resources for further query, auditing, and backtracking.

Prerequisites

CTS has been provisioned.

Supported Operations

Table 1-6 Operations supported by CTS

Operation	Resource Type	Event
Creating member accounts	enterpriseCenter	createMemberAccount
Inviting member accounts	enterpriseCenter	inviteExistingAccount
Disassociating from member accounts	enterpriseCenter	dissassociateMemberAc-count
Requesting a change in permissions	enterpriseCenter	permissionChangeRequest
Accepting a change in permissions	enterpriseCenter	permissionChangeAccept

Operation	Resource Type	Event
Rejecting a change in permissions	enterpriseCenter	permissionChangeReject
Allocating credits	enterpriseCenter	creditAllocate
Allocating account balances	enterpriseCenter	debitAllocate
Issuing coupons	enterpriseCenter	couponAllocate
Revoking credits	enterpriseCenter	creditRetrieve
Revoking account balances	enterpriseCenter	debitRetrieve
Revoking coupons	enterpriseCenter	couponRetrieve

1.8.2 Viewing Audit Logs

For details about audit logs, see **Querying Real-Time Traces**.

1.9 Non-unified Accounting Management (To Be Deprecated)

1.9.1 Organization Management

1.9.1.1 Creating an Organization

An enterprise master account can create an organization and add member accounts to this organization. In this way, the master account can view financial information by organization.

Creating an Organization

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Click **Create Organization** in the upper left corner of the page.

Step 3 Specify the organization name, parent organization, and organization description.

NOTE

> To change the parent organization, click **Edit** next to the **Parent Organization** field.

Step 4 Click **Next**.

NOTE

> A maximum of 5 organizational levels can be created.
>
> A maximum of 100 organizations (excluding root node organizations) can be created.

The system displays a message indicating that the organization is created successfully.

Step 5 Click **Add Member Account** to invite accounts to join this organization or click **Add Member Account Later**.

----End

Modifying or Deleting an Organization

- To modify an organization name or description, locate the organization and click **Edit** in the **Operation** column.

- To delete an organization, locate the organization and click **Delete** in the **Operation** column.

  📖 **NOTE**

  If an organization has subsidiary organizations or member accounts, the organization cannot be deleted.

1.9.1.2 Associating Accounts

1.9.1.2.1 Creating a Member Account

Precautions

A member account cannot be created in the following scenarios:

- The enterprise master account is suspended.

- The maximum number of member accounts associated with the master account has been reached.

- The enterprise master account is an individual account.

- The enterprise master account is a FinTech Cloud Infra customer.

- The maximum number of real-name authentications performed by the enterprise master account has been reached.

- The real-name authentication of the enterprise master account is being reviewed.

A master account and its organizations can create new Huawei Cloud accounts as member accounts. These new accounts are automatically associated with the master account and inherit the following information about the master account:

- Enterprise name, country/region, contracting party, account type, payment method, details about the associated partner, and real-name authentication information.

- Customer attribute if the master account belongs to a customer associated with a solution partner (the same solution partner and association model)

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the row containing the enterprise or organization for which a member account is to be created, and click **Add Member Account** in the **Operation** column.

Step 3 Click **Create Member Account**.

The **Create Member Account** page is displayed.

Step 4 Set **Account Name** and **Email Address**. Click **Next**.

Step 5 Set **Member Account Alias** and **Permissions**.

📖 **NOTE**

- To change the parent organization, click **Edit** next to the **Parent Organization** field.
- If the master account belongs to a postpaid customer which is not associated with a solution partner by reseller model, **Allocate Credit to Member Account** is selected by default and cannot be unselected.
- If you select **Allocate Credit to Member Account**, you must also select **Allow Member Account to Use Your Commercial Discounts**.

Step 6 Click **Next**.

The system displays the member account information for your confirmation.

Step 7 Click **Obtain Verification Code** and enter the verification code.

The verification code is valid for 48 hours. You can enter the verification code on the **Enterprise Center** > **Overview** > **Requests** page later.

Step 8 Click **Submit**.

The system displays a message indicating that the member account is created.

Step 9 Click **Finish**.

----End

Follow-up Operations

After the member account is created, Huawei Cloud will send an SMS notification of member account activation to the mobile number and an email to the preset mailbox, indicating that the association request is approved, the member account is activated, and the password needs to be reset.

The member account administrator can set a password using the link in the received email. The link is valid only for 24 hours. If the link expires, click **Forgot Password** on the login page to set a password. Then, the member account can use the password to log in to Huawei Cloud. The procedure is as follows:

Step 1 Log in to the mailbox registered for the member account, and open the email sent from Huawei Cloud.

Step 2 Click **here** in the email.

Step 3 Set a password.

Step 4 Click **OK**.

----End

1.9.1.2.2 Inviting an Existing Account

Inviting a Member Account

If you enable enterprise management for your account, your account becomes a master account. You can use the master account to invite another account to be its member account on the **Invite Existing Account** page. To invite another account as a member account, the two types of accounts must meet the following requirements:

- The account to be invited is an enterprise account with the enterprise name specified, and is not a master account.
- The account to be invited is not associated with any enterprise master account as a member account.
- The account to be invited must not be frozen.

- If the master account is a resale customer of a reseller, the master account can only invite their resellers' resale customers to become member accounts.

- If the master account belongs to a customer associated with a solution partner in the reseller model, member accounts to be invited cannot use commercial discounts of the master account. If the member accounts need to use the commercial discounts of the master account, contact the solution partner.

- The account to be invited must have the same contracting party as the enterprise master account.

- The maximum number of member accounts associated with the enterprise master account has not been reached.

- The account to be invited does not belong to a solution partner.

- The account to be invited has the same payment method as the enterprise master account.

- The enterprise master account must not be suspended.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the enterprise or organization that an account is to be associated to.

Step 3 Click **Add Member Account** in the **Operation** column.

Step 4 Click **Invite Existing Account**.

The **Invite Existing Account** page is displayed.

📖 **NOTE**

Huawei Cloud China and Huawei Cloud International accounts are independent from each other. Therefore, a Huawei Cloud China account and Huawei Cloud International account cannot associate with each other for enterprise management.

Step 5 Set the account name and alias of the account to invite, and click **Next**.

Step 6 Set **Permissions** and select **I have read and agree to the HUAWEI CLOUD Enterprise Management Service Agreement**.

NOTE

- If a member account has commercial discounts, the member account is not allowed to use your commercial discounts.
- If the master account belongs to a postpaid customer which is not associated with a solution partner by reseller model, **Allocate Credit to Member Account** is selected by default and cannot be unselected.
- If you select **Allocate Credit to Member Account**, you must also select **Allow Member Account to Use Your Commercial Discounts**.

Step 7 Click **Invite Existing Account**.

The system displays a message indicating that the invitation has been sent. Wait for the account to accept the invitation.

NOTE

The invitation can be canceled before it is accepted. To cancel the invitation, click the account name of the invited account on the **Organizations and Accounts** page, and then click **Disassociate Account** next to **Status** on the **Basic Information** page.

Step 8 Click **Finish**.

----End

Viewing Member Account Information

To view member account information, click the name of the member account on the **Organizations and Accounts** page. The **Account Information** page of the member account is then displayed.

Accepting an Association Invitation from a Master Account

The invited account can accept the association invitation on the **My Master Account** page.

Procedure

Step 1 Log in to the **My Master Account** page.

The inviter (master account) information is displayed.

Step 2 Click **Accept** to accept the invitation from the master account.

----End

1.9.1.3 Managing Organization Policies

Organization policies define cloud resource permissions of all member accounts within an organization. For example, you can set an organization policy that allows certain member accounts to purchase the VPC service.

Precautions

- If no policy is attached to an organization, all accounts of the organization and its sub-organizations have all permissions by default.

- Policies attached to an organization will take effect for all accounts of the organization and its sub-organizations.

- Policies will allow or forbid accounts to perform specified operations on relevant cloud services.

- To avoid affecting services, you are advised to apply policies to a testing organization before using them for other organizations.

Creating an Organization Policy

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Policy** tab.

Step 3 Click **Create Policy**.

Step 4 On the **Create Policy** page, set policy information.

📖 **NOTE**

For details about the JSON syntax, see **Policies**.

- Creating a Policy

  a. Enter the basic information such as the policy name and description.

  b. Set **Effect**.

◯◯ NOTE

- The options for permission effect include:

  1. **Deny**: The specified operations are rejected and other operations are allowed.

  2. **Allow**: The specified operations are allowed and other operations are rejected.

- Implementation of organization policies:

  1. By default, new member accounts associated with your master account have all the permissions required for all cloud services. To control the access of a member account to specific cloud services, you can attach policies to the organization to which the member account belongs. A deny policy refuses the specified operations and permits all the other operations, while an allow policy refuses all operations and permits only the specified operations.

  2. If a member account is associated with multiple deny policies, all these policies take effect. However, if a member account is associated with multiple allow policies, only the first allow policy authenticated by the system takes effect according to the implementation logic of allow policies. Therefore, to ensure that all allow permissions take effect for a member account, configure all these allow permissions in the same policy and attach the policy to the organization to which the member account belongs.

    c.   Set **Service** and **Action**.

    d.   Click **OK**.

- Copying an Existing Policy

    a.   Enter the basic information such as the policy name and description.

    b.   Click **Copy Existing Policy**.

        The **Copy Existing Policy** dialog box is displayed.

    c.   Select the policy you will copy.

    d.   Click **OK**. The actions of the selected policy are displayed in the **Policy Content** text box.

    e.   Change the actions for the new policy.

    f.   Click **Check Syntax**.

        If the syntax of the new policy is correct, the message "**Policy content validated successfully.**" is displayed.

    g.   Click **OK**.

----End

Adding a Policy to an Organization

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Organization** tab.

Step 3 In the **Organization** tree on the left, select the organization to which a policy will be added.

All policies of this organization, including the newly added and inherited policies, are displayed on the right of the page.

Step 4 Click **Add Policy**.

Step 5 Select the policies to be added.

Step 6 Click **OK**.

> 📖 NOTE
>
> - You can click [⌄] before the policy name to view the content of the selected policy.
> - You can click **Cancel Policy** in the **Operation** column to disassociate the policy from the organization.

----End

Follow-up Operations

Modifying an Organization Policy

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Policy** tab.

Step 3 Locate a policy to be modified, and click **Edit** in the **Operation** column.

Step 4 Modify **Policy Name**, **Description**, and **Policy Content**.

Step 5 Click **OK**.

----End

Deleting an Organization Policy

Step 1 Go to the **Organization Policies** page.

Step 2 Click the **By Policy** tab.

Step 3 Locate the policy to be deleted, and click **Delete** in the **Operation** column.

Step 4 Click **Yes**.

----End

1.9.1.4 Modifying a Member Account

1.9.1.4.1 Changing Member Account Permissions

A master account can submit a request to a member account to add or cancel permissions for managing the member account. The permission change takes effect after the member account accepts the request.

Submitting a Permission Change Request to a Member Account

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the row containing the organization whose member account permissions need to be changed, and click **Expand All** next to the number of associated accounts.

Step 3 Choose **More** > **Change Permissions** in the **Operation** column of the row containing the target member account.

The **Account Information** page is displayed.

Step 4 In the **Permissions** section, select the permission to be added, or deselect the permission to be canceled. Click **OK**.

📖 NOTE

- If a member account has commercial discounts, the member account is not allowed to use your commercial discounts.
- To view the permission change history of the member account, click **View** next to **Permission Change History**.

The system displays a message indicating that the permission change request has been sent. Wait for confirmation from the member account.

Step 5 Click **OK**.

----End

Accepting a Permission Change Request from the Master Account

Step 1 Go to the **My Master Account** page, and view the permission change request.

Step 2 Click **Accept** to grant the requested permissions to the master account.

----End

1.9.1.4.2 Modifying the Member Account Alias

An enterprise master account can use aliases to name its member accounts so that member accounts can be easily identified. It can modify the alias of a member account.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate an organization whose member account's alias needs to be changed, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the target member account and click **Modify Alias** in the **Operation** column.

The **Modify Alias** dialog box is displayed.

Step 4 Change the alias, and click **OK**.

The system displays a message indicating that the alias has been successfully changed.

----End

1.9.1.4.3 Changing the Organization for a Member Account

A master account can change the organizations which its member accounts belong to.

Procedure

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate an organization whose member account's organization needs to be changed, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the target member account and choose **More** > **Change Organization** in the **Operation** column.

The **Change Parent Organization** dialog box is displayed.

Step 4 Select another organization and click **OK**.

The parent organization of the member account is changed successfully.

----End

1.9.1.5 Disassociating Member Accounts

You can submit a request for disassociating member accounts on the **Organizations and Accounts** page. Member accounts can accept or reject such request on the **My Master Account** page.

Precautions
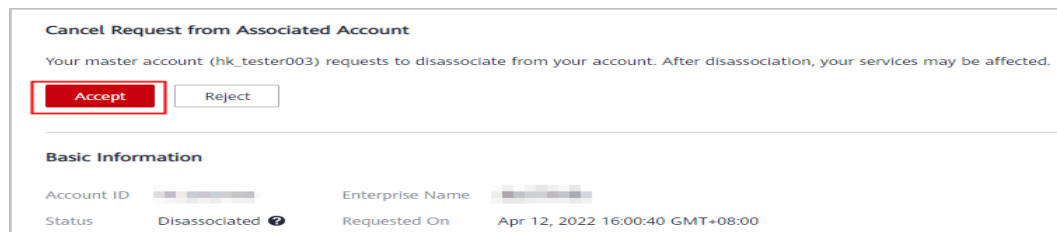
To disassociate a member account from its master account, both accounts must meet the following requirements:

- The member account does not have unreclaimed fund.
- The member account does not have unreclaimed credit.
- The member account does not have unreclaimed cash coupons.
- The member account is not in credit arrears.
- The master account is not suspended.

If you disassociate a member account from your master account, you can no longer allocate funds to or withdraw funds from the member account, and you do not have any permissions for the member account.

Submitting a Disassociation Request to a Member Account

Step 1 Go to the **Organizations and Accounts** page.

Step 2 Locate the row containing the organization whose member account will be disassociated from, and click **Expand All** next to the number of associated accounts.

Step 3 Locate the member account. In the **Operation** column, choose **More** > **Disassociate Account**.

Cancel Request from Associated Account

Your master account (hk_tester003) requests to disassociate from your account. After disassociation, your services may be affected.

[Accept]   [Reject]

Basic Information

Account ID		Enterprise Name	
Status	Disassociated ❓	Requested On	Apr 12, 2022 16:00:40 GMT+08:00

📖 **NOTE**

Before the member account accepts the disassociation request, you can choose **More** > **Cancel Disassociation** in the **Operation** column to cancel the disassociation request.

Step 4 In the **Disassociate Member Account** dialog box that is displayed, click **OK**.

The system displays a message indicating that the operation is successful.

----End

Accepting a Disassociation Request from a Master Account

Step 1 Go to the **My Master Account** page, and view the disassociation request.

Step 2 Click **Accept** to accept the disassociation request.
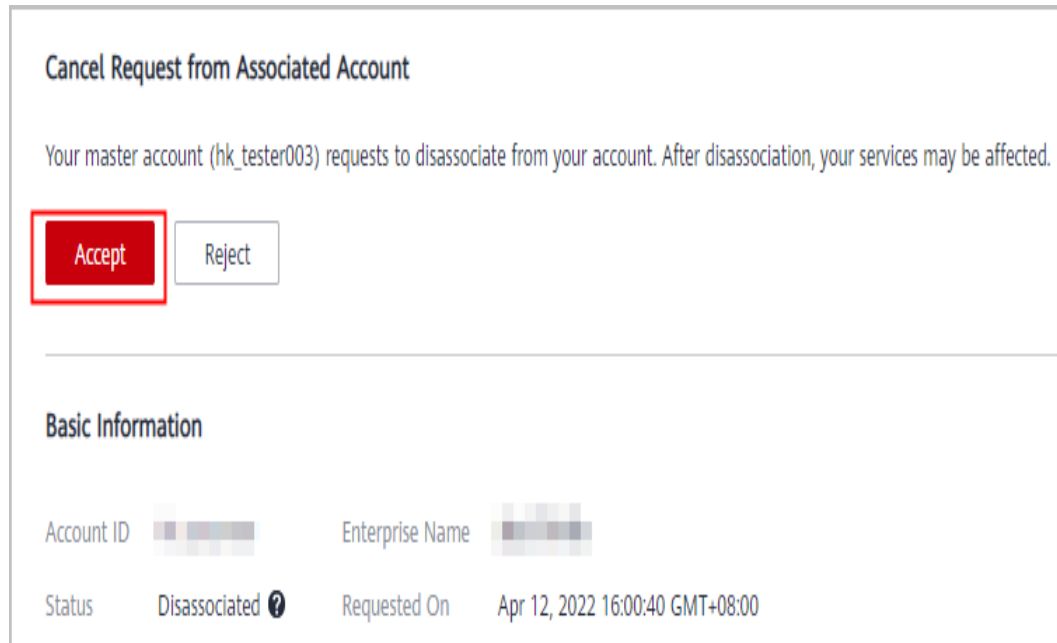
----End

1.9.2 Accounting Management

1.9.2.1 Allocation and Invoicing

1.9.2.1.1 Allocating Account Balance, Credit Limit, and Cash Coupons

A master account can allocate its balance and credit limit to its member accounts.

It can also allocate its testing, commercial, and activity cash coupons issued by Huawei Cloud to its member accounts.

Allocating Account Balance

If the master account belongs to a customer of a solution partner, it cannot allocate account balance to member accounts.

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account to which the master account will allocate account balance.

Step 3 Click **Allocate** in the **Operation** column.

The **Allocation Method** page is displayed.

Step 4 Click **Account Balance**.

The **Account Balance** page is displayed.

Step 5 Set the amount of account balance to be allocated and click **Submit**.

The **Identity Verification** dialog box is displayed.

◻ NOTE

The amount of account balance to be allocated cannot be greater than the allocatable amount. Allocatable amount = Account balance – Overinvoiced amount

Step 6 Verify your identity.

1. Select a verification method.

2. Click **Send Code**, and enter the verification code.

3. Click **OK**.

The verification is successful.

◻ NOTE

Identity verification is required only if you have enabled account transaction protection on the **Overview** page. For details about how to enable or disable this function, see **Enabling/Disabling Account Transaction Protection**.

Step 7 Click **Continue Allocating** to go to the **Allocation Method** page, or click **Back** to return to the **Allocation and Invoicing** page.

----End

Allocating Credit Limit

If the master account belongs to a customer of a solution partner, it cannot allocate credits to a member account. Contact the solution partner to set the credit limit for the member account.

If the master account has allocated credits to a member account, the master account repays the credits used by the member account. For details about the repayment priority, see **Credit Repayment Priority**.

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account to which the master account will allocate account balance.

Step 3 Click **Allocate** in the **Operation** column.

The **Allocation Method** page is displayed.

Step 4 Click **Credit Limit**.

The **Credit Limit** page is displayed.

Step 5 Set the amount of credit limit to be allocated and click **Submit**.

The **Identity Verification** dialog box is displayed.

◻ NOTE

The amount of credit limit to be allocated cannot be greater than the allocatable credit limit.

Step 6 Verify your identity.

1. Select a verification method.

2. Click **Send Code**, and enter the verification code.

3. Click **OK**.

    The verification is successful.

📖 **NOTE**

> Identity verification is required only if you have enabled account transaction protection on the **Overview** page. For details about how to enable or disable this function, see **Enabling/ Disabling Account Transaction Protection**.

Step 7 Click **Continue Allocating** to go to the **Allocation Method** page, or click **Back** to return to the **Allocation and Invoicing** page.

----End

Allocating Cash Coupons

Cash coupons issued by the master account to member accounts inherit the original usage restrictions, such as the expiration time, product usage restrictions, and coupon type.

When the master account allocates cash coupons that can be used on only one purchase to the member account, it needs to allocate the total amount of the cash coupons.

The master account cannot allocate discount coupons to its member accounts.

If the master account is a customer of a solution partner, it cannot allocate cash coupons to the member account. Contact the solution partner to allocate cash coupons to the member account.

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account to which the master account will allocate cash coupons.

Step 3 Click **Allocate** in the **Operation** column.

The **Allocation Method** page is displayed.

Step 4 Click **Cash Coupon**.

The **Cash Coupon** page is displayed.

Step 5 Select a cash coupon to be allocated, set **Amount to Allocate**, and click **Submit**.

The **Identity Verification** dialog box is displayed.

📖 **NOTE**

> If **Allocatable Times** is **One**, the master account needs to allocate the total amount of the cash coupon. The **Amount to Allocate** parameter cannot be configured.

Step 6 Verify your identity.

1. Select a verification method.
2. Click **Send Code**, and enter the verification code.
3. Click **OK**.

    The verification is successful.

> **NOTE**
>
> Identity verification is required only if you have enabled account transaction protection on the **Overview** page. For details about how to enable or disable this function, see **Enabling/ Disabling Account Transaction Protection**.

Step 7 Click **Continue Allocating** to go to the **Allocation Method** page, or click **Back** to return to the **Allocation and Invoicing** page.

----End

1.9.2.1.2 Withdrawing Account Balance, Credit Limit, and Cash Coupons

A master account can withdraw the account balance, credit limit, and cash coupons that are already allocated to a member account.

Withdrawing Account Balance

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account from which the master account will withdraw the account balance.

Step 3 Click **Withdraw** in the **Operation** column.

The **Withdrawal Method** page is displayed.

Step 4 Click **Account Balance**.

The **Account Balance** page is displayed.

Step 5 Set the withdrawn amount, and click **Submit**.

The **Identity Verification** dialog box is displayed.

> **NOTE**
>
> Withdrawable amount = Account balance – Overinvoiced amount

Step 6 Verify your identity.

1. Select a verification method.
2. Click **Send Code**, and enter the verification code.
3. Click **Yes**.

   The verification is successful.

> **NOTE**
>
> You can enable or disable account transaction protection on the **Overview** page. If this function is disabled, you do not need to perform identity verification. For details about how to enable or disable this function, see **Enabling/Disabling Account Transaction Protection**.

Step 7 Click **Continue Withdrawing** to go to the **Withdrawal Method** page, or click **Back** to return to the **Allocation and Invoicing** page.

----End

Withdrawing Credit Limit

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account from which the master account will withdraw the account balance.

Step 3 Click **Withdraw** in the **Operation** column.

The **Withdrawal Method** page is displayed.

Step 4 Click **Credit Limit**.

The **Credit Limit** page is displayed.

Step 5 Set the amount of credit limit to be withdrawn and click **Submit**.

The **Identity Verification** dialog box is displayed.

Step 6 Verify your identity.

1. Select a verification method.
2. Click **Send Code**, and enter the verification code.
3. Click **Yes**.

   The verification is successful.

📖 **NOTE**

Identity verification is required only if you have enabled account transaction protection on the **Overview** page. For details about how to enable or disable this function, see **Enabling/Disabling Account Transaction Protection**.

Step 7 Click **Continue Withdrawing** to go to the **Withdrawal Method** page, or click **Back** to return to the **Allocation and Invoicing** page.

----End

Withdrawing Cash Coupons

The master account can only withdraw the remaining cash coupons that are within validity period from the member account.

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account from which the master account will withdraw the cash coupons.

Step 3 Click **Withdraw** in the **Operation** column.

The **Withdrawal Method** page is displayed.

Step 4 Click **Cash Coupon**.

The **Cash Coupon** page is displayed.

Step 5 Select a cash coupon to be withdrawn and click **Submit**.

The **Identity Verification** dialog box is displayed.

Step 6 Verify your identity.

1. Select a verification method.

2. Click **Send Code**, and enter the verification code.

3. Click **Yes**.

   The verification is successful.

📖 **NOTE**

Identity verification is required only if you have enabled account transaction protection on the **Overview** page. For details about how to enable or disable this function, see **Enabling/ Disabling Account Transaction Protection**.

Step 7 Click **Continue Withdrawing** to go to the **Withdrawal Method** page, or click **Back** to return to the **Allocation and Invoicing** page.

----End

1.9.2.1.3 Viewing Financial and Expenditure Information of Member Accounts

A master account can view financial and expenditure information of its member accounts.

Prerequisites

The member account has accepted your (the master account's) request for the **View Accounting Information of Member Account** and **View Expenditures of Member Account** permissions.

Viewing Financial Information

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account whose financial information you want to view.

Step 3 Click **Financial Info** in the **Operation** column.

The **Financial Information** page is displayed. The system displays financial information of the member account, including **Balance**, **Cash Balance** and **Month-to-Date Spend**.

📖 **NOTE**

You can click **Dashboard** in the **Month-to-Date Spend** area to view the monthly expenditure statistics of the member account.

----End

Viewing Expenditure Information

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Locate a member account whose expenditures you want to view.

Step 3 Click **Dashboard** in the **Operation** column.

The **Dashboard** page is displayed. The system displays monthly expenditures and bills of the member account.

----End

Viewing and Exporting Expenditure Details

You can click **Expenditures** in the navigation pane to view bills of cloud resources (either yearly/monthly or pay-per-use) by transaction, by resource, or by dedicated cloud. To export expenditure details or bills, click **Export** on the **Expenditures** page.

Viewing Export History

In the navigation pane, click **Export History** to view the history of expenditure data export.

📖 NOTE

Click **Download** in the **Operation** column to download the expenditure details to a local directory. The exported files will be automatically deleted three days after export. Download them in time.

1.9.2.1.4 Viewing Order Information of Member Accounts

A master account can view and export order information of its member accounts.

Prerequisites

The member account has accepted the request for the **View Expenditures of Member Account** permission.

Procedure

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 In the **Member Account** column, click the display name of the member account whose order information you want to view.

The **Account Information** page is displayed.

Step 3 In the navigation pane, click **Order Information**.

The system lists all orders of the member account.

📖 NOTE

- To export order information of the member account, click **Export** above the order list.
- To view details of a single order, click the order number or click **Details** in the **Operation** column.

----End

1.9.2.1.5 Setting a Repayment Priority Account

A master account can set one of its member accounts as the repayment priority account. The top-up amount of the master account will be used to preferentially

repay the credits of this repayment priority account. If cash balance is available after the repayment, then it will be used to repay the credits of the master account and other member accounts.

Context

A master account cannot be disassociated from a member account, unless the credit used by the member account is paid. Top up the master account and configure the member account as the repayment priority account to preferentially repay any billed or unbilled credit of the member account.

> **NOTICE**
>
> If you do not want to disassociate from the member account, do not set it as your repayment priority account.

Procedure

Step 1 Go to the **Allocation and Invoicing** page.

Step 2 Click **Configure High-Priority Account for Repayment** in the upper part of the page.

Allocation and Invoicing

Note:
Cash, credit, and cash coupons can be allocated to associated member accounts. Said funds can also be withdrawn from member accounts and invoices can be issued on their behalf.
A master account cannot be disassociated from a member account, unless the credit used by the member account is paid. Top up the master account and configure the member account as the repayment priority account to preferentially repay any billed or unbilled credit of the member account. Configure Repayment Priority Account

> **NOTE**
>
> If the **Configure High-Priority Account for Repayment** function is unavailable, enable it first.

Step 3 Select the member account that needs repayment priority and click **OK**.

> **NOTE**
>
> Only one member account can be set as the repayment priority account.

The system displays a message indicating that the account has been set as the repayment priority account.

----End

1.9.2.1.6 Enabling/Disabling Account Transaction Protection

You can enable or disable account transaction protection on the **Overview** page. After this function is enabled, you need to complete identity verification before proceeding with a critical operation, for example, allocating or withdrawing a credit limit.

Procedure

The following is the procedure for enabling account transaction protection. You can also disable this function in the same way.

Step 1 Go to the **Overview** page.

Step 2 In the **Account Transaction Protection** area at the bottom of the page, click

⬤ .

Account Transaction Protection
⬤ Disabled   After account transaction protection is enabled, identity verification will be required for critical operations involving allocation and withdrawal.
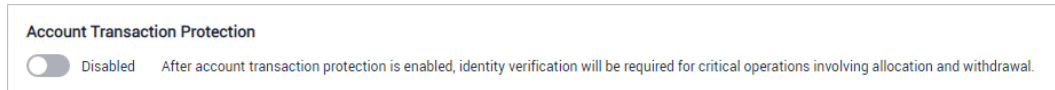
The **Identity Verification** dialog box is displayed.

Step 3 Select a verification method.

Step 4 Click **Send Code**, and enter the verification code.

Step 5 Click **OK**.
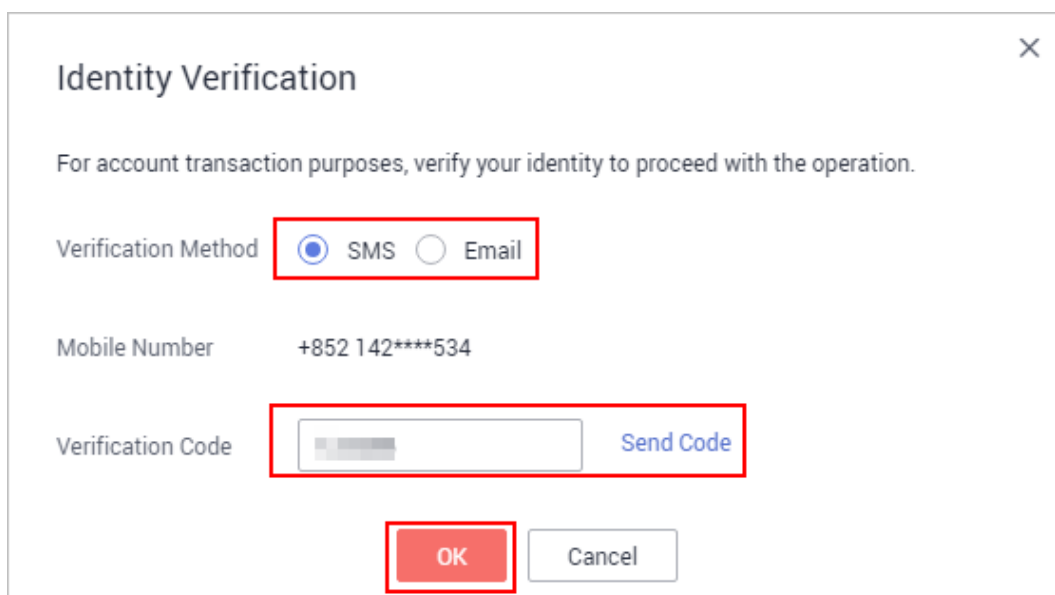
----**End**

1.9.2.2 Viewing Fund Transfer Details

You can view the allocation and withdrawal records of account balance, credit balance, and cash coupons by organization or member account.

Procedure

Step 1 Go to the **Allocation Records** page.

The allocation and withdrawal records of account balance, credit balance, and cash coupons are displayed.

Step 2 Set filter criteria, such as operation time and account, and click **Export**.

The displayed records are exported, and the **Export History** page is displayed.

Step 3 Download the exported fund transaction details on the **Export History** page.

----**End**

1.10 FAQs

1.10.1 Common Issues

1.10.1.1 What Are the Differences Between IAM Users and Enterprise Member Accounts?

See **What Are the Differences Between IAM Users and Enterprise Member Accounts?**

1.10.1.2 What Should I Do If the Organization and Account Information Is Unavailable to an IAM User?

By default, IAM users can view the organization and account information in Enterprise Center. If an IAM user cannot view the information, create a custom policy for the IAM user by following the instructions provided in **Creating a Custom Policy**. When creating the policy, set **Scope** to **Project-level services**, and select the **bss:enterpriseOrganization:view** action. Then attach the created policy to the user group to which the IAM user belongs.
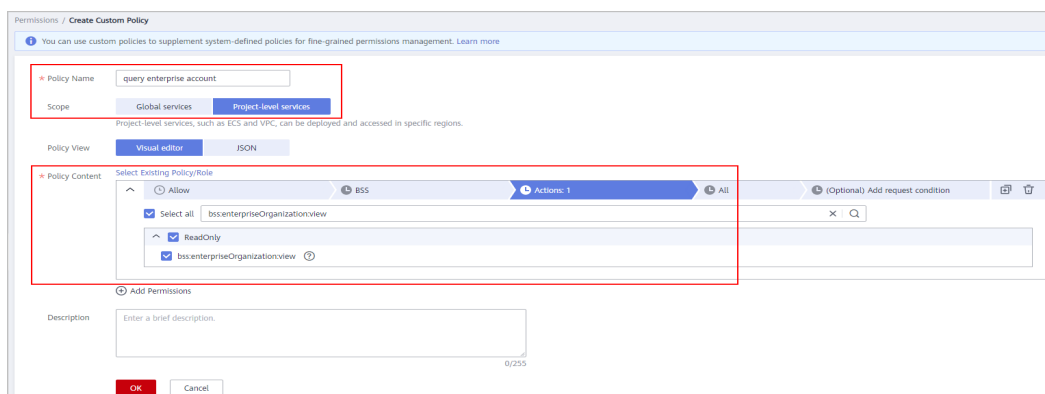
1.10.1.3 What Requirements Must an Account Meet to Function as a Master Account?

To function as an enterprise master account, an account must:

- Belong to an enterprise with the name specified.
- Not associated with another enterprise account as a member account.
- Be a postpaid monthly settlement account.
- Have the bill settlement status being settled.
- Must not belong to a Huawei Cloud reseller.
- Not disable Huawei Cloud services and the Huawei Cloud service status is normal.

1.10.1.4 What Can I Do If the Master Account Cannot Associate with a Member Account Whose Type and Enterprise Name Have Not Been Specified?

Ask the member account to specify the account type and enterprise name, and then associate with the member account. Complete the information of a member account by performing the following procedure:

1. Go to the **Basic Information** page.

2. Click **Edit** next to **Enterprise Name**.

3. Set **Account Type** to **Enterprise**, and enter an enterprise name.

4. Click **OK**.

1.10.1.5 What Can I Do If the Master Account Cannot Associate with an Individual Member Account?

Ask the member account to change to an enterprise account and complete real-name authentication, and then associate with the member account. A member account can change its account type in either of the following scenarios:

- If the member account has not completed real-name authentication, it can change to an enterprise account on the **Basic Information** page. On the **Basic Information** page, click **Edit** next to **Enterprise Name**, set **Account Type** to **Enterprise**, and enter an enterprise name.

- If the member account has completed real-name authentication, it needs to perform real-name authentication again to change to an enterprise account. For details, see **Changing the Owner of an Individual Account to an Enterprise**.

1.10.1.6 In What Scenarios Does an Enterprise Master Account Create an Enterprise Member Account? What Is the Real-Name Authentication Information of the Created Member Account?

An enterprise master account can create member accounts for multiple departments or services in the same enterprise. The created member accounts will inherit the real-name authentication information of the master account.

1.10.1.7 How Do I Apply for Enterprise Management Accounts for a Company and Its Subsidiaries and Branches?

Perform the following steps:

1. Register an account on the Huawei Cloud official website for each enterprise and perform real-name authentication. For details, see **Account Registration Process** and **Enterprise Real-Name Authentication**.

2. Select an account to enable the enterprise master account function, and use this account to invite other accounts that have completed enterprise real-name authentication to function as member accounts. For details, see **Enabling Enterprise Center**.

1.10.1.8 Why Cannot an IAM User of My Enterprise Master Account Cannot View Details About My Member Accounts?

Symptom

If unified accounting management is not enabled, after an IAM user of an enterprise master account logs in to the Enterprise Center, the user cannot view details about member accounts under the master account.

Possible Causes

- The master account has not assigned the Agent Operator role to the IAM user.
- The master account has not assigned the BSS Administrator, BSS Operator, or BSS Finance role to the IAM user.
- The master account does not have permissions to view details about member accounts.

Assigning the Agent Operator Role to an IAM User

Step 1 Log in to Huawei Cloud and click **Console** in the upper right corner.

Step 2 On the management console, hover the mouse pointer over the username in the upper right corner, and choose **Identity and Access Management** from the drop-down list.

Step 3 In the navigation pane, choose **User Groups**.

Step 4 In the user group list, click **Manage Permissions** in the **Operation** column of the row containing the user group to which the IAM user belongs.

Step 5 On the **Permissions** tab page, click **Assign Permissions** above the permission list.

Step 6 Set **Scope** to **Global service project**.

Step 7 Select the Agent Operator role and click **OK**.

----End

Assigning the BSS Administrator, BSS Operator, or BSS Finance role to an IAM User

Step 1 Log in to Huawei Cloud and click **Console** in the upper right corner.

Step 2 On the management console, hover the mouse pointer over the username in the upper right corner, and choose **Identity and Access Management** from the drop-down list.

Step 3 In the navigation pane, choose **User Groups**.

Step 4 In the user group list, click **Manage Permissions** in the **Operation** column of the row containing the user group to which the IAM user belongs.

Step 5 On the **Permissions** tab page, click **Assign Permissions** above the permission list.

Step 6 Set **Scope** to **Region-specific projects** and select region-specific projects for the role to take effect.

Step 7 Select the BSS Administrator, BSS Operator, or BSS Finance role and click **OK**.

----End

Applying for the Permissions to View Details About Member Accounts

When creating a member account or inviting an account to become a member account, you can apply for the permissions to view details about the member account.

You can also apply for the permissions to view details about an exiting member account. For details, see **Changing Member Account Permissions**.

1.10.1.9 How Do I Delete an Enterprise Member Account?

1. Disassociate the member account from the enterprise master account. For details, see **Disassociating Member Accounts**.

    a. Log in to Enterprise Center using the master account and initiate a disassociation request.

    b. Go to **My Account** using the member account. On the **Basic Information** page, accept the disassociation request.

2. Close and delete the member account. For details, see **Deleting an Account**

    a. Go to **My Account** using the member account. On the **Basic Information** page, click **Close Account**.

    b. After you close the account, click **Delete Account**.

1.10.1.10 How Many Member Accounts Can I Associate with My Enterprise Master Account?

A master account can associate with up to 10 member accounts.

1.10.1.11 What Can I Do If I Cannot View or Perform Operations on Member Accounts?

Symptom

After I signed in to Huawei Cloud using an enterprise master account (an IAM account or a delegated account) and selected a member account from the upper left menu, one or more messages were displayed in the upper right corner of the page, indicating that I had insufficient permissions. The following shows an example:
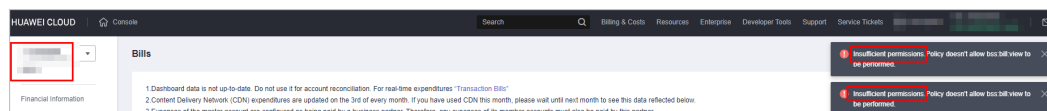
Causes and Solutions

1. The **cbc_customerorgagent_*** agency was deleted by the selected member when they associated with you.

You can search for **cbc_customerorgagent** on the Identity and Access Management (IAM) console.
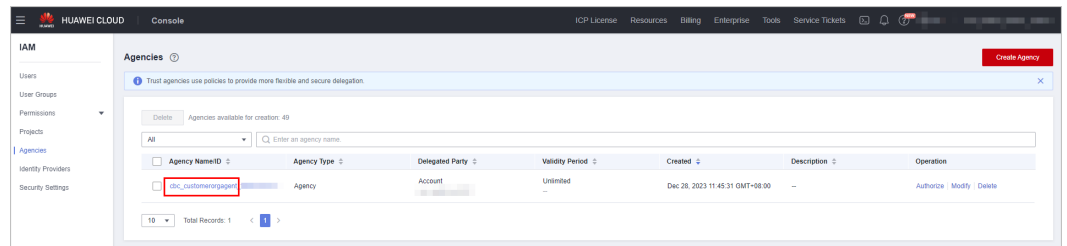
– If the agency is displayed, go to **2**.

– If there is no data available, the agency has been deleted. You can obtain the name of the deleted agency from operation logs and then recreate the agency using IAM. The agency must contain related BSS permissions, including BSS Administrator, BSS Finance, and BSS Operator.
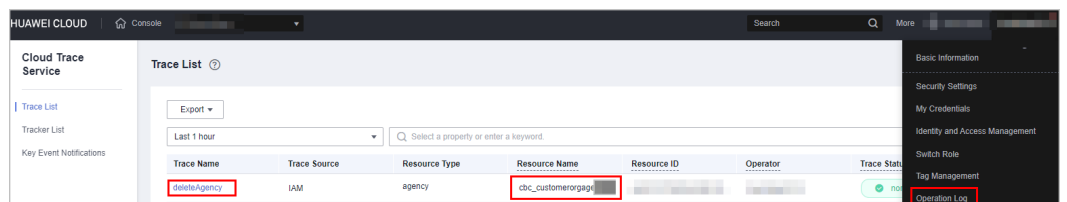
2. There are organization policies that restrict related BSS permissions for the selected account. You can go to **Enterprise Center** > **Organization Management** > **Organization Policies** and click the **By Organization** tab to review organization policies. The following shows an example:
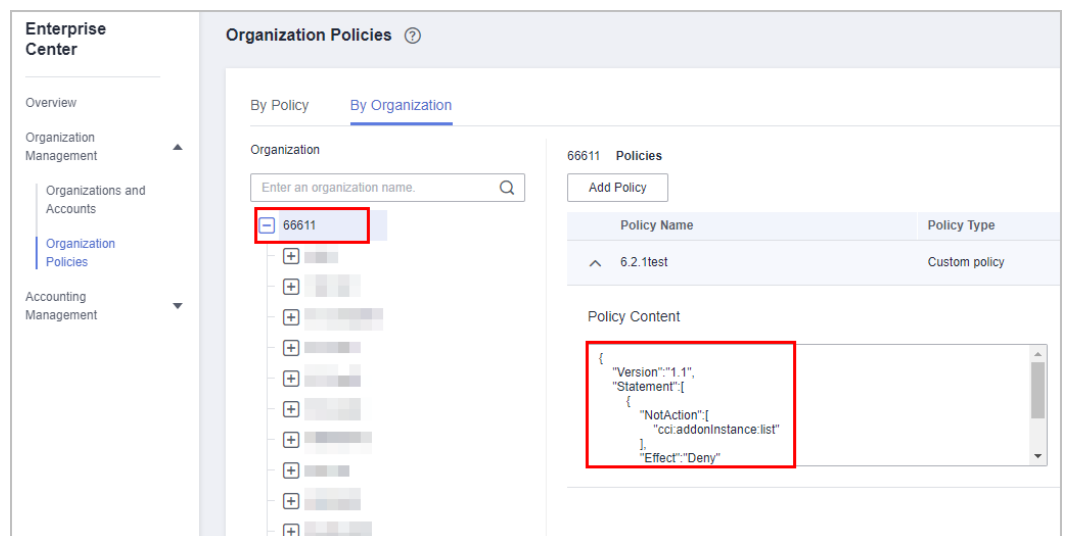
– If there are no policies restricting related BSS permissions, go to **3**.

– If there are policies restricting related BSS permissions, modify the policies to remove the restriction.

3. The selected member is attached with an SCP that restricts related BSS permissions For details, see **SCP Principles**.

   You can contact the account owner who attached the SCP to the selected member to remove the restriction.

1.10.2 Unified Accounting Management

1.10.2.1 What Is Unified Accounting Management? How Can I Enable It?

Unified accounting management allows you to centrally manage the funds, bills, and invoices of member accounts. You need to pay the expenditures of the member accounts.

When you create or invite member accounts using a newly registered enterprise master account, unified accounting management is automatically enabled.

1.10.2.2 What Changes Will Be Caused to an Enterprise Master Account and Its Member Accounts After Unified Accounting Management Is Enabled?

- The enterprise master account issues invoices for the expenditure of the member accounts.

- Your taxes cover the taxes of member accounts' expenditure. No separate tax determination will be performed for the member accounts.

- By default, member accounts use the commercial discounts and cash coupons of the master account to purchase resources.

- If an account has cash coupons and balance before being associated with another account, the cash coupons and balance of the account can be used to repay the bills generated before the association.

- After association, no cash coupons can be issued to member accounts.

- After association, the master account cannot apply commercial discounts for member accounts.

- Member accounts cannot use their balances after association. However, they can withdraw the balances, or use the balances after being disassociated from the master account.

1.10.2.3 How Will the Resources Purchased by Enterprise Member Accounts and the Refund for Unsubscription Be Handled After Unified Accounting Management Is Enabled?

- If an enterprise member account unsubscribes from a resource purchased before association, the refund will be returned to the enterprise member account.

- If an enterprise member account unsubscribes from a resource purchased after association, the refund will be returned to the enterprise master account.

1.10.2.4 Can a Member Account Use the Credit, Cash Coupons, and Commercial Discounts of the Master Account to Pay For Services?

In a unified accounting management scenario, the enterprise master account pays for the expenditures of its member accounts. Member accounts' bills must be paid by their master accounts. Master accounts can apply credits, coupons, or discounts to their member accounts' bills.

1.10.2.5 How Does a Master Account and Its Member Accounts Check Whether Unified Accounting Management Has Been Enabled?

If you have a master account, log in to the Enterprise Center using this account, and check whether a link to the Cost Center is displayed in the upper part of the

Organizations and Accounts page, as shown in the following figure. If the link is displayed, unified accounting management has been enabled for the master account and all associated member accounts.
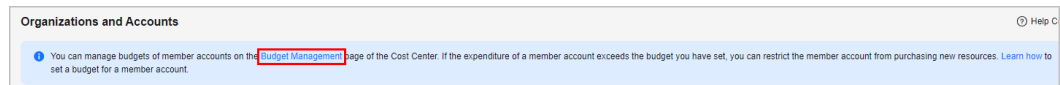
When you use a member account to purchase yearly/monthly products and you are reminded that the bill must be paid by your master account, it means that unified accounting management has been enabled.

1.10.2.6 How Can I Enable Unified Accounting Management for My Master Account?

Please contact your account manager.

1.10.2.7 Where Can a Master Account and Its Member Accounts View Accounting Information After Unified Accounting Management Is Enabled?

The master account pays and issues invoices for all expenditures of its member accounts. The member account can view its own expenditure details in the **Billing Center**.

The master account can view bills, expenditure summary, and expenditure details of both itself and all member accounts in the **Billing Center**.

1.10.2.8 Can Internal Customers Enable Unified Accounting Management?

No. Currently, unified accounting management is unavailable for internal customers.

1.10.2.9 Which Payment Scenarios of an Enterprise Member Account Are Affected by the Payment Method Set by the Enterprise Master Account for the Enterprise Member Account?

Two payment methods are supported:

Automatic: Discounts or cash coupons of the enterprise master account will be automatically matched for payment. For details, see **Automatic Payments**.

Manual: After a member account places an order, a bill is generated in the billing center for the enterprise master account. The enterprise master account logs in to the system and completes the payment.

The two payment methods apply only to manual payment operations of enterprise member accounts, for example, resource purchase and manual resource subscription renewal. The payment methods do not apply to scenarios that are automatically triggered by the system, such as automatic resource renewal and automatic payment when an order is placed by calling an open API.

1.10.2.10 What Are the Differences Between a Resource Account and a Member Account for Unified Accounting?

In Landing Zone solution, a resource account is the minimum unit for resource isolation. Resource accounts are used for internal resource and security management.

A resource account must be created with an enterprise master account through **Organizations** and is associated with the master account that is used to create it. Resource accounts cannot be used for transactions on Huawei Cloud, but member accounts can.

Table 1 lists more differences between a resource account and a member account for unified accounting.

Table 1-7 Differences between a resource account and a unified accounting member account for unified accounting

Sce nari o	Sub- Scen ario	Resource Account	Member Account
Regi strat ion	-	- A resource account cannot be independently created. - You can only create a resource account with an enterprise master account using **Organizations**. A resource account cannot be associated with an enterprise master account through invitations.	- A member account can be independently created. - You can create a member account in Enterprise Center. You can also invite a member to associate with you.
Logi n	-	- You cannot sign in to Huawei Cloud with a resource account. - Instead, you can **access account resources via agency or IAM**.	You can sign in to Huawei Cloud with a member account.
Real -nam e auth entic atio n	-	- A member account inherits the real-name information from the enterprise master account that the member account was created with. - You cannot independently perform real-name authentication or change the information of real-name authentication for a resource account.	- A member account inherits the real-name information from the enterprise master account that the member account was created with. - You cannot independently perform real-name authentication or change the information of real-name authentication for a resource account.

Acco unt infor mati on	-	• You can view basic information, real-name information, address, and preference configurations. • You cannot modify basic information, real-name information, address, and preference configurations. • If basic information, real-name information, address, and preference configurations are changed in an enterprise master account, these changes are synchronized to resource accounts created with the master account. • You can add or change the mobile number or email address for a resource account.	• You can view basic information, real-name information, address, and preference configurations. • You can modify basic information, address, and preference configurations, but not the real-name information. • If the real-name information of an enterprise master account is changed, the change will be synchronized to its member accounts.
Reso urce subs cript ion	Pay-per-use resou rces	• You can purchase pay-per-use resources with a resource account. • You can view resources on service consoles. • Resources are paid for by master accounts. Resource accounts can enjoy discounts of their master accounts. • If resources are not paid for as required, they enter a grace period and a retention period.	• You can purchase pay-per-use resources with a member account. • You can view resources on service consoles. • Resources are paid for by master accounts. Resource accounts can enjoy discounts of their master accounts. • If resources are not paid for as required, they enter a grace period and a retention period.

	Yearly/monthly resources	• You can purchase yearly/monthly resources with a resource account. You need to specify the master account when placing orders. • In Billing Center, you can view all of your orders that are pending payment, newly purchased, unsubscribed from, or renewed. • You can view, modify, renew, and unsubscribe from resources on service consoles.	• You can purchase yearly/monthly resources with a member account. You need to specify the master account when placing orders. • In Billing Center, you can view all of your orders that are pending payment, newly purchased, unsubscribed from, or renewed. • You can view, modify, renew, and unsubscribe from resources on service consoles.
	Resource packages and savings plans	You cannot purchase resource packages or savings plans with a resource account.	You can purchase resource packages or savings plans with a member account.
Payment	Top-up and withdrawal	• You cannot top up a resource account. • You cannot withdraw money from a resource account.	• You can top up a member account. • You can withdraw money from a member account.
	Paying bills	Resources in a resource account are paid for by the associated master account.	• Resources in a resource account are paid for by their associated master. • Enterprise members pay for their orders before they are associated with an enterprise master.

	Bill generation and settlement	• Bills are not generated for resource accounts • If an enterprise master is a direct-sales or referral customer of Huawei Cloud, the master is billed for their associated resource accounts. If an enterprise master is associated with their partner in the resale model, their partner is billed for the enterprise master and the resource accounts associated with the enterprise master. • You can view bills and expenditure details with your resource account. • An enterprise master can view all bills and expenditure details in their own and their resource accounts.	• Bills are not generated for member accounts. • If an enterprise master is a direct-sales or a referral customer of Huawei Cloud, the enterprise master is billed for their members. If an enterprise master is associated with their partner in the resale model, their partner is billed for the enterprise master and the members associated with the enterprise master. • You can view bills and expenditure details using a member account. • An enterprise master can view all bills and expenditure details in their own and their member accounts.
	Invoicing	• Invoices are not issued to resource accounts. • If an enterprise master is a direct-sales or referral customer of Huawei Cloud, they can issue an invoice based on one or more resource accounts. If an enterprise master is a resale customer or authorized distributor of Huawei Cloud, invoices are issued to their partners.	• Invoices are not issued to member accounts that are associated with enterprise master accounts. • If an enterprise master is a direct-sales or referral customer of Huawei Cloud, they are billed for their enterprise members. If an enterprise master is associated with their partner in the resale model, their partner is invoiced. An enterprise member is invoiced before they are associated with an enterprise master.

Shar ing reso urce pack ages and savi ngs plan s	-	• An enterprise master can share their resource packages and savings plans with associated resource accounts after resource package and savings plan sharing is enabled. • By default, newly associated resource accounts can enjoy resource packages or savings plans shared by their enterprise master accounts. If resource package or savings plan sharing is disabled, resource accounts associated with their master accounts after the disablement cannot enjoy shared resource packages or savings plans, but resource accounts associated with their master accounts before the disablement can. • An enterprise master can specify which resource accounts can share their resource packages and savings plans. • After resource package or savings plan sharing is enabled, it takes effect immediately. Resource packages or savings plans only applies to resource costs generated after the sharing.	• An enterprise master can share their resource packages with their members after resource package sharing is enabled. • By default, newly associated member accounts can enjoy resource packages or savings plans shared by their enterprise master accounts. If resource package or savings plan sharing is disabled, member accounts associated with their master accounts after the disablement cannot enjoy shared resource packages or savings plans, but member accounts associated with their master accounts before the disablement can. • An enterprise master can specify which resource accounts can share their resource packages and savings plans. • After resource package or savings plan sharing is enabled, it takes effect immediately. Resource packages or savings plans only applies to resource costs generated after the sharing.
Cou pons	-	Cash coupons are not issued for resource accounts.	• Cash coupons are not issued for member accounts. • You can apply legacy cash coupons to bills generated before you associated with an enterprise master.

Cost man age men t	-	You can perform operations such as budget tracking, exception monitoring, and viewing cost recommendations with a resource account. You cannot purchase savings plans with a resource account.	You can perform operations such as budget tracking, exception monitoring, and viewing recommended cost optimizations with a member account. If you disassociate from your master account, you can only manage costs generated after the disassociation.
Closi ng acco unts	-	An enterprise master can close resource accounts through **Organizations**. You cannot close your own resource account in **My Account**.	Your enterprise master cannot close your account. You can close your own member account in **My Account**.

1.10.3 Non-unified Accounting Management

1.10.3.1 What Requirements Must an Enterprise Master Account Meet to Associate with Another Account?

To invite another account as a member account, the two types of accounts must meet the following requirements:

● The account to be invited is an enterprise account with the enterprise name specified, and is not a master account.

● The account to be invited is not associated with any enterprise master account as a member account.

● The account to be invited must not be frozen.

● The account to be invited has the same contracting party as the master account.

● The maximum number of member accounts associated with the enterprise master account has not been reached.

● The account to be invited must not belong to a Huawei Cloud solution partner.

● If the master account is a resale customer of a reseller, the master account can only invite their resellers' resale customers to become member accounts.

● If an account is a resale customer of a reseller, they can only be invited by a master account that is a resale customer of the same reseller.

1.10.3.2 What Are the Requirements for Canceling Associations Between an Enterprise Master Account and Its Member Account?

To disassociate a member account from its master account, the member account must not

- have available funds.
- have available credit limits.
- have available cash coupons.
- be in credit arrears.

1.10.3.3 How Does the Member Account of a Majority-Owned, Joint Stock, or Directly Controlled Subsidiary Apply to Share the Commercial Discounts of the Master Account Used by the Parent Company?

When inviting the account of a subsidiary to function as a member account, the parent company (enterprise master account) that obtains the commercial discounts must request the **Allow Member Account to Use Your Commercial Discounts** permission. The member account can share the master account's commercial discounts only after being approved by Huawei Cloud and the member account grants the requested permission.

1.10.3.4 Why Can't My Member Account Share the Same Commercial Discounts as the Master Account of the Parent Company?

The possible reasons and solutions are as follows:

1. The master account has not obtained any commercial discounts. Contact Huawei Cloud account manager to apply for a commercial discount.
2. The master account has not made the request to allow member accounts to user their discounts. To add permissions, see **Changing Member Account Permissions**.

1.10.3.5 Can an Enterprise Master Account Allocate Funds to an Enterprise Member Account?

Yes. The enterprise master account can allocate its account balance, credit limit, and cash coupons to the member account.

Note:

- According to the financial management requirements of Huawei Cloud, if the enterprise master account and the member account belong to different legal persons, the master account cannot allocate its credit limit and cash coupons to the member account.
- For details about allocating funds from an ecosystem partner to a customer account, see guides in Partner Center.

1.10.3.6 Why Can't an Enterprise Master Account Allocate Cash Coupons to a Member Account?

If the master and member accounts belong to different legal persons, the master account can only allocate a balance to the member account.

If the master and member accounts belong to the same legal person, the master account can allocate a balance, a credit limit, or cash coupons to the member account.

1.10.3.7 Can an Enterprise Master Account Allocate a Credit Limit to an Enterprise Member Account?

After obtaining post payment authorization, an enterprise master account can allocate a credit limit to a member account that has the same real-name authentication information or belongs to a branch of the enterprise.

Note:

A master account that belongs to a different parent company or subsidiary cannot allocate a credit limit to a member account.

1.10.3.8 Who Pays the Fee After an Enterprise Member Account Uses the Allocated Credit?

The master account pays the fee if the member account belongs to the same enterprise of the master account (with the same real-name authentication information) or an enterprise branch.

1.10.3.9 Is an Enterprise Master Account Allowed to Request Invoices for a Member Account at the Huawei Cloud International Website?

No.

1.10.3.10 Are the Subsidiaries (Member Accounts) of an Enterprise (Master Account) Allowed to Share Its Commercial Discounts and Credits?

Yes.

1.10.3.11 What Information About the Master Account Will Be Inherited by a Newly Created Member Account?

A newly created member account inherits the following information about the master account:

1. Real-name authentication information
2. Company name
3. Country/Region information
4. Signing entity
5. Account type
6. Payment method
7. Associated partner information

1.10.3.12 Credit Repayment Priority

If an enterprise master account has allocated credits to member accounts, the master account needs to repay the credits used by itself and the member accounts based on the following priorities:

- High priority: Overdue bills of member accounts are paid prior to those of the master account. The earliest overdue bill is paid first.

- Medium priority: Bills of the member account with repayment priority are paid.

- Non-overdue bills are paid based on the sequence of the due dates.

- Low priority: Bills of member accounts are paid prior to those of the master account. Bills of the earliest associated member account are paid first.

  You can view the time when the member accounts are associated with the master account on the **Organization Management** > **Organizations and Accounts** page.

2 Project Management

2.1 What Is Enterprise Project Management Service?

Overview

Enterprise Project Management Service (EPS) allows you to hierarchically manage your personnel, accounting, resources, permissions, and services based on your organizational structure and service management model.

📖 NOTE

EPS is free of charge.

2.2 Applicable Scenarios

You can create projects based on your organizational structure to centrally manage your resources across regions. You can authorize different users and user groups to different projects to control resource access. This section describes typical application scenarios of enterprise projects.

Project-based Scenario

Enterprises that have multiple projects can settle resources separately and assign different personnel to manage resources.

Scenario: A game company launches games A, B, and C. The company wants to separately manage the personnel, resources, and finance for games A, B, and C.

Solution (procedure):

- Sign up for a Huawei Cloud account and enable the enterprise project function.

- Create enterprise projects A, B, and C for the three games.

- Create user groups and users and authorize them to manage the enterprise projects.

- Add resources to or remove resources from the three enterprise projects.

- Independently manage accounting details for each enterprise project.

Figure 2-1 shows the organizational structure of the game company, and **Figure 2-2** shows the solution provided by Huawei Cloud.
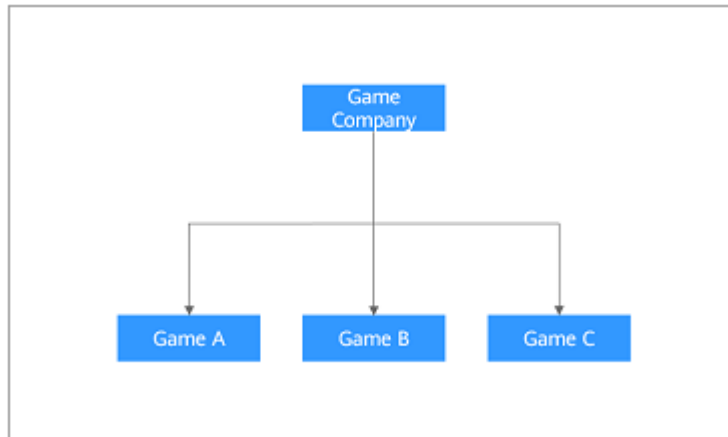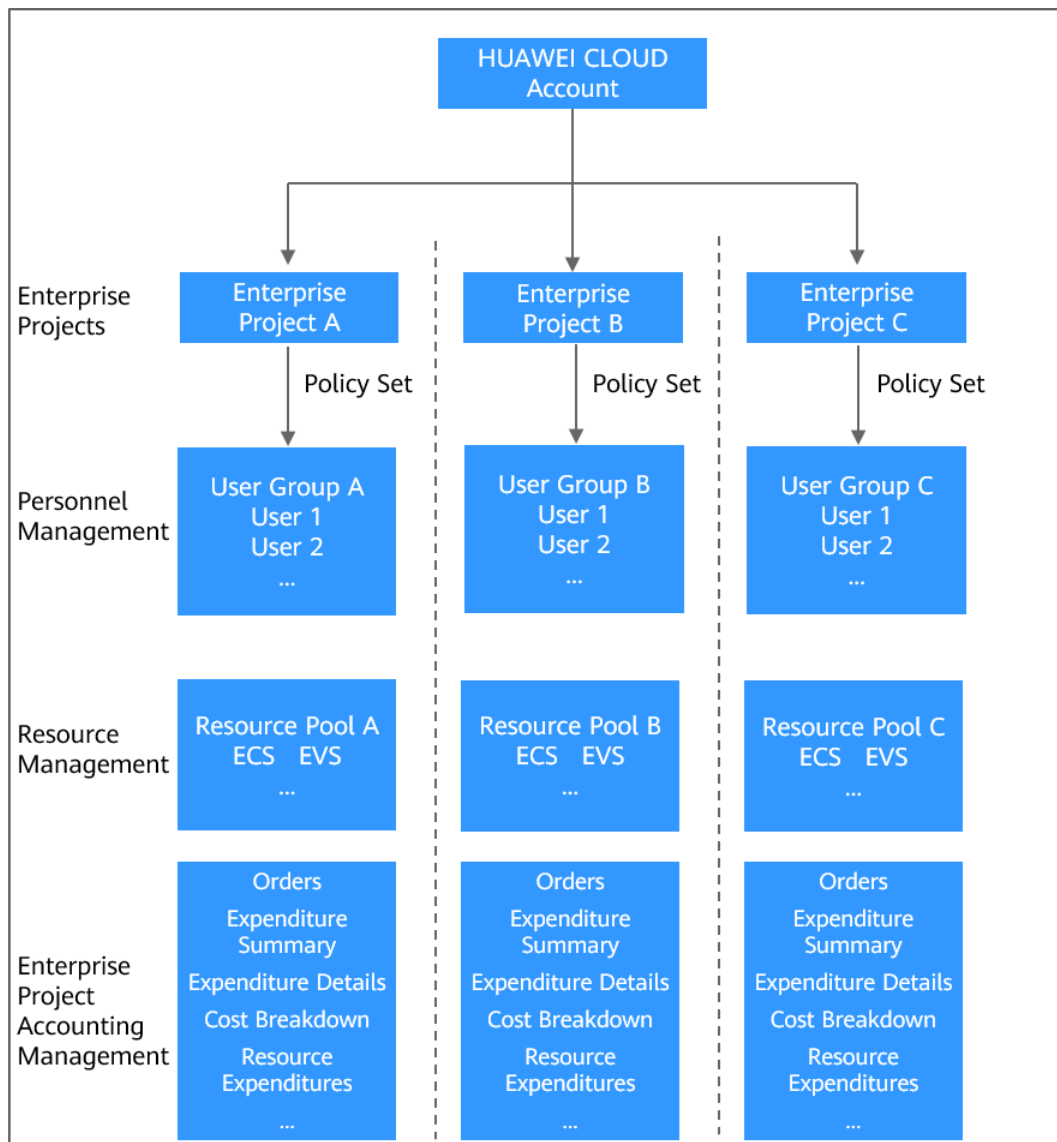
Figure 2-1 Organizational structure

Figure 2-2 Solution diagram

Scenario based on the Organizational Structure and Projects

Enterprises can create projects based on their organizational structure to control resource access for different accounts.

Scenario: A group has two subsidiaries (A and B). Both A and B have three departments. The group wants to manage personnel, resources, and accounting details independently by department.

Solution:

- Sign up for a Huawei Cloud account and enable EPS and Enterprise Center.

- Create member accounts A and B and enable the enterprise project function for the two accounts.

- Use member account A to create enterprise projects A1, A2, and A3 for the three departments in subsidiary A, and use member account B to create enterprise projects B1, B2, and B3 for the three departments in subsidiary B.

- Create user groups and users and authorize them to manage the enterprise projects.
- Add resources to or remove resources from the three enterprise projects.
- Manage accounting details for each enterprise project.

Figure 2-3 shows the organizational structure of this group, and **Figure 2-4** shows the solution provided by Huawei Cloud.

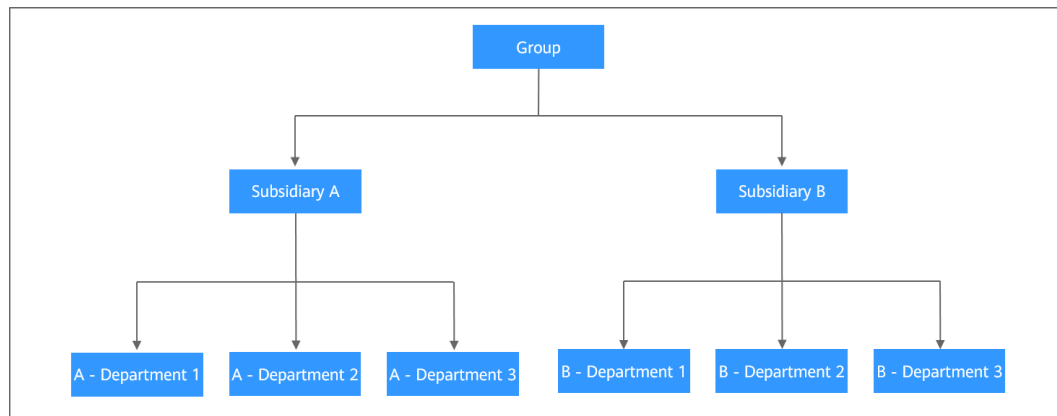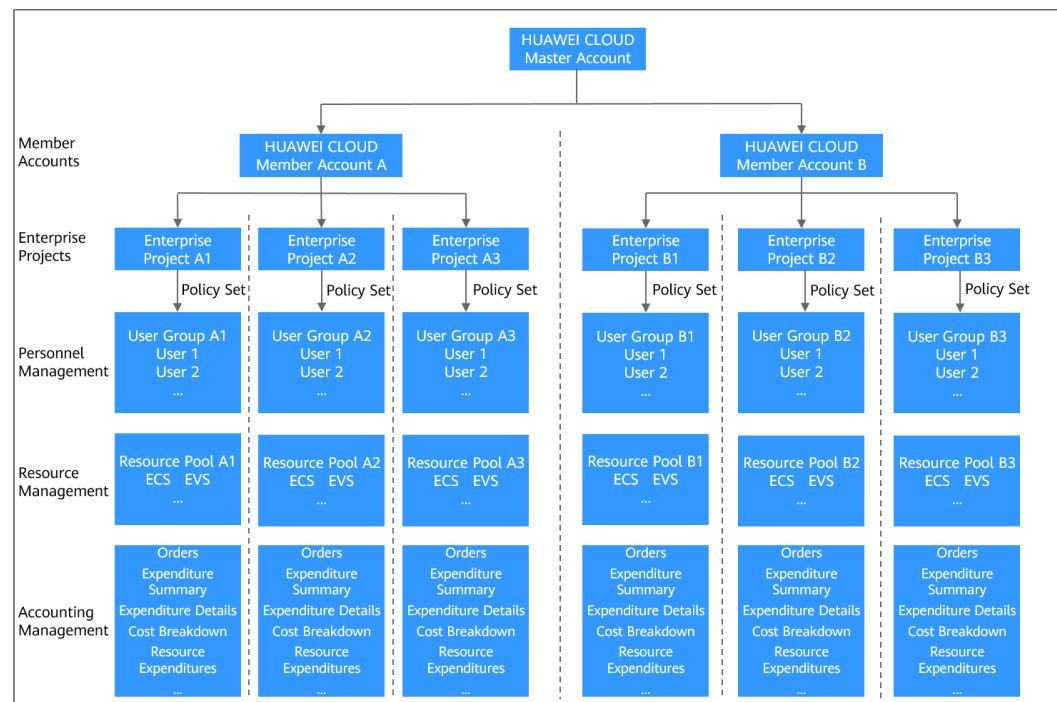**Figure 2-3** Organizational structure

Figure 2-4 Solution diagram

2.3 Supported Cloud Services

You can go to EPS console to check services and resources supported by EPS.

On the **Enterprise Project Management Service** page of EPS console, you can click **View Resource** in the **Operation** column of any projects to view services and resources supported by EPS.

📖 **NOTE**

There may be multiple versions of a service, and only one version is supported by Enterprise Project Management. Enterprise Project Management console only displays service and resource types that are supported. For details about version information, see related documentation of each service.

The following table lists the cloud services and resources supported by EPS.

Table 2-1 Resources supported by enterprise projects

Service	Resource Type
Direct Connect	- Connection - Virtual gateway - Virtual interface - Link aggregation group
Elastic Cloud Server (ECS)	Elastic cloud server
Bare Metal Server (BMS)	Bare metal server
Auto Scaling (AS)	AS group
Image Management Service (IMS)	Private image
Dedicated Host (DeH)	Dedicated host
FunctionGraph	Function
Object Storage Service (OBS)	Bucket
Elastic Volume Service (EVS)	Disk
Cloud Backup and Recovery (CBR)	Vault
Content Delivery Network (CDN)	Domain name
Scalable File Service (SFS)	- File system - SFS Turbo
Virtual Private Cloud (VPC)	- Virtual private cloud - Security group - IP address group - Network ACL
Bandwidth	Shared bandwidth
Elastic IP (EIP)	Elastic IP
Elastic Load Balance (ELB)	Load balancer
NAT Gateway	Public NAT gateway

Service	Resource Type
Domain Name Service (DNS)	- Private zone - PTR record - Public zone
Cloud Container Engine (CCE)	- Cluster - Autopilot cluster
Cloud Container Instance (CCI)	Namespace
Gene Container Service (GCS)	Environment
Advanced Anti-DDoS (AAD)	Instance
Web Application Firewall (WAF)	- WAF instance - Web application firewall - Domain expansion package - Bandwidth expansion package
Host Security Service (HSS)	Host security
Key Management Service (KMS)	Key
Distributed Cache Service (DCS)	Instance
Distributed Message Service (DMS)	- Kafka instance - RabbitMQ instance - RocketMQ instance
Simple Message Notification (SMN)	Topic
Blockchain Service (BCS)	- BCS instance (enhanced Hyperledger Fabric) - Blockchain engine
API Gateway (APIG)	Dedicated gateway
Cloud Eye	- Alarm rule - Monitoring panel - Resource group
Application Operations Management (AOM)	Resource group
Application Performance Management (APM)	Application
Log Tank Service (LTS)	Log stream
Cloud Connect (CC)	- Cloud Connect - Bandwidth package
Relational Database Service (RDS)	Instance

Service	Resource Type
Document Database Service (DDS)	Instance
Distributed Database Middleware (DDM)	Instance
Data Replication Service (DRS)	- Real-time synchronization task - Real-time migration task - Backup migration task - Data subscription task - Real-time disaster recovery task
GaussDB	GaussDB instance
Cloud Data Migration (CDM)	Cluster
ModelArts	Workspace
MapReduce Service (MRS)	Cluster
Data Lake Insight (DLI)	- Cluster - Queue - Database - Elastic resource pool
Cloud Search Service (CSS)	Cluster
Data Warehouse Service (DWS)	DWS cluster
Data Ingestion Service (DIS)	Stream
CloudTable	CloudTable cluster
Graph Engine Service (GES)	GES cluster
Recommender System (RES)	Workspace
Data Lake Visualization (DLV)	DLV instance
DevCloud	Project management
ROMA Connect	- ROMA instance - ROMA task
SupportPlan Service	Support plan
Cloud Service Engine (CSE)	Engine
Private Number	Application
SSL Certificate Manager (SCM)	Certificate
DataArts Studio (DAYU)	DAYU instance

Service	Resource Type
Dedicated Distributed Storage Service (DSS)	• Disk • Storage pool
Dedicated Computing Cluster (DCC)	Dedicated computing cluster
Server Migration Service (SMS)	Source server
Application Service Mesh (ASM)	Mesh
Database Security Service (DBSS)	Database audit instance
Virtual Private Network (VPN)	VPN gateway
Video on Demand (VOD)	Domain name
Database and Application Migration UGO (UGO)	• Object migration task • Object evaluation tasks
CloudSite	Site
Multi-Cloud High Availability Service	• MAS instance • MAS namespace
Enterprise Router (ER)	Enterprise router
Change Management Service (CMS)	• Workflow • Job • Package • Script
Private Certificate Authority (PCA)	• Private CA • Private certificate
Cloud Phone Host (CPH)	Cloud phone server
MacroVerse SmartStage for Integrators	Flow
Cloud Trace Service (CTS)	Tracker
Cloud Bastion Host (CBH)	Bastion host
Cloud Firewall (CFW)	Cloud firewall
Live	Domain
Cloud-native Anti-DDoS	CNAD
IoT Device Access (IoTDA)	Instance
Dedicated HSM	Hardware security module
Cloud Secret Management Service (CSMS)	Secret
LakeFormation	LakeFormation instance

Service	Resource Type
Edge Security	• Edge DDoS domain expansion package • Edge WAF domain expansion package • Edge DDoS • Edge WAF
Workspace	Workspace-desktop
Enterprise Connect	• Enterprise connect network • Intelligent enterprise gateway
EventGrid (EG)	Channel
Global Elastic IP	• Global Elastic IP • Global internet bandwidth
Industrial Digital Model Engine (iDME)	• LinkX Foundation • MBM Foundation Service • Runtime • Studio
Global Accelerator (GA)	Accelerator
Industrial Simulation Cloud Service	• SimSpace • SimStudio • CPU computing • GUI computing
Integrated Product DevelopmentCenter Cloud Service	DigitalProductServices
ServiceStage	• ServiceStage environment • ServiceStage application
GeminiDB	Instance

2.4 Restrictions and Limitations

- You can enable Enterprise Project for only enterprise accounts.
- You can create up to 100 enterprise projects for an enterprise account. If you need to increase the quota, see **How Do I Apply for a Higher Quota**. The quota can be increased to a maximum amount of 256.
- Disabled enterprise projects cannot be modified.
- Disabled enterprise projects are still counted towards your enterprise project quota. If your enterprise project quota is insufficient, you can contact O&M personnel to delete enterprise projects.

- Disabled enterprise projects will not be displayed in the drop-down list of **Enterprise Project** on the page where you buy a cloud resource. You cannot add resources or user groups to a disabled enterprise project. You can enable disabled enterprise projects as needed.

- If an enterprise project contains any resources that are included in an unfinished order, the project cannot be disabled. Unfinished orders refer to the orders in the following states: pending payment, processing, pending review, and pending approval.

- Default enterprise projects cannot be modified or disabled.

- Test enterprise projects cannot be disabled.

- Currently, commercial projects cannot be converted to test projects.

- Currently, resources can only be transferred between commercial projects or test projects.

- Default enterprise projects are commercial projects by default. You cannot transfer resources between a test project and a default project.

- Only enterprise master accounts or IAM users with administrator permissions can view resource transfer events.

- A project name can contain up to 255 characters and can only be composed of letters, digits, underscores (_), and hyphens (-). Any form of "default" must be avoided in the project name. A project description can contain up to 512 characters.

- You can add up to 10 tags to each resource.

2.5 Permissions

2.5.1 Enterprise Project Permissions

Administrator: The administrator can perform any operations on the **Enterprise Project Management Service** page.

IAM user: An IAM user's permissions are granted by the administrator. The enterprise project information displayed on the **Enterprise Project Management Service** page varies for each IAM user based on the permissions assigned. Each IAM user can only access resources that they are allowed to If the administrator can use default and custom policies to assign permissions.

The administrator can grant permissions specified in the default policies or custom policies to users. Policies related to enterprise projects include EPS FullAccess, EPS ReadOnlyAccess and Enterprise Project BSS FullAccess. You can configure enterprise project permissions for users in IAM. For details, see the **Identity and Access Management User Guide**.

The enterprise project permission management feature has been integrated into IAM. You can grant enterprise project permissions to users and user groups on the IAM console. For details, see **Assigning Permissions to an IAM User** and **Creating a User Group and Assigning Permissions**.

Table 2-2 Enterprise Management permissions

Service Name	Permission Name	Permission Description	Typically Associated Personnel
Enterprise Management	EPS FullAccess	Full permissions for EPS. Users with these permissions can create enterprise projects, migrate resources, and manage tags of resources in enterprise projects.	Enterprise asset administrators
	EPS ReadOnlyAccess	Read-only permissions for enterprise project management. Users with these permissions can only perform query operations.	Enterprise asset query personnel

Service Name	Permission Name	Permission Description	Typically Associated Personnel
	Enterprise Project BSS FullAccess	Permissions for operations management of enterprise projects. The detailed permissions are as follows: ● Viewing fund quota settings of enterprise projects ● Viewing and exporting cost breakdowns of enterprise projects ● Viewing fund quota adjustment records of enterprise projects ● Viewing renewals of enterprise projects ● Enabling or disabling auto-renewal and manual renewal, changing billing mode from pay-per-use to yearly/monthly, and releasing resources ● Viewing yearly/monthly orders ● Placing yearly/monthly orders ● Unsubscribing from resources and viewing unsubscription records ● Viewing the expenditure summary of enterprise projects ● Exporting the expenditure summary of enterprise projects ● Viewing expenditure details of enterprise projects ● Exporting expenditure details of enterprise projects **NOTE** The permissions for paying for yearly/monthly products are of the account level, and the **Enterprise Project BSS FullAccess** permissions are specific to IAM users. That is why the **Enterprise Project BSS FullAccess** policy cannot include the permissions for paying for yearly/monthly products.	Enterprise asset administrators

Table 2-3 Common operations and required permissions

Operation	EPS FullAccess	EPS ReadOnlyAccess	Enterprise Project BSS FullAccess
Viewing resources in an enterprise project	√	√	×
Creating an enterprise project	√	×	×
Modifying an enterprise project	√	×	×
Enabling an enterprise project	√	×	×
Disabling an enterprise project	√	×	×
Adding a resource to an enterprise project	√	×	×
Removing a resource from an enterprise project	√	×	×
Viewing fund quota settings of an enterprise project	×	×	√
Viewing fund quota adjustment records of an enterprise project	×	×	√
Viewing renewal details of an enterprise project	×	×	√
Enabling or disabling auto-renewal and manual renewal for a resource, changing billing mode from pay-per-use to yearly/monthly for a resource, and releasing a resource	×	×	√

Operation	EPS FullAccess	EPS ReadOnlyAccess	Enterprise Project BSS FullAccess
Viewing a yearly/monthly order	×	×	√
Placing a yearly/monthly order	×	×	√
Unsubscribing from resources and viewing unsubscription records	×	×	√
Viewing the expenditure summary of an enterprise project	×	×	√
Exporting the expenditure summary of an enterprise project	×	×	√
Viewing expenditure details of an enterprise project	×	×	√
Exporting expenditure details of an enterprise project	×	×	√
Viewing the cost breakdown information of an enterprise project	×	×	√
Exporting the cost breakdown information of an enterprise project	×	×	√

2.5.2 Cloud Service Permissions

With IAM, you can control resource access for users and user groups based on enterprise projects. For details about cloud services supported by EPS, see **Supported Cloud Services**. For details about cloud service permissions, see **System-defined Permissions**.

Dependent services that are not support by EPS require other permissions. You can grant dependent service permissions in either of the following ways:

- On the Identity and Access Management (IAM) console, add system-defined policies to user groups. For details, see **Creating a User Group and Assigning Permissions**.

- If system-defined policies do not meet your requirements, you can create custom policies on the IAM console and assign custom policies to user groups for more refined access control. For details, see **Creating a Custom Policy**.

2.6 Security

2.6.1 Shared Responsibilities

Huawei guarantees that its commitment to cyber security will never be outweighed by the consideration of commercial interests. To cope with emerging cloud security challenges and pervasive cloud security threats and attacks, Huawei Cloud builds a comprehensive cloud service security assurance system for different regions and industries based on Huawei's unique software and hardware advantages, laws, regulations, industry standards, and security ecosystem.

Figure 2-5 illustrates the responsibilities shared by Huawei Cloud and users.

- **Huawei Cloud**: Ensure the security of cloud services and provide secure clouds. Huawei Cloud's security responsibilities include ensuring the security of our IaaS, PaaS, and SaaS services, as well as the physical environments of the Huawei Cloud data centers where our IaaS, PaaS, and SaaS services operate. Huawei Cloud is responsible for not only the security functions and performance of our infrastructure, cloud services, and technologies, but also for the overall cloud O&M security and, in the broader sense, the security and compliance of our infrastructure and services.

- **Tenant**: Use the cloud securely. Tenants of Huawei Cloud are responsible for the secure and effective management of the tenant-customized configurations of cloud services including IaaS, PaaS, and SaaS. This includes but is not limited to virtual networks, the OS of virtual machine hosts and guests, virtual firewalls, API Gateway, advanced security services, all types of cloud services, tenant data, identity accounts, and key management.

Huawei Cloud Security White Paper elaborates on the ideas and measures for building Huawei Cloud security, including cloud security strategies, the shared responsibility model, compliance and privacy, security organizations and personnel, infrastructure security, tenant service and security, engineering security, O&M security, and ecosystem security.

Figure 2-5 Huawei Cloud shared security responsibility model
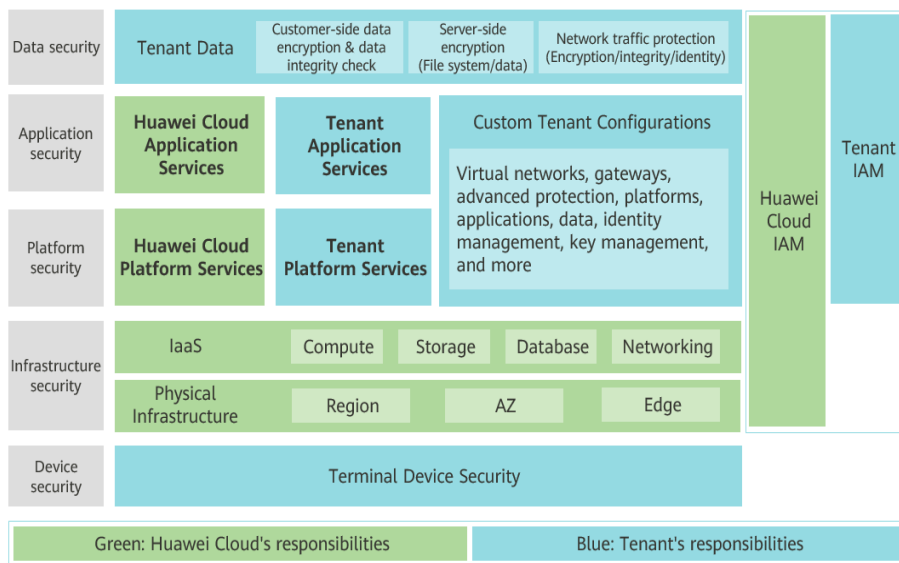
2.6.2 Identity Authentication and Access Control

Identity and Access Management (IAM) is a basic service provided by Huawei Cloud for permissions management, access control, and identity authentication. You can use IAM to create and manage users and user groups, grant permissions to allow or deny their access to cloud services and resources, and configure policies to improve account and resource security. IAM also provides you with multiple secure access credentials.

You can use IAM to control access to your EPS resources. IAM permissions define which actions on your cloud resources are allowed or denied. After creating an IAM user, the administrator needs to add the user to a user group and grants the required permissions by EPS to the user group. Then, all users in this group automatically inherit the granted permissions.

2.6.3 Auditing and Logging

Cloud Trace Service (CTS) is a log audit service for Huawei Cloud security. It allows you to collect, store, and query cloud resource operation records. You can use these records for security analysis, audit compliance, resource tracking, and fault locating.

After CTS is enabled, EPS operations can be recorded for auditing.

- For details about how to enable and configure CTS, see **Enabling CTS**.
- For details about how to view traces, see **Querying Real-Time Traces**.
- The following table lists the operation events that can be audited by EPS.

Table 2-4 EPS operations recorded by CTS

Operation	Resource Type	Trace Name
Creating an enterprise project	enterpriseProject	createEnterpriseProject
Modifying an enterprise project	enterpriseProject	modifyEnterpriseProject
Disabling an enterprise project	enterpriseProject	disableEnterpriseProject
Enabling an enterprise project	enterpriseProject	enableEnterpriseProject
Migrating resources	enterpriseProjectResource	migrate
Removing resources and their associated resources	enterpriseProjectResource	associatedMigrateOut
Adding resources and their associated resources	enterpriseProjectResource	associatedMigrateIn
Adding resources to an enterprise project.	enterpriseProjectResource	migrateIn
Removing resources	enterpriseProjectResource	migrateOut

2.6.4 Data Protection Technologies

2.6.4.1 Static Data Protection

EPS cannot be used to modify, add, or delete Huawei Cloud resources. EPS collects the following enterprise project details.

- Name
- Description
- Type
- Status

2.6.4.2 Data Transmission Protection

An encryption protocol is used when data is transmitted to the internal database of EPS. Data cannot be configured by users during the transmission process.

When you call EPS APIs, EPS supports HTTP and HTTPS. However, HTTPS is recommended for security reasons.

2.6.4.3 Data Destruction

After a customer deletes data, the data is stored in the backup database list. After a Huawei Cloud account is deleted, the data from the account will be retained for seven days before being permanently deleted.

2.7 Enabling the Enterprise Project Function

Prerequisites

You can only enable Enterprise Project with an enterprise account.

For an enterprise account, the **Account Type** must be set to **Enterprise** and the enterprise name cannot be left empty.

Procedure

Step 1 Log in to the **Huawei Cloud** homepage.

Step 2 Click **Console** in the upper right corner.

The management console is displayed.

Step 3 Method 1: Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-6 Project Management
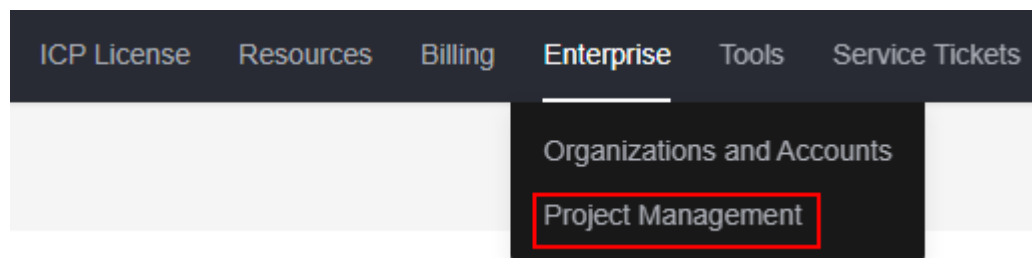
Method 2: Click the ≡ icon in the upper left corner of the page, and then click **Management & Governance** > **Enterprise Project Management Service**.

Step 4 On the **Apply for Enterprise Project** page, click **Apply Now**.

Figure 2-7 Applying for enabling the enterprise project function
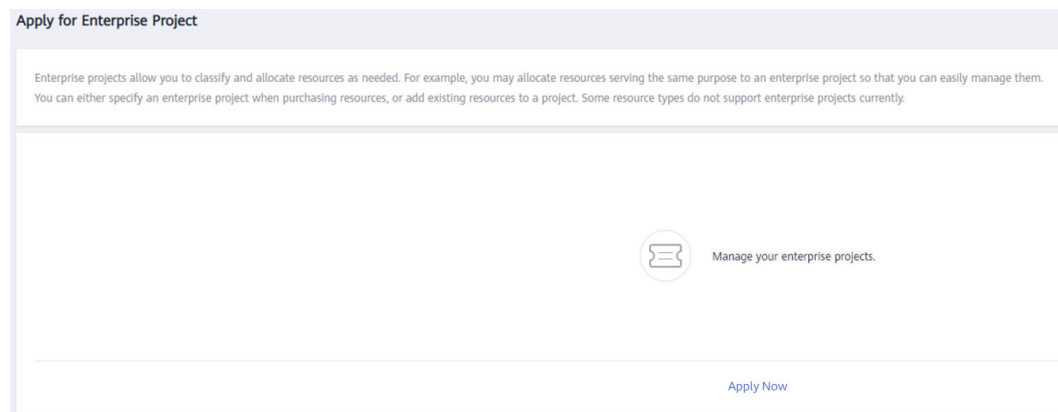
----End

2.8 Accessing the Enterprise Project Management Service Page

Prerequisites

The current account must be an enterprise account.

Procedure

Step 1 Log in to the **Huawei Cloud** homepage.

Step 2 Click **Console** in the upper right corner.

The management console is displayed.

Step 3 Method 1: Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-8 Project Management
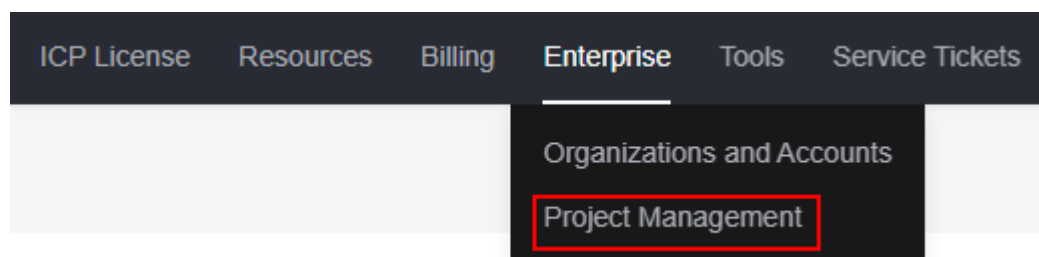
Method 2: Click the ≡ icon in the upper left corner of the page, and then click **Management & Governance** > **Enterprise Project Management Service**.

----End

2.9 Getting Started

2.9.1 Overview

Scenario

EPS supports resource management using IAM users.

You can grant IAM users different permissions to ensure controlled and secure resource access.

This section describes how to grant IAM users permissions for managing different cloud resources based on enterprise projects.

Table 2-5 Operation guide

Operation	Description
Creating user groups	On the IAM console, create two user groups, Test_ECS_A and Test_ECS_B.
Creating IAM users and adding them to user groups	On the IAM console, create two users, Test_User_A and Test_User_B. • Add user Test_User_A to user group Test_ECS_A. • Add user Test_User_B to user group Test_ECS_B.
Creating enterprise projects and adding user groups	On the **Enterprise Project Management Service** page, create two enterprise projects, project_A and project_B. • Add user group Test_ECS_A to enterprise project project_A. • Add user group Test_ECS_B to enterprise project project_B.
Adding resources	On the **Enterprise Project Management Service** page, add specific resources to enterprise projects project_A and project_B, respectively.

Process

Figure 2-9 Process
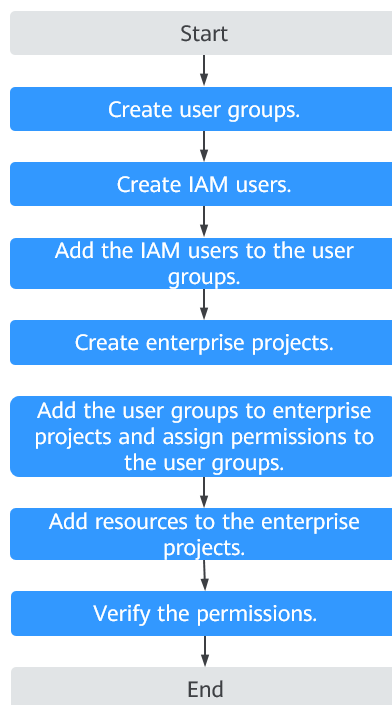
Prerequisites

- You are an administrator or have been assigned the EPS FullAccess policy on IAM.
- There are multiple Huawei Cloud resources in the account.

2.9.2 Creating a User Group
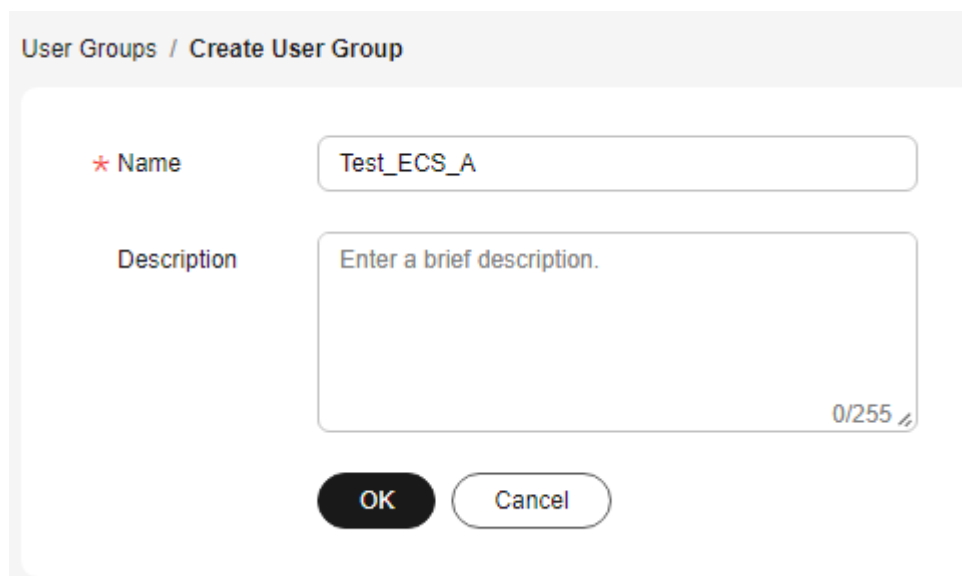
The following procedure shows how to create a user group, such as Test_ECS_A. You can follow the procedure to create more user groups, such as Test_ECS_B.

Step 1 Log in to Huawei Cloud and click **Console** in the upper right corner.

Step 2 On the management console, point to the username in the upper right corner, and choose **Identity and Access Management** from the drop-down list.

Step 3 In the navigation pane on the left, click **User Groups**. Click **Create User Group** in the upper right corner.

Figure 2-10 Creating a user group

Step 4 On the displayed page, enter a user group name, for example, **Test_ECS_A**.

Figure 2-11 Entering the name of the user group

Step 5 Click **OK**.

The user group you create is displayed in the user group list.

----End

📖 **NOTE**

> For more information, see **Creating a User Group and Assigning Permissions**.

2.9.3 Creating an IAM User

The following procedure shows how to create an IAM user, such as Test_User_A. You can follow the procedure to create more users, such as Test_User_B.

Step 1 Log in to Huawei Cloud and click **Console** in the upper right corner.

Step 2 On the management console, point to the username in the upper right corner, and choose **Identity and Access Management** from the drop-down list.

Step 3 Choose **Users** from the navigation pane on the left, and click **Create User** in the upper right.

Figure 2-12 Creating a user
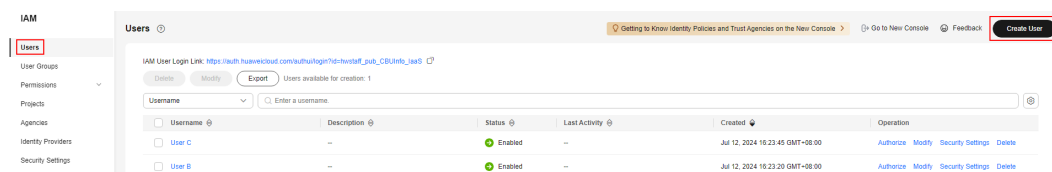
Step 4 On the **Create User** page, configure user basic information.

Figure 2-13 Setting user details

Step 5 Click **Next** in the lower right corner.

The **(Optional) Add User to Groups** page is displayed. You can add the user to the user group Test_ECS_A on this page, or add the user to the user group later.

Step 6 Click **Create** in the lower right corner.

The user is created.

----End

📖 **NOTE**

For more information, see **Creating an IAM User**.

2.9.4 Adding an IAM User to a User Group

You can add IAM users Test_User_A and Test_User_B to user groups Test_ECS_A and Test_ECS_B respectively according to the following procedure:

Step 1 Log in to Huawei Cloud and click **Console** in the upper right corner.

Step 2 On the management console, point to the username in the upper right corner, and choose **Identity and Access Management** from the drop-down list.

Step 3 In the navigation pane on the left, click **User Groups**.

Step 4 In the user group list, locate the row that contains **Test_ECS_A** and click **Manage User** in the **Operation** column.

Figure 2-14 Managing user groups

Step 5 On the displayed page, add the desired user to the user group.

Figure 2-15 Adding a user to the user group
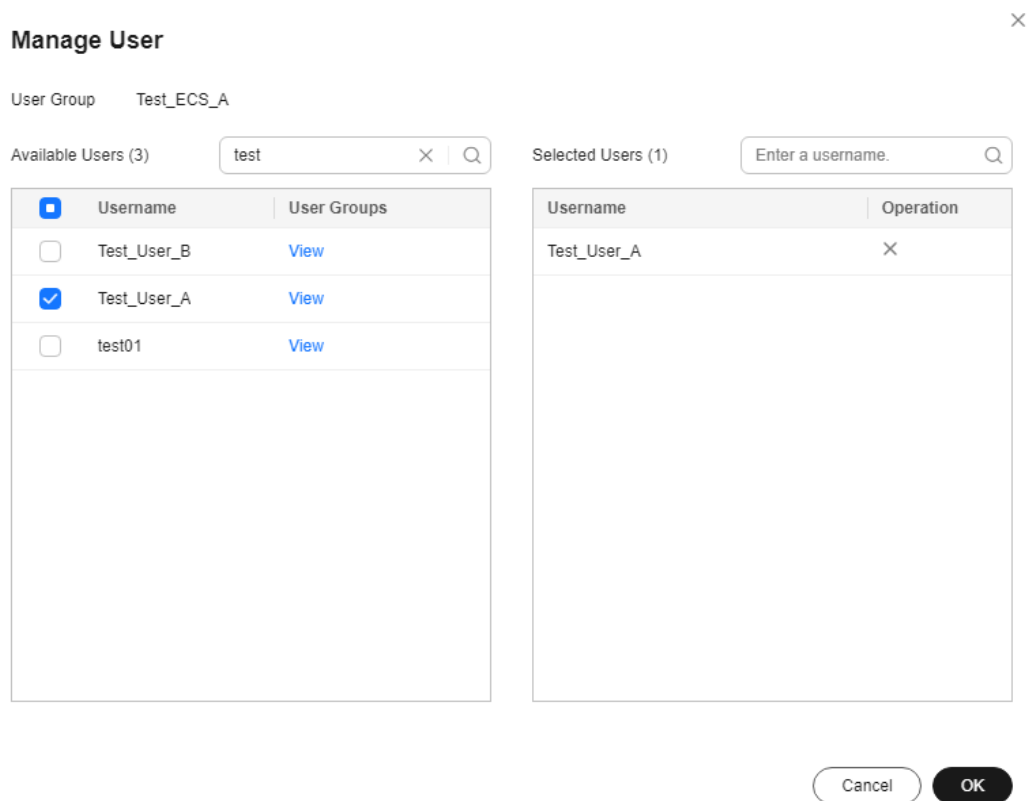
Step 6 Click **OK**.

----End

2.9.5 Creating an Enterprise Project

The following procedure shows how to create an enterprise project (project_A). You can follow the procedure to create more projects, such as project_B.

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.
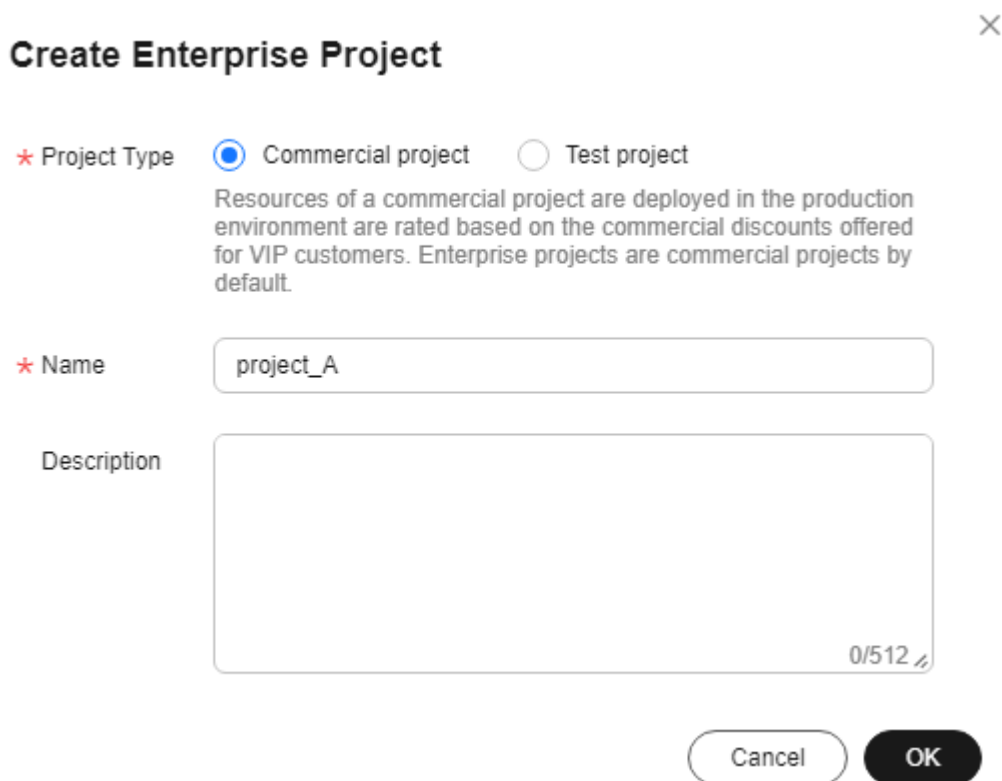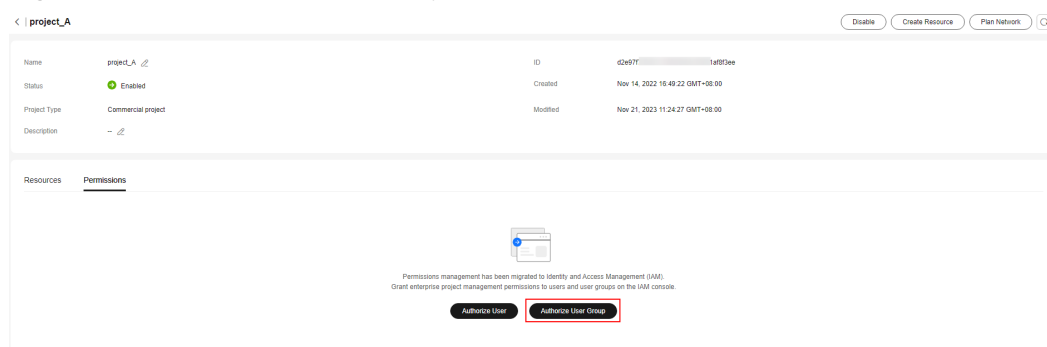
Figure 2-16 Project Management
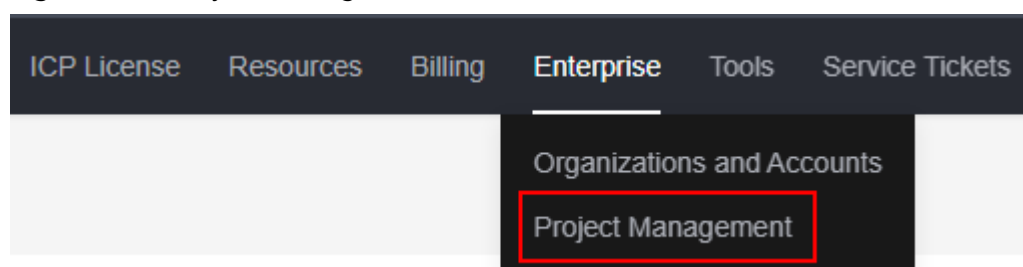
Step 3 On the **Enterprise Project Management Service** page, click **Create Enterprise Project** in the upper right corner.

The **Create Enterprise Project** dialog box is displayed.

Figure 2-17 Creating an enterprise project

Step 4 Select a project type based on service requirements.

Step 5 Set **Name** and **Description**, and click **OK**.

Table 2-6 Configuration rules

Parameter	Description	Example
Name	Name of the enterprise project you create. A project name can contain up to 255 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed. It cannot contain the word **default** in any form.	project_A
Description	Description of the enterprise project. The description can contain up to 512 characters.	Manage the resources in this enterprise project.

----End

2.9.6 Authorizing a User Group to Manage an Enterprise Project

The following procedure shows how to authorize a user group to manage an enterprise project:

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-18 Project Management
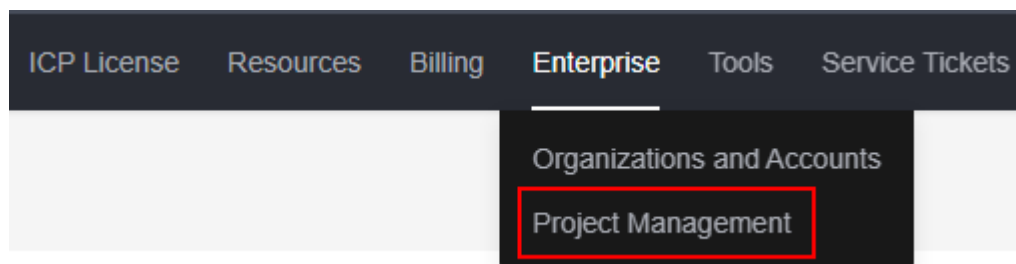
Step 3 On the **Enterprise Project Management Service** page, click the name of the enterprise project you want to view.

Step 4 On the enterprise project details page that is displayed, click the **Permissions** tab, and click **Authorize User Group**.

The IAM **User Groups** page is displayed. Select a user group and authorize the user group to manage the enterprise project.

For details, see **Creating a User Group and Assigning Permissions**.

Figure 2-19 Authorize User Group

----End

2.9.7 Adding Resources to Enterprise Projects

You can add cloud resources to enterprise projects project_A and project_B according to the following procedure:

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-20 Project Management
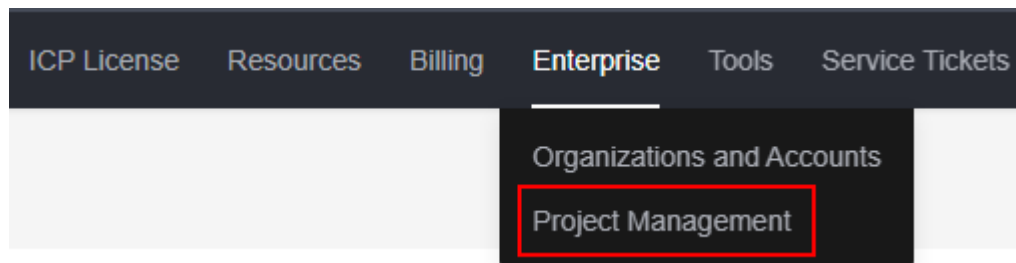
Step 3 On the **Enterprise Project Management Service** page, click **View Resource** in the **Operation** column of the row containing the target enterprise project.

The enterprise project details page is displayed. You can view the resources in the enterprise project on the **Resources** tab.

Step 4 Click **Add**.

The **Add Resource** dialog box is displayed.

Step 5 Select a mode.

- **Independent resources**: Each resource is added as an independent resource, and multiple resources can be added at a time.

  Select this mode when adding resources other than ECSs.

  You can also select this mode to add ECSs to the enterprise project, but resources associated with the ECSs such as EIPs and EVS disks will not be added.

- **ECSs and ECS associated resources**: Only ECSs need to be selected. Resources associated with the selected ECSs will be automatically added to the enterprise project at the same time.

  Select this mode when adding ECSs and their associated resources. Currently, only EVS disks and EIPs can be added together with ECSs.

Step 6 Filter resources by service, region, or enterprise project in the filter box above the resource list, or enter a resource name in the search box for exact search.

Step 7 For services that contain multiple resource types, you can click ⧩ next to **Resource Type** to filter resources.

Resources meeting the search criteria are displayed in the lower part of the page.

If you select **ECSs and ECS associated resources** for **Mode**, you cannot filter resources by service or resource type.

Figure 2-21 Adding Resource
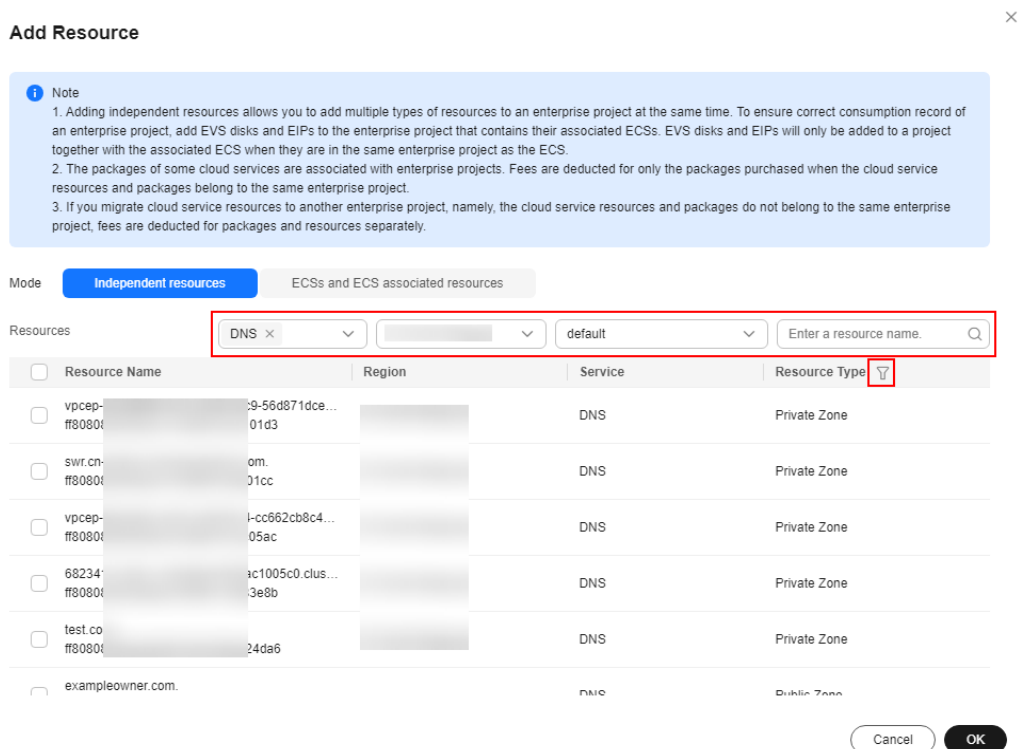
Step 8 Select the resources to be added and click **OK**.

After the resources are added, they appear in the resource list of the current enterprise project.
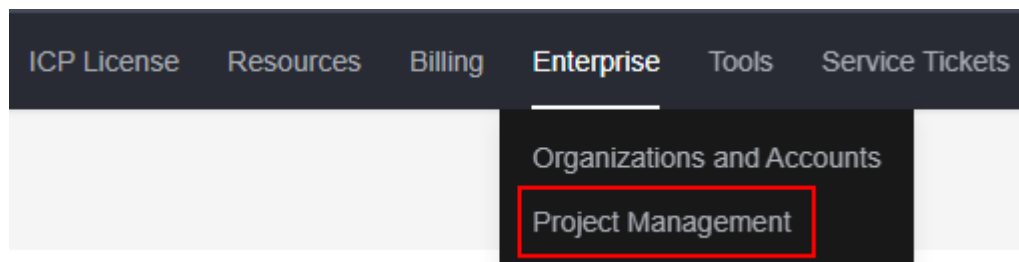
----End

2.9.8 Verifying Permissions

This section describes how to verify IAM user permissions.

Step 1 Sign in to the management console as **an IAM user**.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-22 Project Management

Step 3 In the left navigation, click **Project Management**.

Step 4 Click **View Resource** in the **Operation** column of a target enterprise project. The enterprise project details page is displayed.

Step 5 On the **Resources** tab, click a target resource name to go to the details page and verify the permissions.

----End

2.10 Multi-project Management Cases

2.10.1 Scenario

A company needs to manage multiple project teams and assign resources and personnel to different projects. This section presents the best practice for multi-project management to address company A's requirements.

Requirements

- **Requirement 1**: The company needs resources in **CN-Hong Kong** and **AP-Singapore**. The resources will be allocated to two project teams. Resources of the two project teams need to be isolated from each other. Resource access needs to be authorized, for example, only authorized IAM users can access a specific ECS.

- **Requirement 2**: Members in a team cannot access resources of other teams and only have the least privilege required to complete related tasks.

- **Requirement 3**: Costs can be managed independently for the tow project teams

Solution

- **Solution to requirement 1**: Enterprise Project Management (EPS) and Identity and Access Management (IAM) can both help you isolate resources between projects. However, the implementation logic and functions of the two services are different.

  - **EPS**: **An enterprise project can contain resources of different regions**, and resources in different enterprise projects are logically isolated. You can add resources to and remove resources from an enterprise project.

  - **IAM**: **An IAM project can contain resources of only one region**, and resources in different IAM projects are physically isolated.

  In conclusion, EPS is more flexible than IAM. It is recommended that the company use enterprise projects to manage resources. The solutions to the requirement 2 and 3 are based on EPS. For more information about the differences between IAM projects and enterprise projects, see **What Are the Differences Between IAM Projects and Enterprise Projects?**.

- **Solution to requirement 2**: The company can use IAM to create users and user groups; add users to the user groups as needed; add add user groups to enterprise projects created based on **requirement 1**; and assign permissions to user groups based on **table 10-1**.
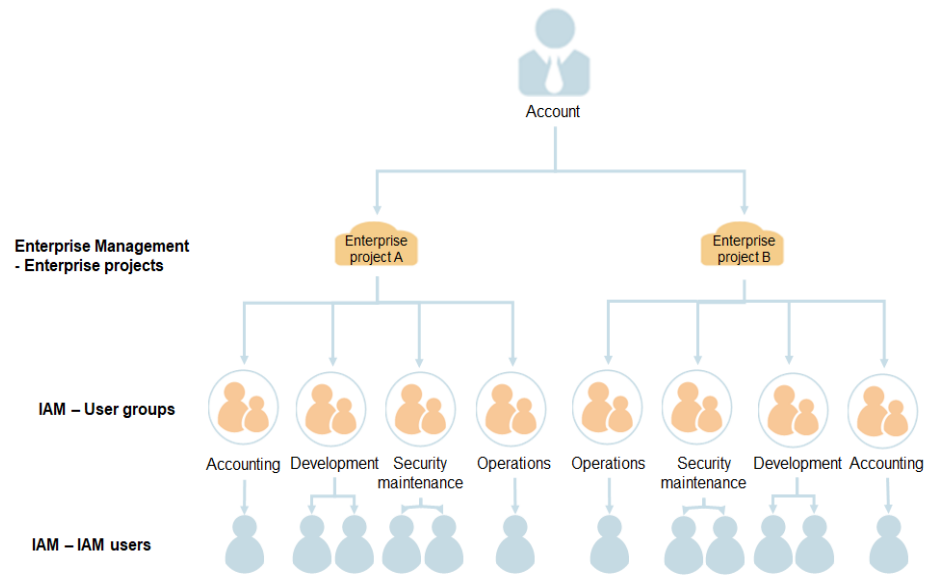
Figure 2-23 Personnel management model

Table 2-7 User group permissions

User Group	Responsibility	Permissions	Description
Accounting team	Project expenditure management	Enterprise Project BSS FullAccess	Permissions for accounting management of enterprise projects
Development nt team	Project development	ECS FullAccess	Full permissions for Elastic Cloud Server (ECS)
		OBS FullAccess	Full permissions for Object Storage Service (OBS)
		ELB FullAccess	Full permissions for Elastic Load Balance (ELB)
Security maintenan ce team	Security O&M of the project	ECS CommonOpe rations	Permissions for basic ECS operations
		CAD Administrato r	Full permissions for Advanced Anti-DDoS (AAD)
Operations team	Overall operations of the project	EPS FullAccess	Full permissions for EPS, including modifying, enabling, disabling, and viewing enterprise projects.

📖 NOTE

> For details about permissions of all Huawei Cloud services, see **System-defined Permissions**.

- **Solution to requirement 3**: The company can use EPS to independently manage renewals, orders, accounting, unsubscriptions, changes, and quotas of each enterprise project. For details, see **Enterprise Project Accounting Management**.

2.10.2 Procedure

The following process shows how the company can manage resources and personnel with Enterprise Management.

Figure 2-24 Enterprise project management process
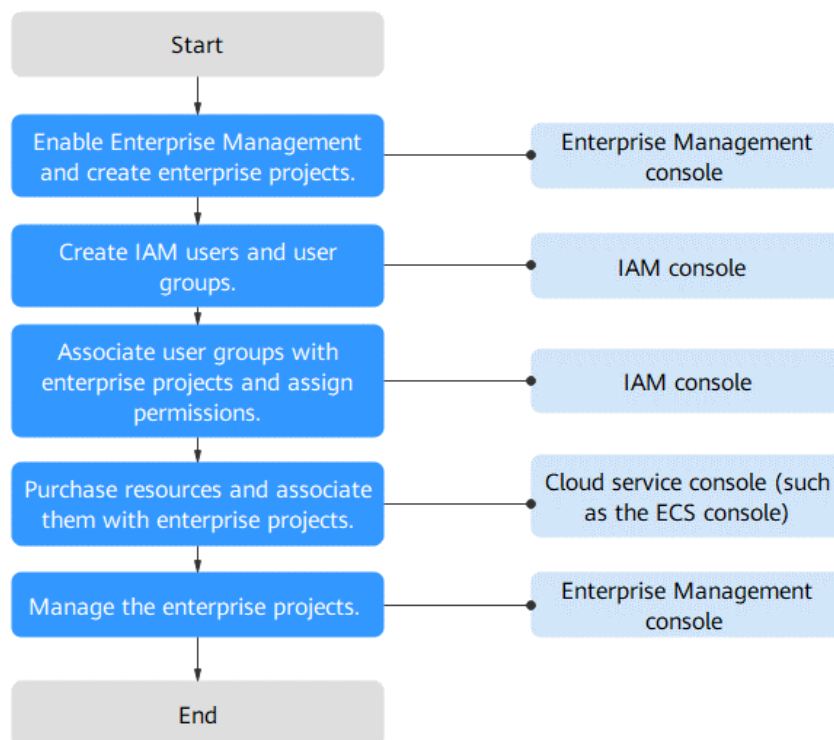
Step 1: Enable Enterprise Project and create enterprise projects on the EPS console.

Step 2: On the IAM console, create users and user groups and add users to user groups.

Step 3: On the IAM console, authorize the user groups to manage related enterprise projects.

Step 4: Purchase resources on related service consoles and add the resources to related enterprise projects.

Follow-Up Operation: Enterprise Project Management: Perform personnel, resource, and accounting management on the Enterprise Management console.

Enabling Enterprise Management and Creating Enterprise Projects

Perform the following procedure to create two enterprise projects, such as Enterprise_Project_A and Enterprise_Project_B, on the Enterprise Management console. If you have enabled Enterprise Project, go to **Step 4**.

📖 **NOTE**

You can only enable Enterprise Project with an enterprise account.

For an enterprise account, the **Account Type** must be set to **Enterprise** and the enterprise name cannot be left empty.

Step 1　Log in to the **Huawei Cloud** homepage.

Step 2　Click **Console** in the upper right corner.

The management console is displayed.

Step 3　Method 1: Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-25 Project Management
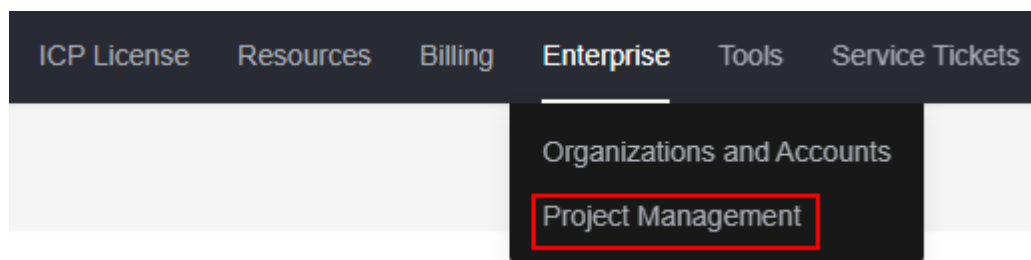
Method 2: Click the ☰ icon in the upper left corner of the page, and then click **Management & Governance** > **Enterprise Project Management Service**.

Step 4　On the **Apply for Enterprise Project** page, click **Apply Now**.

Figure 2-26 Applying for enabling the enterprise project function
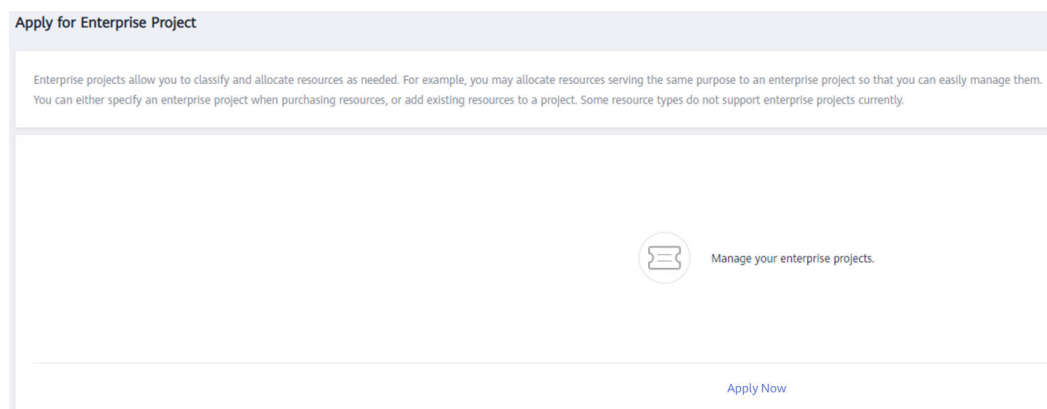
Step 5　On the **Enterprise Project Management Service** page, click **Create Enterprise Project**.

Figure 2-27 Creating an enterprise project
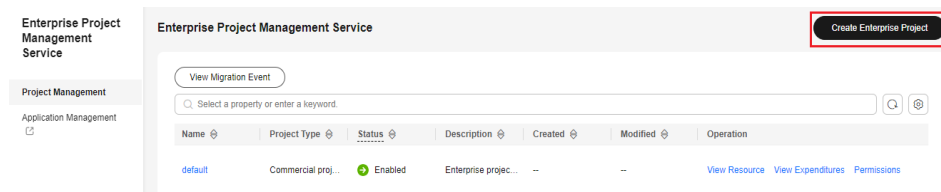
Step 6 Enter **Enterprise_Project_A** for **Name** and click **OK**.

Step 7 Repeat steps **5** and **6** to create **Enterprise_Project_B**.

The two enterprise projects are displayed on the **Enterprise Project Management Service** page.

----End

Creating IAM Users and User Groups

The following is an example procedure for creating a user group (**Enterprise Project A_Accounting**) and user (**Murphy**) and adding the user to the user group.

Step 1 Create a user group.

1. Go to the management console, and choose **Service List** > **Management & Governance** > **Identity and Access Management**.

2. On the IAM console, choose **User Groups** in the navigation pane. Then click **Create User Group**.

Figure 2-28 Creating a user group
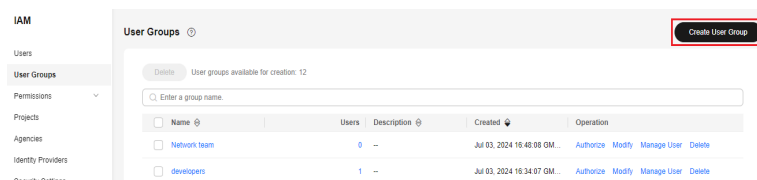
3. Set the user group name to **Enterprise Project A_Accounting** and click **OK**.

4. Repeat steps **2** to **3** to create the accounting, development, security maintenance, and operations teams for the two enterprise projects.

The user groups are displayed in the user group list.

Step 2 Create an IAM user and add the user to a user group.

1. In the navigation pane of the IAM console, choose **Users**. Then click **Create User**.

2. Specify the user information, select an **access type** (see **Figure 2-29**), and click **Next**.

Figure 2-29 Creating an IAM user

3. Add user **Murphy** to the user group **Enterprise Project A_Accounting** and click **Create**.

Figure 2-30 Adding the user to a user group

4. Repeat steps **1** to **3** to create users for all employees and add the users to corresponding user groups.

   The user is displayed in the user list. You can view the IAM users of each user group on the **Users** tab.

   ----End

Associating User Groups with Enterprise Projects

Assign permissions to a user group and apply user group permissions to enterprise projects.

**Step 1** Log in to the IAM console as an administrator.

Step 2 In the user group list, locate the row containing the target user group and click **Authorize** in the **Operation** column.

Step 3 On the displayed page, search for **Enterprise Project BSS FullAccess** in the search box, select it, and click **Next**.
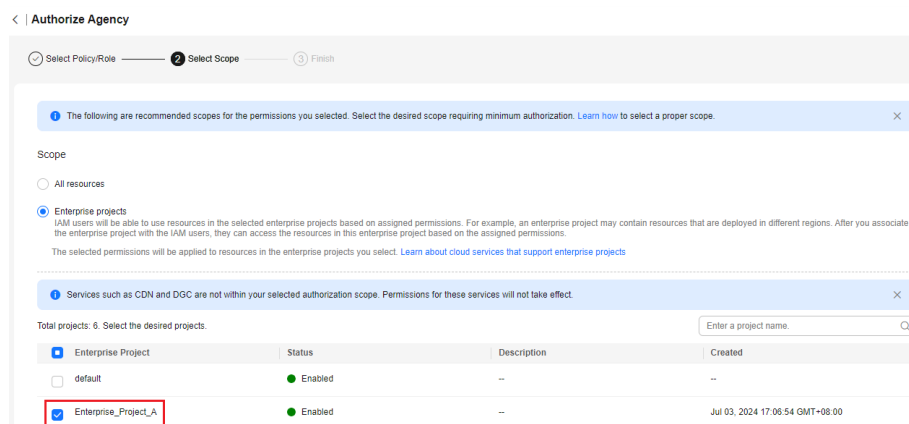
> 📖 NOTE
>
> You can create custom policies to supplement system-defined policies for fine-grained permissions management. For details, see **Creating a Custom Policy**.

Figure 2-31 Selecting permissions
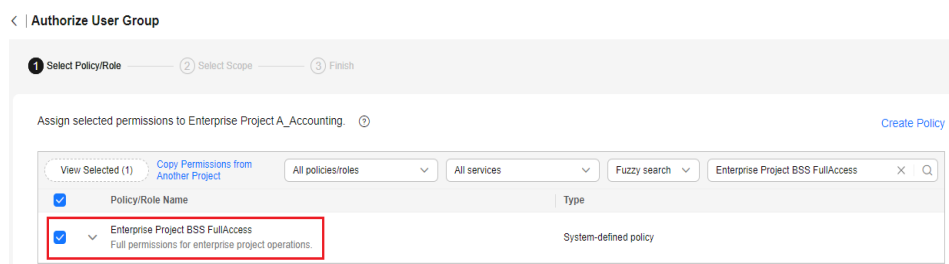
Step 4 Select the **Enterprise projects** authorization scope.

Figure 2-32 Selecting an enterprise project

Step 5 In the enterprise project list, select **Enterprise Project A**.

**Step 6** Click **OK**.

----End

Purchasing Resources and Associating Them with Enterprise Projects

The following is an example procedure for purchasing an ECS and associating it with enterprise project A.

Step 1 Sign in to the management console, click ☰ in the upper left corner, and choose **Compute** > **Elastic Cloud Server**.
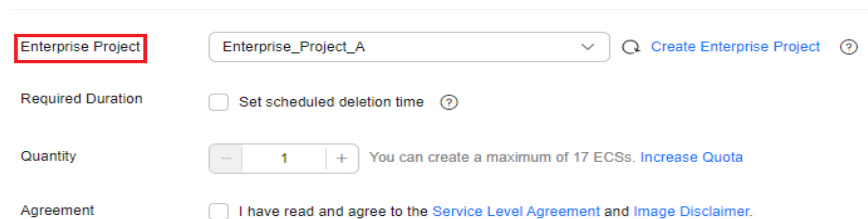
Step 2 Click **Buy ECS** in the upper right corner.

Figure 2-33 Buying an ECS
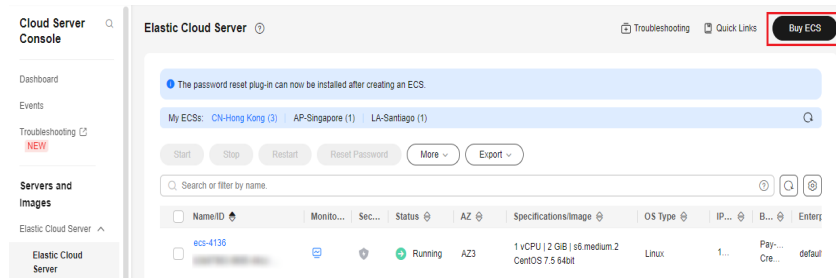
Step 3 **Specify the ECS information** and select **Enterprise_Project_A** from the **Enterprise Project** drop-down list.

Figure 2-34 Selecting an enterprise project

Step 4 Click **Next** in the lower right corner to view the resource details and submit the order.

Step 5 Repeat **Step 1** to **Step 4** to purchase resources for the two enterprise projects.

To view the purchased resources, go to the Enterprise Management console and click **View Resource** in the row that contains the target project.

☐ **NOTE**

- Currently, Enterprise Management only supports some Huawei Cloud services. For details, see **Supported Cloud Services**..

- If you have already purchased resources, you can directly associate them with the two enterprise projects. For details, see **Adding Resources to an Enterprise Project**.

----End

Follow-Up Operation: Enterprise Project Management

After completing the preceding steps, you can manage your enterprise projects on the **Enterprise** > **Project Management** > **Enterprise Project Management Service** page.

- **Resource management**: Click **View Resource** to view the existing resources of an enterprise project and **add more resources to the enterprise project**.

- **Personnel management**: Choose **More** > **Permissions** to go to the IAM console to view the users and user groups associated with an enterprise project, and modify the users, user groups and their permissions for the enterprise project. For details, see **Personnel Management**.

- **Accounting management**: Click **View Expenditures** to view the orders and bills and manage renewals of an enterprise project. For details, see **Enterprise Project Accounting Management**.

2.11 Managing Enterprise Projects

2.11.1 Creating an Enterprise Project

Scenario

You can create an enterprise project for a department or based on your business requirements.

Prerequisites

Only the administrator or the user with the EPS FullAccess policy is allowed to create enterprise projects.
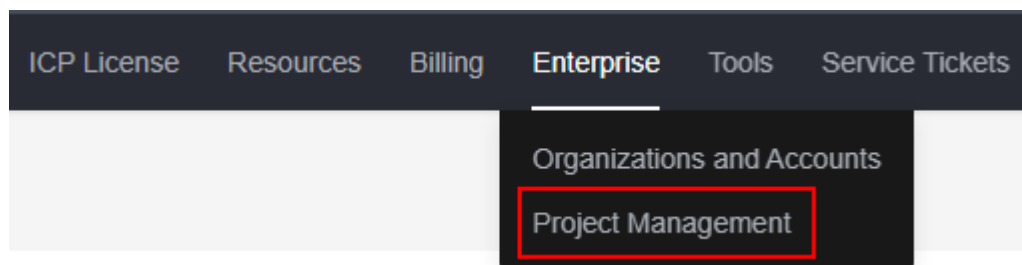
Restrictions and Limitations

Up to 100 enterprise projects can be created in an account.
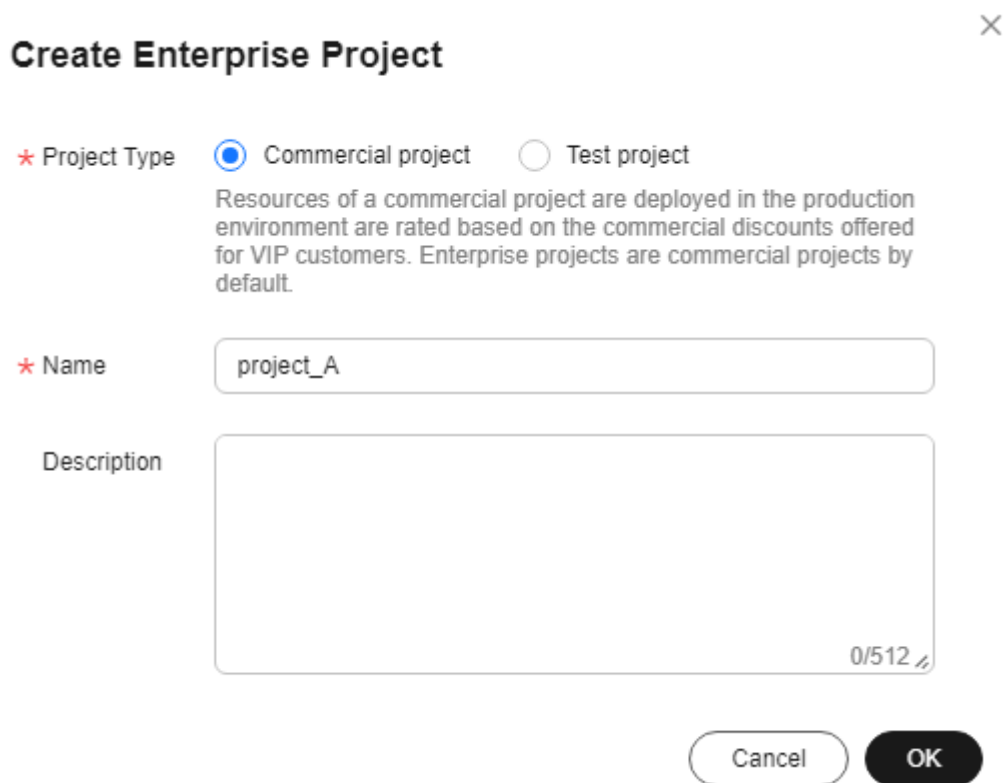
Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-35 Project Management

Step 3 On the **Enterprise Project Management Service** page, click **Create Enterprise Project** in the upper right corner.

The **Create Enterprise Project** page is displayed.

Figure 2-36 Creating an enterprise project

Step 4 Select a project type based on service requirements.

Table 2-8 Project type parameters

Parameter	Description
Commercial project	Commercial projects contain resources for production environment use, and commercial discounts can be applied to these resources. The default enterprise project is a commercial project.
Test project	Test projects are used for testing. Cloud service providers usually provide test coupons for such projects. You can choose to apply available test coupons when placing orders for yearly/monthly resources. Commercial discounts cannot be applied to pay-per-use resources. Your account balance will be charged after your test coupons are used up.

Step 5 Set **Name** and **Description**, and click **OK**.

Table 2-9 Configuration rules

Parameter	Description
Name	A project name can contain up to 255 characters. Only Chinese characters, letters, digits, underscores (_), and hyphens (-) are allowed. The value cannot contain the word **default** in any form. Example: project_A
Description	The description can contain up to 512 characters. Example: The enterprise project is used to manage the resources of Project A.

☐ **NOTE**

To avoid data leakage, you are advised not to include personal or sensitive information in enterprise project descriptions or resource tags.

----End

2.11.2 Modifying, Enabling, or Disabling an Enterprise Project

Scenario

You can modify, enable, or disable your enterprise projects as needed.

For resource security, enterprise projects cannot be deleted. If you no longer need an enterprise project, you can disable it.

Restrictions and Limitations

- Disabled enterprise projects cannot be modified.

- Disabled enterprise projects are still counted towards your enterprise project quota. If your enterprise project quota is insufficient, you can contact O&M personnel to delete enterprise projects.

- Disabled enterprise projects will not be displayed in the **Enterprise Project** drop-down list box on pages of creating cloud resources. Resources and user groups cannot be added to the disabled enterprise projects. If you want to use the enterprise projects, enable them again.

- If an enterprise project contains any resources that are included in an unfinished order, this enterprise project cannot be disabled. Unfinished orders refer to the orders in the pending payment, processing, pending review, or pending approval state.

- Default enterprise projects cannot be modified or disabled.

- Test projects cannot be disabled.

- Currently, commercial projects cannot be converted to test projects.
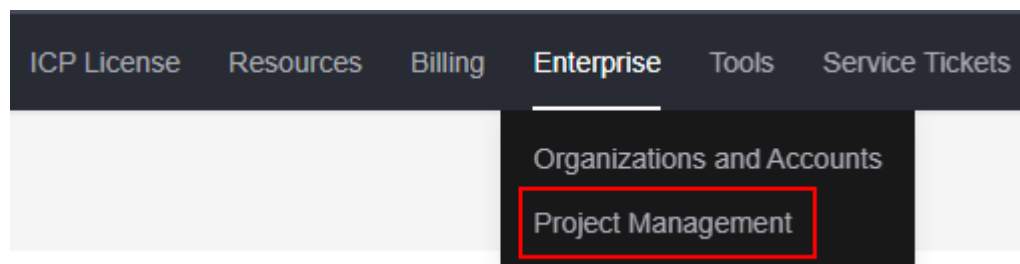
Modifying an Enterprise Project

To modify the name or description of an enterprise project, perform the following steps:

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.
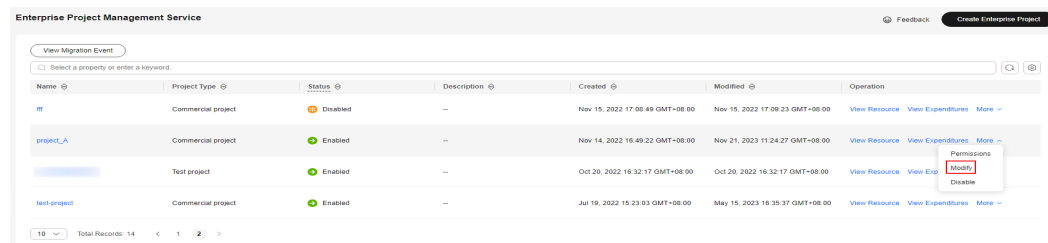
Figure 2-37 Project Management

Step 3 On the **Enterprise Project Management** page, locate the enterprise project you want to modify, choose **More** > **Modify** in the **Operation** column.

The **Modify Enterprise Project** dialog box is displayed.

Figure 2-38 Modifying an enterprise project

Step 4 Modify the project name or description.

Table 2-10 Configuration rules

Parameter	Description
Name	A project name can contain up to 255 characters. Only Chinese characters, letters, digits, underscores (_), and hyphens (-) are allowed. The value cannot contain the word **default** in any form. Example: project_A
Description	The description can contain up to 512 characters. Example: The enterprise project is used to manage the resources of Project A.

📖 NOTE

> The project type of a commercial project cannot be changed.

Step 5 Click **OK**.
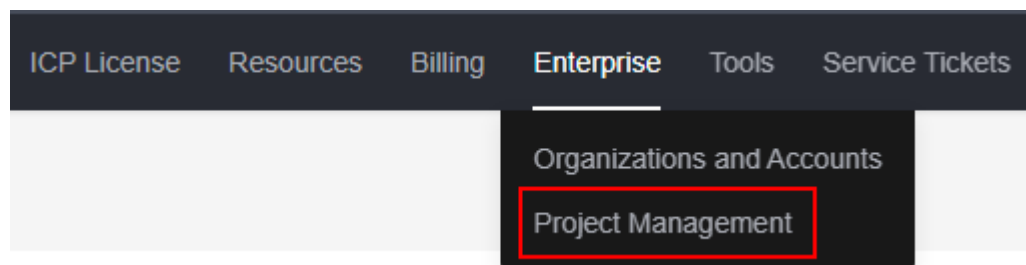
----End

Enabling an Enterprise Project

To use a disabled enterprise project again, enable it.

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.
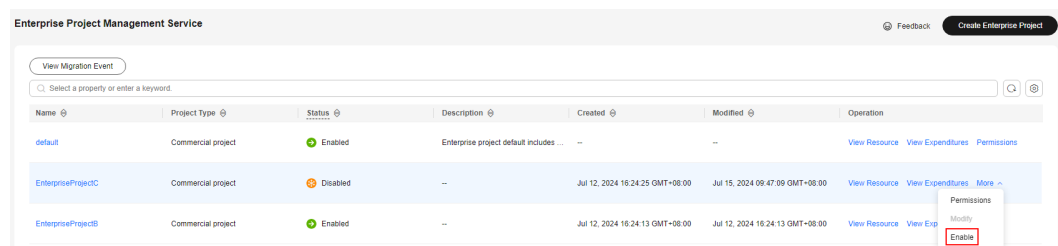
Figure 2-39 Project Management

Step 3 On the **Enterprise Project Management Service** page, locate an enterprise project in the **Disabled** state and choose **More** > **Enable** in the **Operation** column.

The **Enable Enterprise Project** dialog box is displayed.

Figure 2-40 Enabling an enterprise project

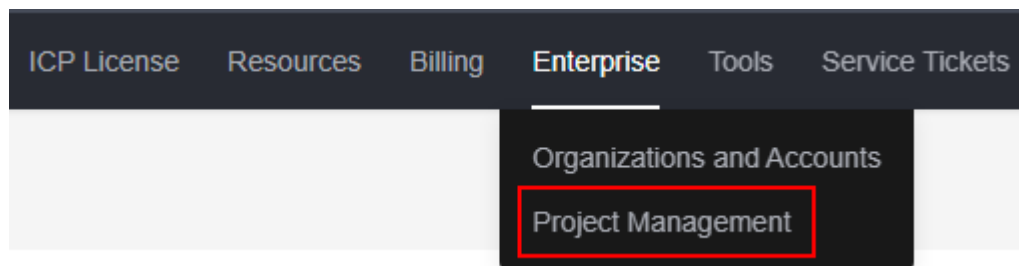**Step 4** Click **OK**.

----End

Disabling an Enterprise Project

If you no longer need an enterprise project, you can disable it.
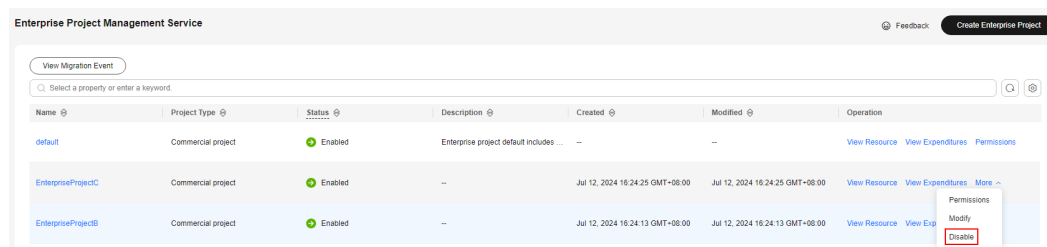
Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-41 Project Management

Step 3 On the **Enterprise Project Management Service** page, locate an enterprise project in the **Enabled** state and choose **More** > **Disable** in the **Operation** column.

The **Disable Enterprise Project** dialog box is displayed.

Figure 2-42 Disabling an enterprise project

Step 4 Click **OK**.

----End

2.11.3 Selecting an Enterprise Project for a New Cloud Resource

Scenario

When purchasing a cloud resource, you can select an enterprise project in the **Enabled** state for the resource so that the resource can be managed based on the enterprise project.

You can add cloud resources to an enterprise project using either of the following consoles:

- EPS console
- Consoles of corresponding cloud services that support EPS
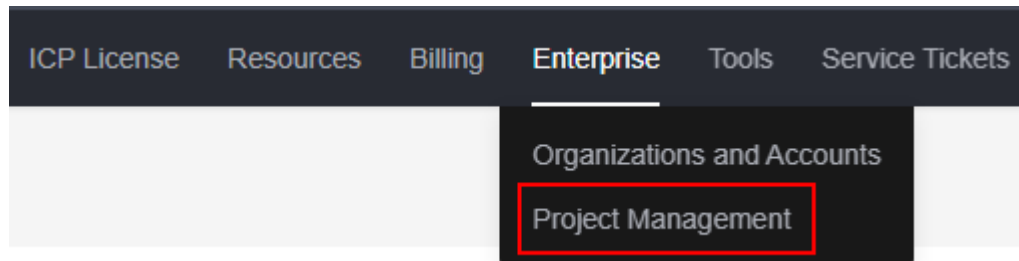
Restrictions and Limitations

ou cannot add resources to a disabled enterprise project.

Using the EPS Console

**Step 1** Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-43 Project Management

Step 3 In the enterprise project list, click the name of an enterprise project to access the enterprise project details page.

Step 4 Click **Create Resource** or **Plan Network** in the upper right corner to add required cloud resources to the enterprise project.

Figure 2-44 Adding resources to an enterprise project
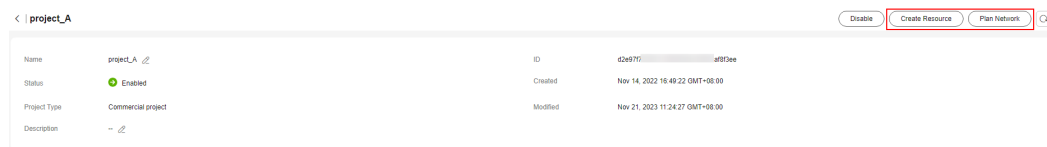
----**End**

📖 **NOTE**

- Currently, you can create only the following four types of cloud resources: Elastic Cloud Server, Elastic Volume Service, Elastic IP, and Relational Database Service.

- If you click **Plan Network** on an enterprise project details page to create resources, you can only create VPCs, VPC Peering, and security groups.

- For resources supported by EPS, see **Supported Cloud Services**.

Using a Service Console

You can select an enabled enterprise project when configuring **Enterprise Project** on the cloud resource creation page. New cloud resources can be managed based on the selected enterprise project.

The following procedure takes Cloud Eye as an example.

Step 1 Sign in to the management console.

Step 2 Click ⬡ in the upper left corner to select a region and a project.

Step 3 Click ☰ in the upper left corner of the page, and then click **Management & Governance** > **Cloud Eye**.

Step 4 In the left navigation, choose **Alarm Management** > **Alarm Rules**.

Step 5 Click **Create Alarm Rule**, and then configure related parameters.

Step 6 In the **Advanced Settings** area, select an enterprise project.

Figure 2-45 Selecting an enterprise project

Step 7 Confirm the configurations and click **Create**.

----End

2.11.4 Converting a Test Project to a Commercial Project

Scenario

You can change a test project to a commercial project based on service requirements. Currently, commercial projects cannot be converted to test projects.

Procedure
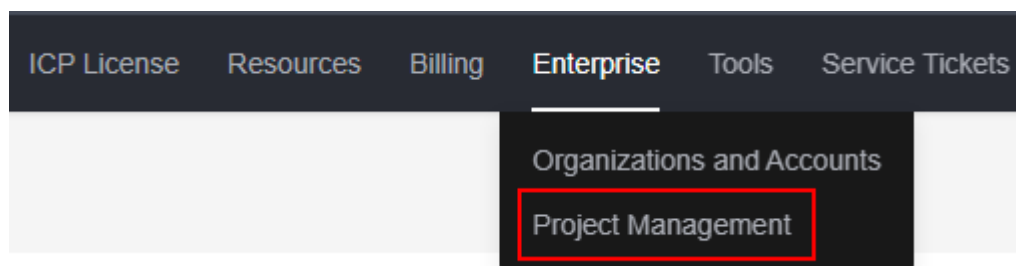
Step 1 Sign in to the management console.
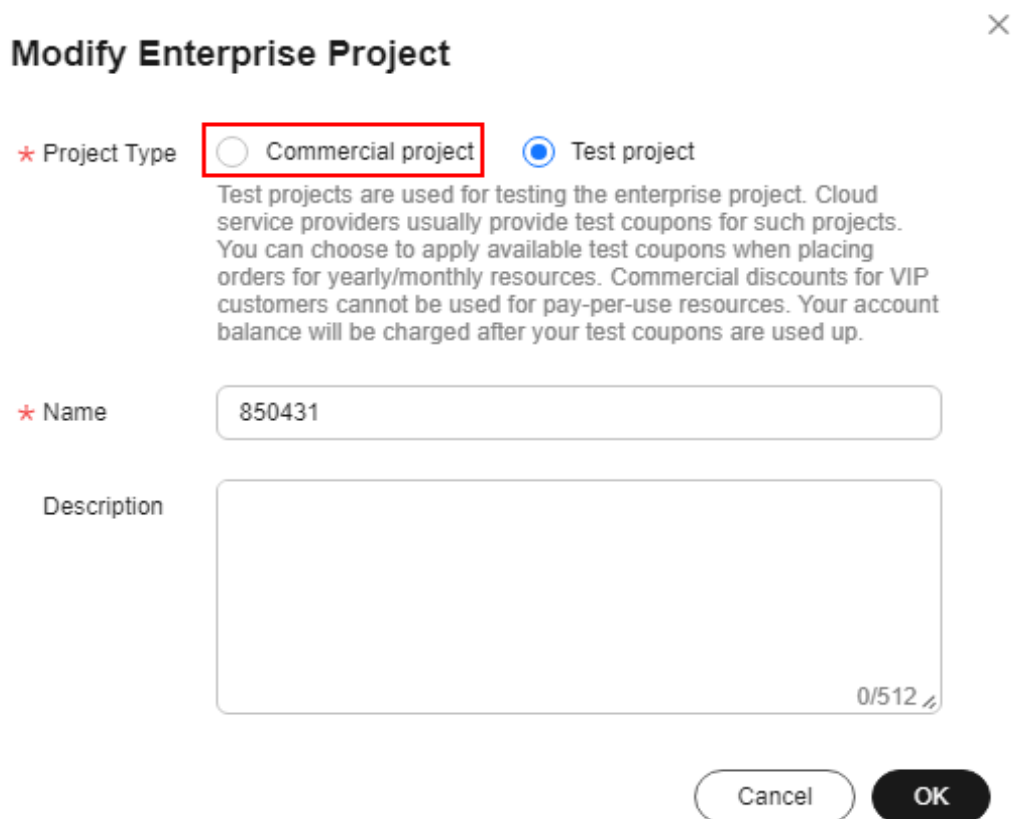
Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-46 Project Management

Step 3 Choose **More** > **Modify** in the **Operation** column of the row containing the test project to change.

Figure 2-47 Changing a test project into a commercial project

Step 4 Click **OK**.

----End

2.12 Managing Resources in an Enterprise Project

2.12.1 Resource Management Overview

You can use enterprise projects to group and manage cloud resources (for example, resources used for the same purpose).

Transferring a resource between enterprise projects does not affect the resource itself. For example, the transferring will not cause an instance to restart, change network configurations, or change the ownership of resources.

However, if you grant resource access based on enterprise projects, users may be affected to access related resources. For example, if you grant a user only the permissions to access resources of project A, after the resources are transferred to project B, the user may fail to access the resources due to insufficient permissions.

☐ **NOTE**

Enterprise projects are different from IAM projects. For more information, see **What Are the Differences Between IAM Projects and Enterprise Projects?**

## 2.12.2 Viewing Resources in an Enterprise Project

Scenario

You can view all resources of an enterprise project. For details about how to export resource information for an enterprise project, see **Exporting Resource Information**.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-48 Project Management
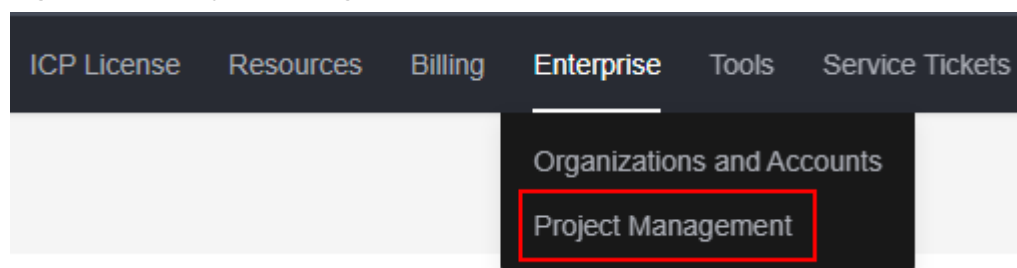
Step 3 On the **Enterprise Project Management Service** page, click **View Resource** in the **Operation** column of the row containing the target enterprise project.

The enterprise project details page is displayed. You can view the resources in the enterprise project on the **Resources** tab.

Figure 2-49 Viewing resources
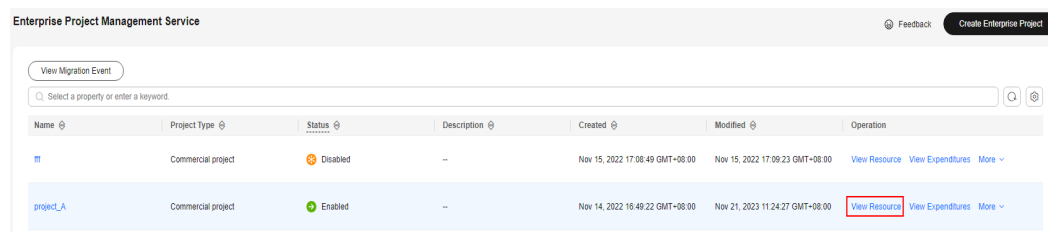
Step 4 Set search options.

1. Select regions.

2. Select services.

   After you select services, you can further specify resource types accordingly.

To view all resources of an enterprise project, select **All** for both the **Region** and **Service**.

> **NOTE**
>
> If you select **EIP** for **Service**, you can view associated instances. The instances can only be ECSs, enhanced load balancers, BMSs, and virtual IP addresses.

Step 5 Click **Search** and the resources will be displayed in a table at the bottom of the page.

----End

Exporting Resource Information

EPS does not support exporting resource information. To export resource information, go to Config console. For more details, see **Exporting the Resource List**.

2.12.3 Adding Resources to an Enterprise Project

Scenario

You can add resources to or remove resource from enterprise projects as needed.

An enterprise project can contain resources from different regions.

Restrictions and Limitations

● Currently, resources can only be transferred between commercial projects or test projects.

● Enterprise projects are commercial projects by default. You cannot transfer the resources of a default enterprise project to a test project.

● You cannot add resources or user groups to a disabled enterprise project.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-50 Project Management
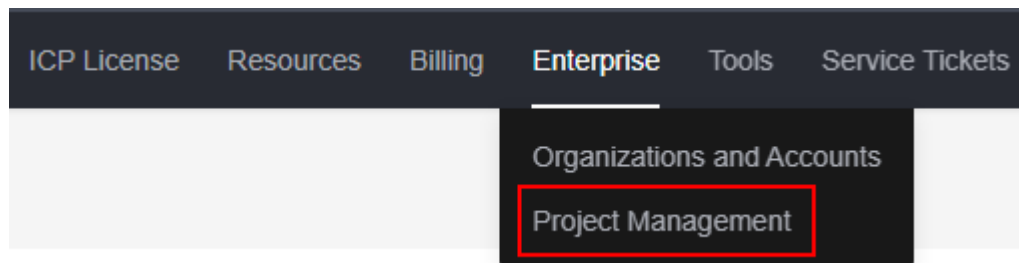
Step 3 On the **Enterprise Project Management Service** page, click **View Resource** in the **Operation** column of the row containing the target enterprise project.

The enterprise project details page is displayed. You can view the resources in the enterprise project on the **Resources** tab.

Figure 2-51 Viewing resources

Step 4 Click **Add**.

The **Add Resource** dialog box is displayed.

Figure 2-52 Accessing the **Add Resource** dialog box

Step 5 Select a mode.

- **Independent resources**: Each resource is added as an independent resource, and multiple resources can be added at a time.

  Select this mode when adding resources other than ECSs.

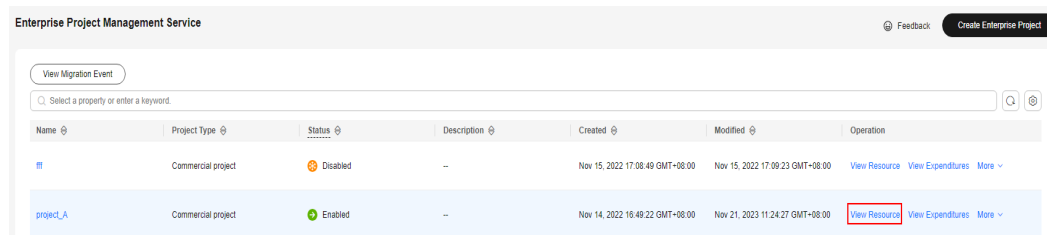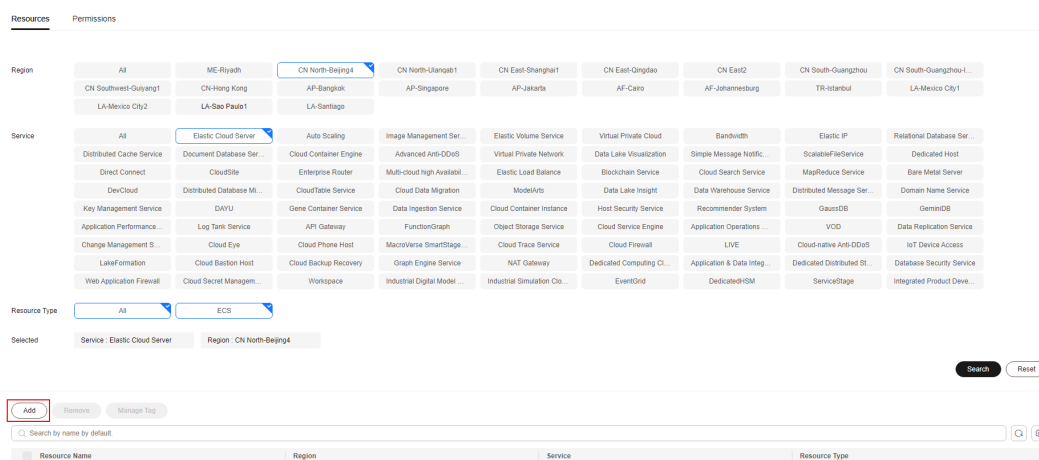 If you select this mode to add ECSs, their associated resources, such as EIPs and EVS disks, will not be added.

- **ECSs and ECS associated resources**: Only ECSs need to be selected. Resources associated with the selected ECSs will be automatically added to the enterprise project at the same time.

  Select this mode when adding ECSs and their associated resources. Currently, only EVS disks and EIPs can be added together with ECSs.

Step 6 Filter resources by service, region, or enterprise project in the filter box above the resource list, or enter a resource name in the search box for exact search.

Disabled enterprise projects and enterprise of different types are not displayed in the drop-down list.

Step 7 For services that contain multiple resource types, you can click ▽ next to **Resource Type** to filter resources.

Resources meeting the search criteria are displayed in the lower part of the page.

If you select **ECSs and ECS associated resources** for **Mode**, you cannot filter resources by service or resource type.

Figure 2-53 Add Resource
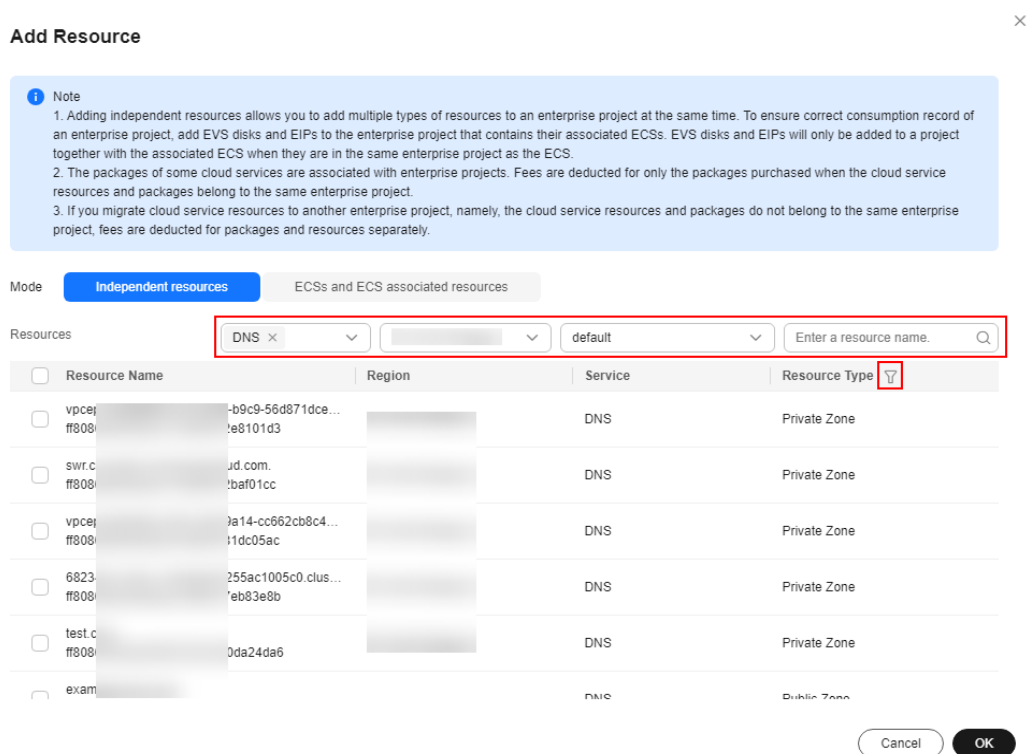
Step 8 Select the resources to be added and click **OK**.

After the resources are added, they appear in the resource list of the current enterprise project.

----End

2.12.4 Removing Resources from an Enterprise Project

Scenario

You can add resources to or remove resource from enterprise projects as needed.

You can include resources from different regions in the same project.

Resource removing involves the following two scenarios:

- Transferring resources from an enterprise project to another.
- Transferring resources from an enterprise project to the default enterprise project when you do not need to manage the resources based on any enterprise projects.

Restrictions and Limitations

- Currently, resources can only be transferred between commercial projects or test projects.
- Enterprise projects are commercial projects by default. You cannot transfer the resources of a test project to a commercial project.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-54 Project Management
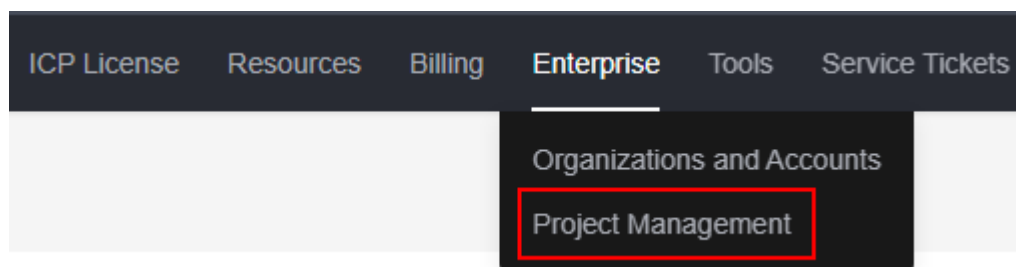
Step 3 On the **Enterprise Project Management Service** page, click **View Resource** in the **Operation** column of the row containing the target enterprise project.

The enterprise project details page is displayed. You can view the resources in the enterprise project on the **Resources** tab.

Figure 2-55 Viewing resources
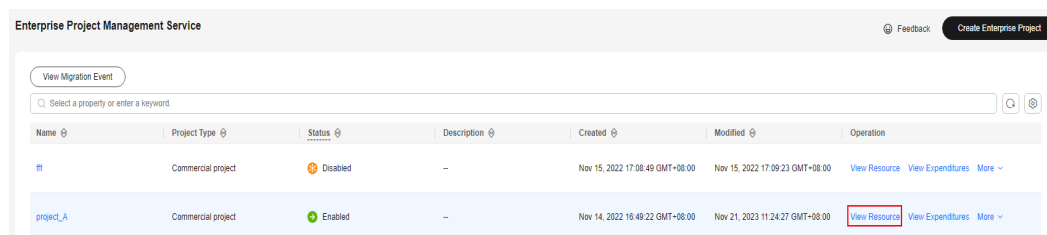
Step 4 Select the resources to be removed, and click **Remove**.

The **Remove Resource** dialog box is displayed.

Figure 2-56 Accessing the Remove Resource dialog box
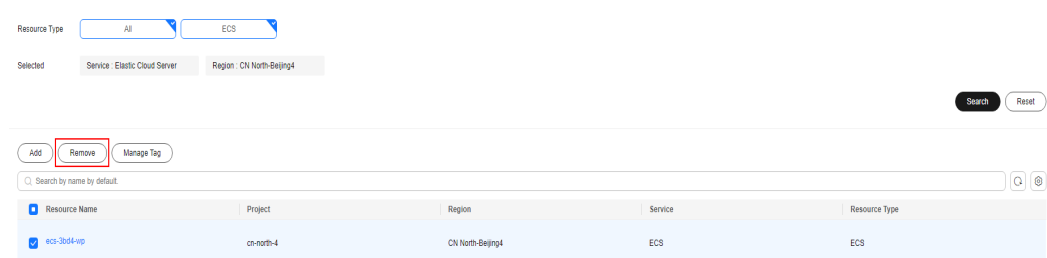
Step 5 Select a mode.

- **Independent resources**: Each resource is removed as an independent resource, and multiple resources can be removed at the same time.

  Select this mode when removing resources other than ECSs.

  If you select this mode to remove ECSs, their associated resources, such as EIPs and EVS disks, will not be removed.

- **ECSs and ECS associated resources**: Only ECSs need to be selected. Resources associated with the selected ECSs will be automatically removed from the enterprise project at the same time.

  Select this mode only when removing ECSs and their associated resources. Currently, only EVS disks and EIPs can be removed together with ECSs.

Figure 2-57 Removing resources
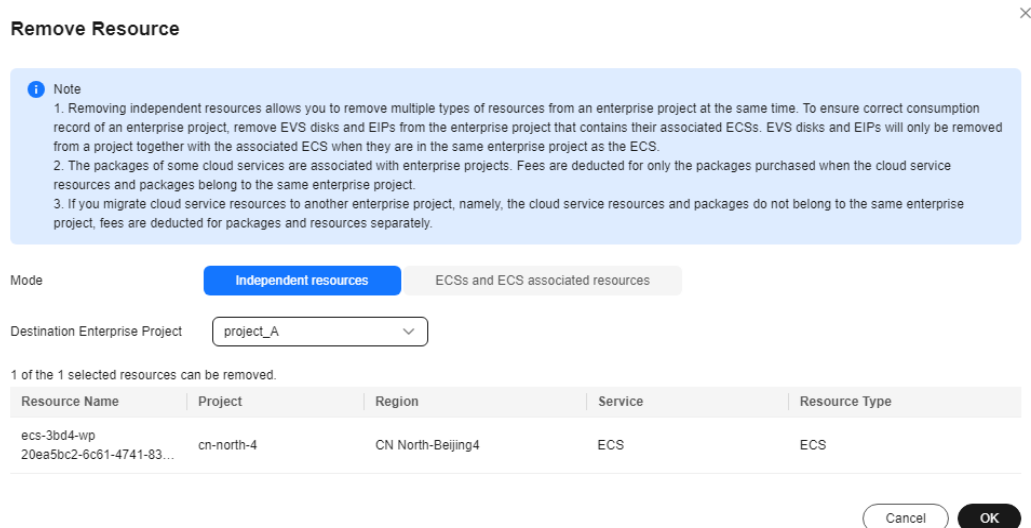
Step 6 Select the destination enterprise project and click **OK**.

Select an enterprise project to manage the resources as required.

By default, the **default** enterprise project is selected if you no longer manage the resources in enterprise projects you created.

Disabled enterprise projects and enterprise of different types are not displayed in the drop-down list.

After the resources are removed from the enterprise project, they appear in the resource list of the destination enterprise project.

----End

📖 **NOTE**

Currently, resources can be migrated only from a commercial project to another commercial project or from a test project to another test project.

2.12.5 Viewing Migration Events

Scenario

You can view details of migration events, including the migration time, operator, operation, resource ID, source enterprise project, and destination enterprise project.

Restrictions and Limitations

Migration events from the last seven days can be queried.

To view migration events, you must use an enterprise master account or have the administrator permission.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-58 Project Management
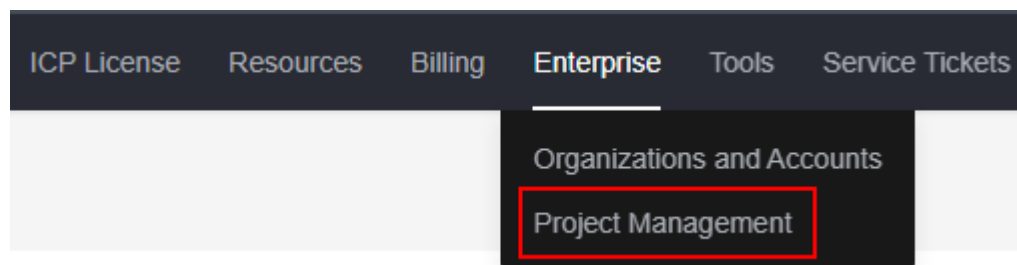
Step 3 On the **Enterprise Project Management Service** page, click **View Migration Event** above the enterprise project list.

The **Migration Events** page is displayed, listing the resource adding and removal events in the past seven days.

Figure 2-59 Viewing migration events
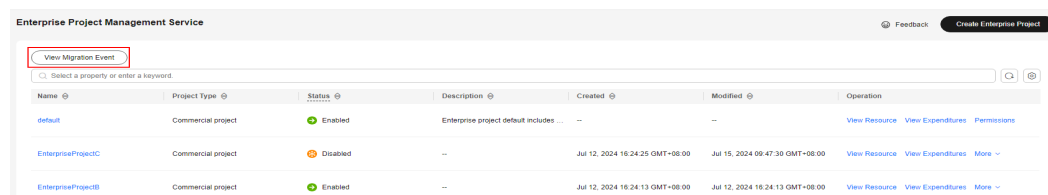
----End

2.12.6 Managing Resource Tags

Scenario

EPS allows you to add, modify, and delete resource tags. Batch operations are supported.

You can use tags to mark the usage, ownership, or environment of resources.

For supported services and resources, see **TMS and Other Services**.

Restrictions and Limitations

- You can add up to 10 tags to each resource.
- A key can contain up to 36 characters, including letters, digits, underscores (_), and hyphens (-).
- A value can contain up to 43 characters, including letters, digits, underscores (_), periods (.), and hyphens (-).

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-60 Project Management
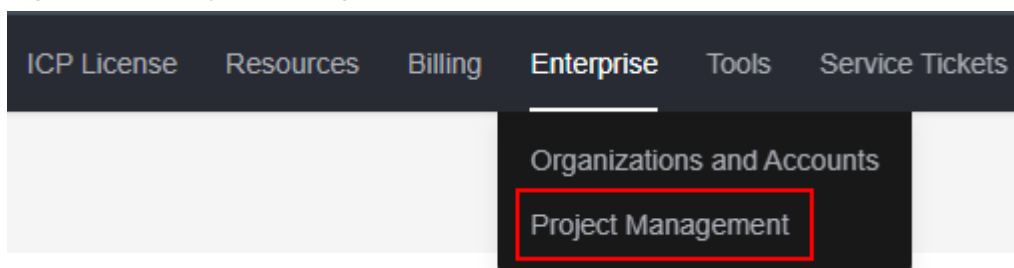
Step 3 On the **Enterprise Project Management Service** page, click **View Resource** in the Operation column of an enterprise project. The project details are displayed.

Figure 2-61 Viewing resources
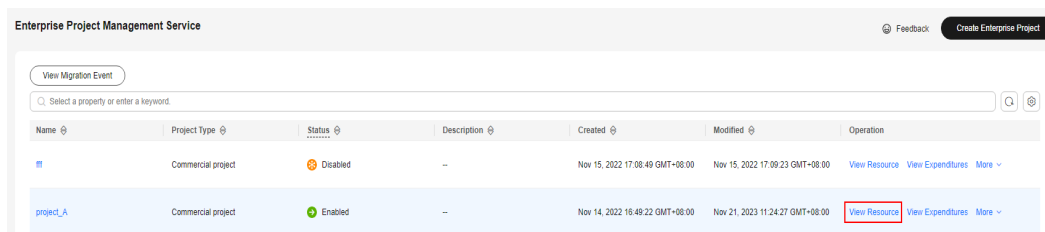
Step 4 Select the target resource in the **Resources** tab and click **Manage Tag**.

You can select one or more resources. You can also select all resources at one time.

Step 5 On the Manage Tag page, enter the tag key and tag value.

Figure 2-62 Managing tags
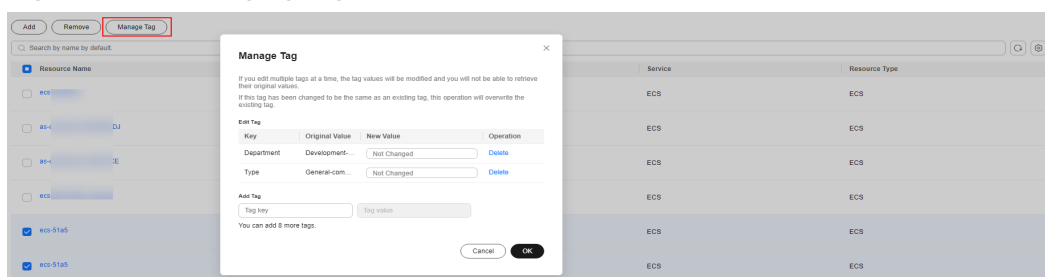
Step 6 Click OK and the resource tag is added.

Step 7 You can modify the tag value by entering a new one or delete the tag by clicking **Delete** in the operation column.

Step 8 Click OK. The resource tag is modified or deleted.

Figure 2-63 Modifying or deleting a tag

----**End**

2.13 Personnel Management

You can assign user groups roles or policies through IAM to manage your enterprise projects.

Personnel management allows you to manage users and user groups by enterprise project. You can view, add, and remove users and user groups.

☐ NOTE

- For details about permissions, roles, and policies, see *IAM User Guide*.
- IAM provides administrator permissions and read-only permissions for each cloud service. You can assign the permissions to user groups. Users in the groups can then access cloud services based on the assigned permissions.

2.13.1 Viewing Enterprise Project Authorization Records

Scenario

You can centrally manage all authorization records of your enterprise projects on the authorization management page of IAM.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-64 Project Management
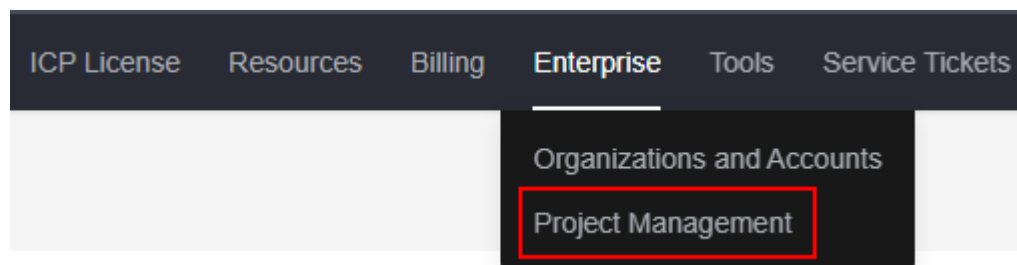
Step 3 On the **Enterprise Project Management Service** page, locate the enterprise project you want to view and click **More** > **Permissions** in the **Operation** column.

Step 4 On the IAM **Authorization** page that is displayed, click **By Enterprise Project** to view authorization records of each enterprise project.

Step 5 Click the user or user group name in the **Principal** column to view details about a user or user group.

Figure 2-65 Viewing authorization records of enterprise projects

----**End**

2.13.2 Managing User Groups in an Enterprise Project

2.13.2.1 Authorizing a User Group to Manage an Enterprise Project

Scenario

You can authorize user groups to manage enterprise projects, and users will inherit permissions from their user groups. The following procedure shows how to authorize a user group to manage an enterprise project.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-66 Project Management
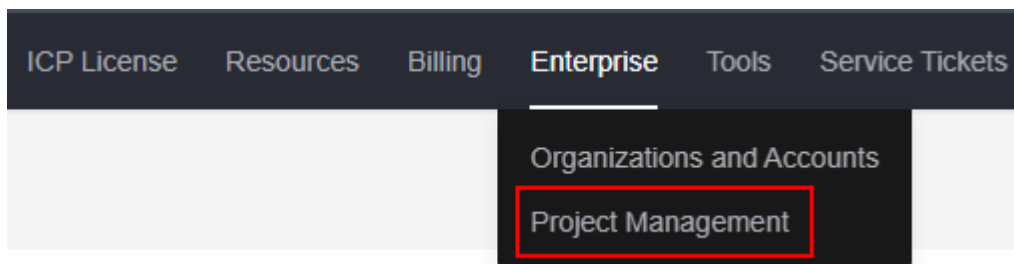
Step 3 On the **Enterprise Project Management Service** page, click the name of the enterprise project you want to view.

Step 4 On the enterprise project details page that is displayed, click the **Permissions** tab, and click **Authorize User Group**.

The IAM **User Groups** page is displayed. Select a user group and authorize the user group to manage the enterprise project.

For details, see **Creating a User Group and Assigning Permissions**.

Figure 2-67 Authorize User Group

----End

2.13.2.2 Removing a User Group from an Enterprise Project

Scenario

You can remove user groups from enterprise projects as needed.

Batch operations are supported.

After a user group is disassociated from an enterprise project, they can no longer manage the project.
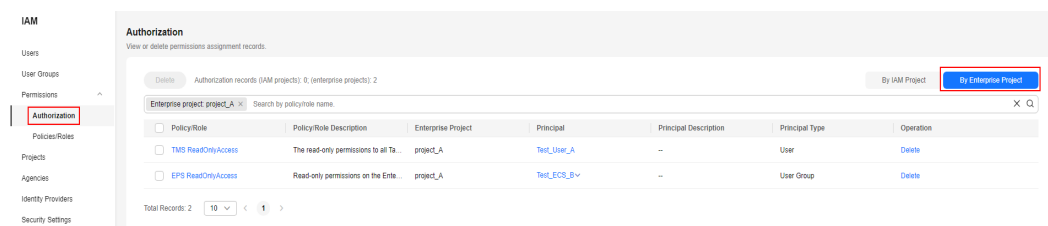
Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-68 Project Management
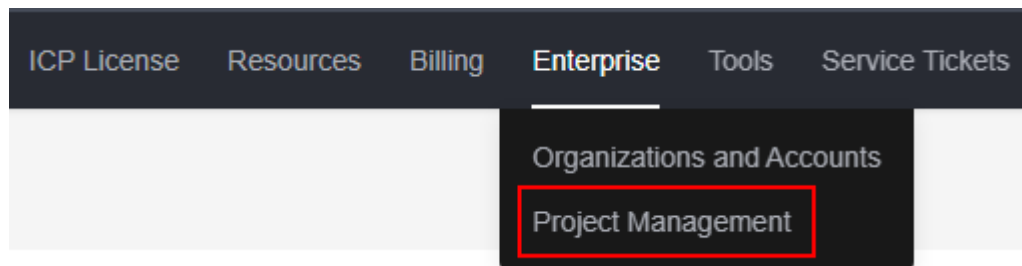
Step 3 On the **Enterprise Project Management Service** page, click the name of the enterprise project you want to view.

Step 4 On the enterprise project details page that is displayed, click the **Permissions** tab, and click **Authorize User Group**.

Figure 2-69 Authorize User Group
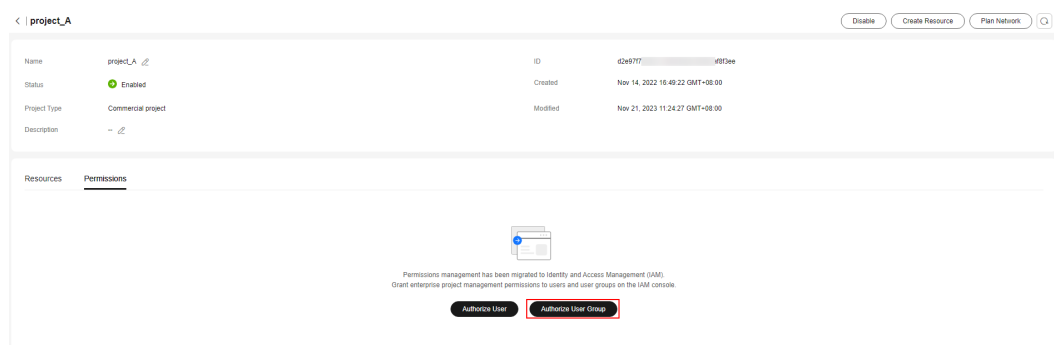
Step 5 On the IAM **User Groups** page that is displayed, click the user group name to go to the user group details page.

Step 6 On the **Permissions** tab, click **By Enterprise Project**, select the target enterprise project, and click **Delete** in the **Operation** column.

To delete enterprise projects in batches, select the enterprise projects in the list and click **Delete** above the list.

Figure 2-70 Deleting enterprise projects that are managed by a user group
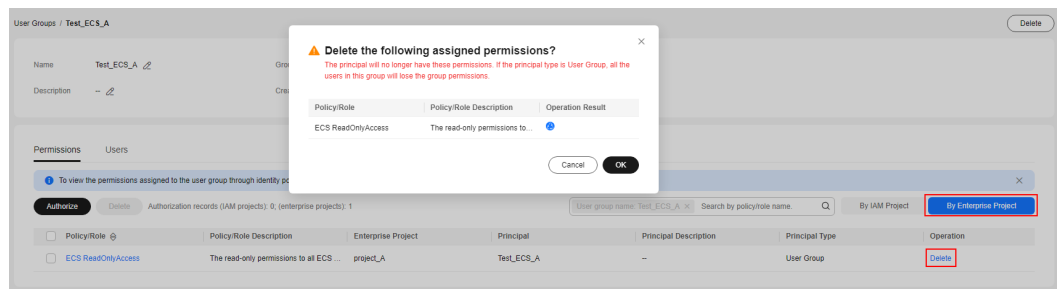
Step 7 In the displayed dialog box, click **OK**.

The enterprise projects that are managed by the user group are deleted.

----End

2.13.3 Managing Users in an Enterprise Project

2.13.3.1 Authorizing a User to Manage an Enterprise Project

Scenario

You can authorize users to manage enterprise projects. The user can access resources in enterprise projects based on the permissions assigned. The following procedure shows how to authorize a user to manage an enterprise project.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.
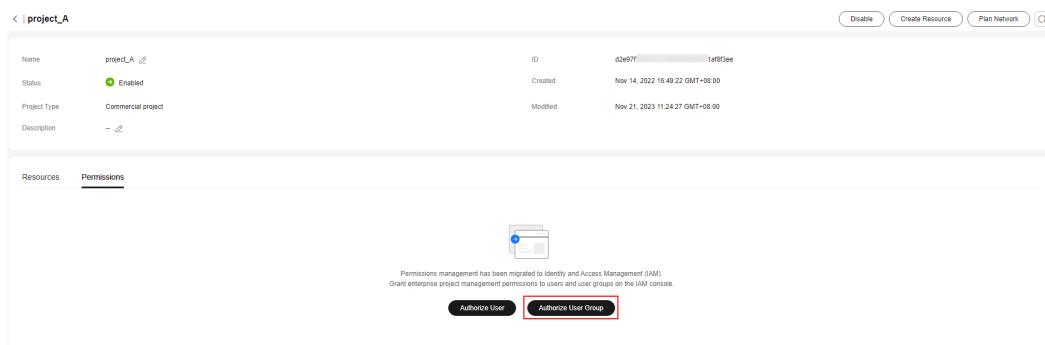
Figure 2-71 Project Management
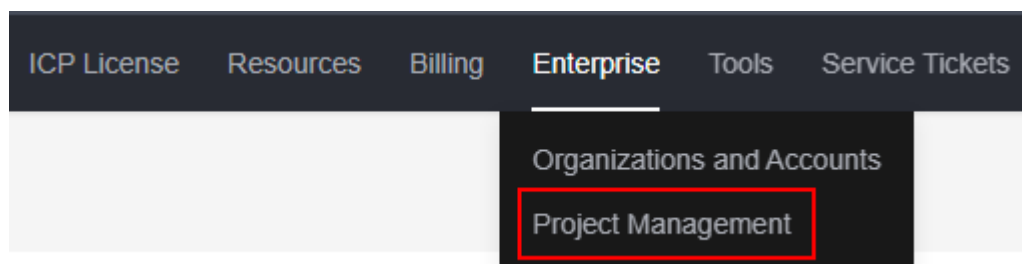
Step 3 On the **Enterprise Project Management Service** page, click the name of the enterprise project you want to view.

Step 4 On the enterprise project details page that is displayed, click the **Permissions** tab, and click **Authorize User**.

The IAM **Users** page is displayed. Select a user and authorize the user to manage the enterprise project.

For details, see **Assigning Permissions to an IAM User**.

Figure 2-72 User Authorization
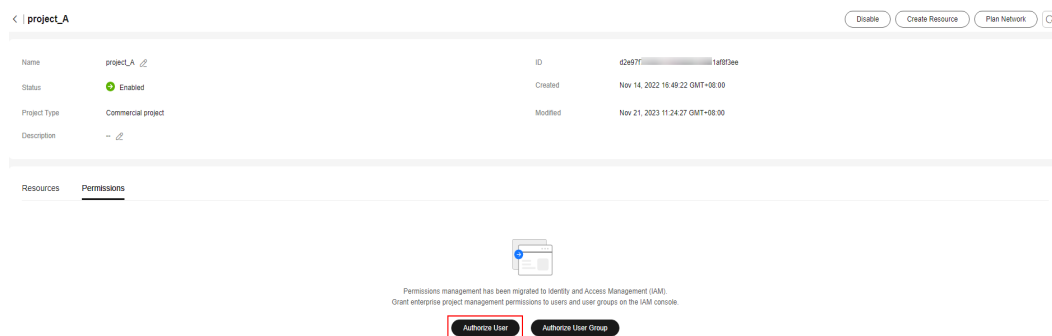
----End

Other Operations

Users inherit permissions from their user groups. Adding or removing users from a user group allows you to efficiently manage user permissions. For details, see **Adding Users to or Removing Users from a User Group**.

2.13.3.2 Removing Users from an Enterprise Project

Scenario

You can remove users from enterprise projects as needed.

Batch operations are supported.

After a user is disassociated from an enterprise project, they can no longer manage the project.

Procedure

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-73 Project Management
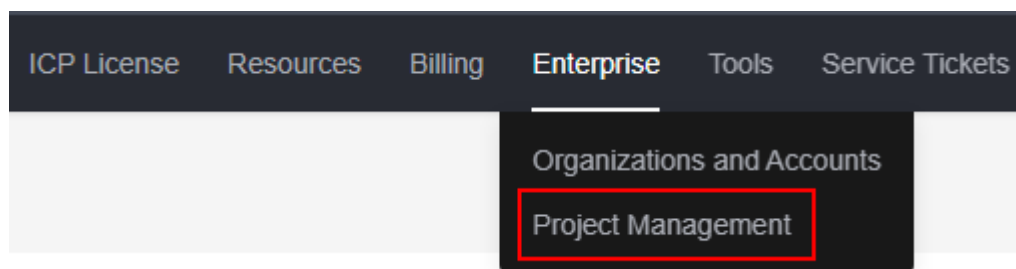
Step 3 On the **Enterprise Project Management Service** page, click the name of the enterprise project you want to view.

Step 4 On the enterprise project details page that is displayed, click the **Permissions** tab, and click **Authorize User**.

Figure 2-74 User Authorization
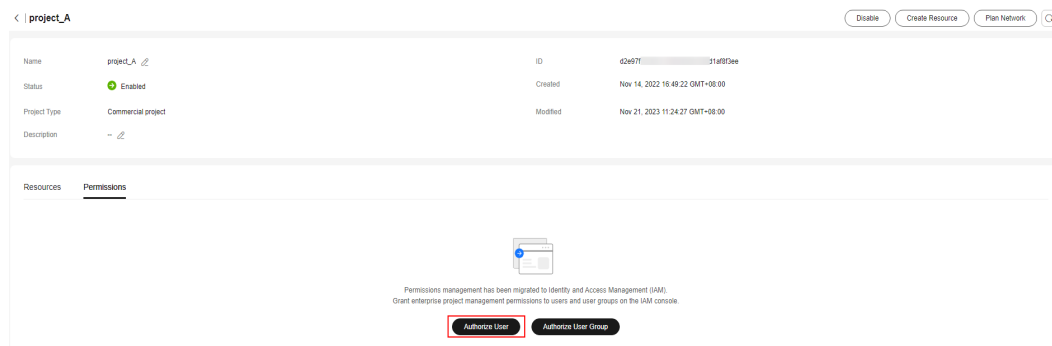
Step 5 On the IAM **Users** page that is displayed, click the user name to go to the user details page.

Step 6 On the **Permissions** tab, click **By Enterprise Project**, select the target enterprise project, and click **Delete** in the **Operation** column.

To delete enterprise projects in batches, select the enterprise projects in the list and click **Delete** above the list.

Figure 2-75 Deleting enterprise projects that are managed by a user
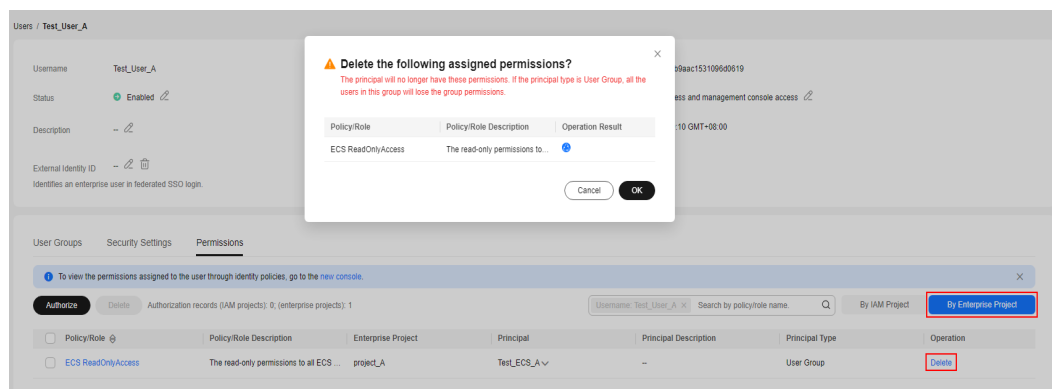
Step 7 In the displayed dialog box, click **OK**.

The enterprise projects that are managed by the user are deleted.

----End

Other Operations

Users inherit permissions from their user groups. Adding or removing users from a user group allows you to efficiently manage user permissions. For details, see **Adding Users to or Removing Users from a User Group**.

2.14 Quotas

What Are Quotas?

Quotas are the limits put on resources to prevent waste. Each service has their own quotas.

You can create up to 100 enterprise projects with an account. If you need to increase the quota, see **How Do I Apply for a Higher Quota?**.

The quota can be increased to a maximum amount of 256.

How Do I Apply for a Higher Quota?

1. Log in to the management console.
2. In the upper right corner of the page, choose **Resources** > **My Quotas**.

   The **Service Quota** page is displayed.

   Figure 2-76 My Quotas
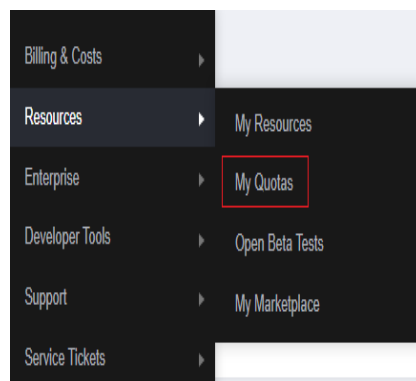
   Figure 2-77 My Quotas
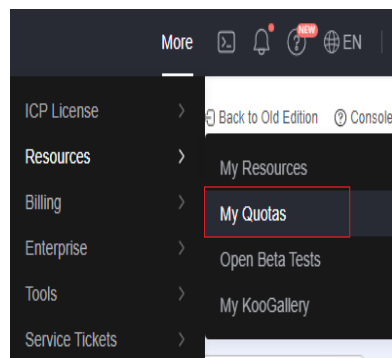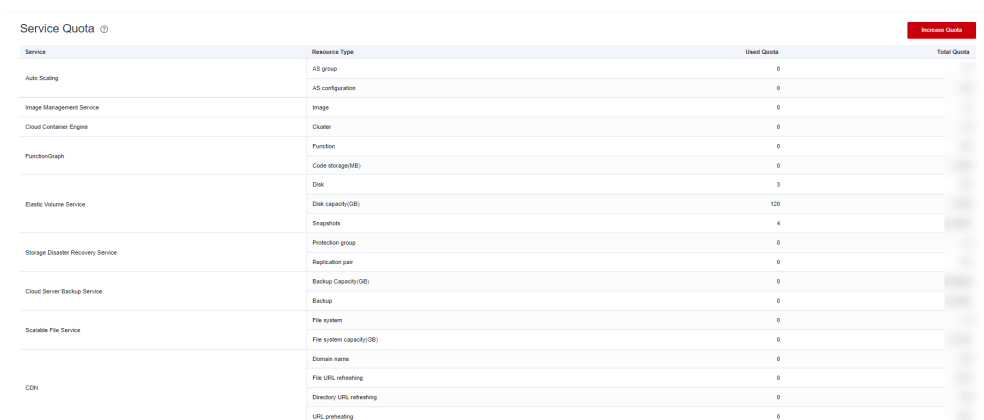
3. Click **Increase Quota** in the upper right corner of the page.

Figure 2-78 Increasing quota

Figure 2-79 Increasing quota

4. On the **Create Service Ticket** page, configure parameters as required.

   In the **Problem Description** area, fill in the content and reason for adjustment.

5. After all necessary parameters are configured, select **I have read and agree to the Ticket Service Protocol and Privacy Statement** and click **Submit**.

2.15 Accounting Management

EPS allows you to manage accounting by enterprise project.

You can create multiple accounts based on your organizational structure, associate the master account with member accounts, and manage accounting based on the enterprise projects in these accounts.

2.15.1 Managing Enterprise Project Groups

2.15.1.1 Creating an Enterprise Project Group

Scenario

An enterprise project group is a collection of enterprise projects. You can add the same type of projects in your account to an enterprise project group to centrally manage accounting.

Prerequisites

You have enabled the enterprise project function.

Procedure

Step 1 Sign in to the management console.

Step 2 Go to the **Overview** page of **Billing Center**.

Step 3 In the upper right corner, click **Enterprise Project Accounting Information**.

The **Enterprise Project Accounting Information** page is displayed.

Step 4 Click **Enterprise Project Group Management** in the description information at the top of the page.

The **Enterprise Project Group Management** page is displayed.

Step 5 Click **Create Project Group**.

The **Create Project Group** dialog box is displayed.

Step 6 Set **Name** and **Description**.

- The name of an enterprise project group can contain a maximum of 64 characters and cannot contain spaces or the following special characters: &()<>'/\"".

- The description can contain a maximum of 200 characters.

Step 7 Click **Next**.

Step 8 Select the enterprise projects you want to add to the group.

📖 **NOTE**

- Next to **Available Projects**, you can enter an enterprise project name and click 🔍. The enterprise project will be displayed in the list.

- One enterprise project can belong to only one enterprise project group only. To move an enterprise project between project groups, remove the project from the old project group first.

- The expenditure summary of an enterprise project group is based on the enterprise projects it currently includes. After an enterprise project leaves a project group, the expenditures for that project will no longer be included in the expenditure summary (both current and historical) for the project group.

Step 9 Click **OK**.

----End

Other Operations

- On the **Enterprise Project Group Management** page, choose **More** > **Modify Group Name** in the **Operation** column of the row containing the target enterprise project group. Then you can enter a new name and description for the group.

- On the **Enterprise Project Group Management** page, choose **More** > **Manage Project List** in the **Operation** column of the row containing the

target enterprise project group. Then you can add enterprise projects to or remove enterprise projects from the group.

- On the **Enterprise Project Group Management** page, choose **More** > **Dismiss** in the **Operation** column of the row containing the target enterprise project group. Then you can dismiss the group.

📖 **NOTE**

After an enterprise project group is dismissed, there will be no accounting information for the project group. However, you can still view the accounting information for each enterprise project.

2.15.1.2 Viewing Expenditures of an Enterprise Project Group

Scenario

Viewing the monthly expenditure amounts and expenditure breakdown of the last 12 months.

Prerequisites

You have enabled the enterprise project function.

Procedure

Step 1 Sign in to the management console.

Step 2 Go to the **Overview** page of **Billing Center**.

Step 3 In the upper right corner, click **Enterprise Project Accounting Information**.

The **Enterprise Project Accounting Information** page is displayed.

Step 4 Click **Enterprise Project Group Management** in the description information at the top of the page.

The **Enterprise Project Group Management** page is displayed.

Step 5 Click **View Expenditure Analysis** in the **Operation** column of the row containing the target enterprise project group.

The **Expenditures Statistics** page of the enterprise project group is displayed.

Step 6 View the monthly expenditure statistics of the last 12 months, including the expenditure amounts and expenditure breakdown.

📖 **NOTE**

On the **Expenditures Statistics** page, click **Export** to export the monthly statistics.

----End

2.15.2 Accessing the Page for Managing Enterprise Project Accounting Information

Scenario

Accessing the page for managing enterprise project accounting information by either of the following consoles:

- The **EPS console**
- The **Billing Center**

Using the EPS Console

Step 1 Sign in to the management console.

Step 2 Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

Figure 2-80 Project Management
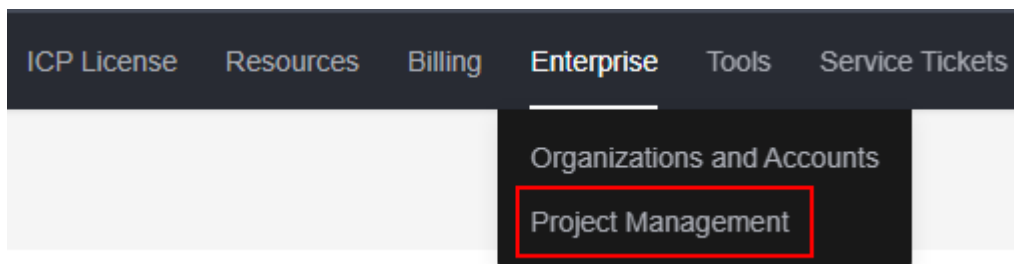
Step 3 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 4 In the left navigation of the **Bills** page, you can choose to go to the **Renewals**, **Orders**, **Bills**, **Unsubscriptions and Changes**, **Quota Management**, or the **Message Reception** page.

----End

Using the Billing Center

Step 1 Sign in to the management console.

Step 2 Choose **Billing & Costs** from the drop-down list of your account name.

Step 3 Go to the **Overview** page of **Billing Center**.

Step 4 In the upper right corner, click **Enterprise Project Accounting Information**.

The **Enterprise Project Accounting Information** page is displayed.

Step 5 Click **Expenditure Bills** in the **Operation** column of the target enterprise project.

The **Expenditure Bills** page of the enterprise project is displayed.

Step 6 In the navigation pane of the **Bills** page, choose **Renewals**, **Orders**, **Bills**, **Unsubscriptions and Changes**, **Quota Management**, and **Message Reception** to perform related operations.

☐ NOTE

On the **Enterprise Project Accounting Information** page, you can choose **Expenditure Bills**, **More** > **Bills**, or **More** > **Set Quota** in the target enterprise project to perform related operations.

----End

2.15.3 Managing Orders

Scenario

You can pay, cancel, export, and view orders for your enterprise projects.

Prerequisites

You have enabled the enterprise project function.

Procedure

Step 1 Go to the page for managing enterprise project accounting information.

☐ NOTE

For details, see **Accessing the Page for Managing Enterprise Project Accounting Information**.

Step 2 In the navigation pane, choose **Orders**.

Step 3 Select an order to pay it, cancel it, export it, or view its details.

- To pay an order, see **Paying for Orders**.
- To cancel an order, see **Canceling Orders**.
- To export an order, see **Exporting Orders**.
- To view the details of an order, see **Viewing Order Details**.

----End

2.15.4 Managing the Bills of an Enterprise Project

2.15.4.1 Viewing and Exporting the Monthly Expenditure Summary of an Enterprise Project

Scenario

Viewing and exporting monthly expenditure of an enterprise project

Batch operations are supported.

Prerequisites

You have enabled the enterprise project function.

Viewing the Monthly Expenditure of an Enterprise Project

Step 1 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 2 Log in to the **Bills**.

Step 3 Select a month from the drop-down list on the **Overview** tab.

Step 4 View the monthly expenditure statistics of the enterprise project, including the expenditure amounts and description.

----End

Exporting the Monthly Bill of an Enterprise Project

Step 1 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 2 Log in to the **Bills**.

Step 3 Select a month from the drop-down list on the **Overview** tab.

Step 4 Click **Export** to export the monthly expenditure bill of the enterprise project.

----End

Exporting Monthly Bills of Multiple Enterprise Projects

Step 1 Go to the **Overview** page of **Billing Center**.

Step 2 In the upper right corner, click **Enterprise Project Accounting Information**.

The **Enterprise Project Accounting Information** page is displayed.

Step 3 Select a month from the drop-down list above the enterprise project accounting information list.

Step 4 Click the check boxes of all enterprise projects whose expenditure bills you want to export, and click **Export**.

----End

Downloading Monthly Bills of Multiple Enterprise Projects

Step 1 Go to the page for managing enterprise project accounting information.

☐ NOTE

For details, see **Accessing the Page for Managing Enterprise Project Accounting Information**.

Step 2 In the navigation pane, choose **Bills** > **Export History**.

Step 3 Click **Download** in the **Operation** column of the row containing the export record to download, and download the export record to a local directory.

----End

2.15.4.2 Viewing the Expenditure Details of an Enterprise Project

Scenario

Viewing the expenditure details of an enterprise project

Prerequisites

You have enabled the enterprise project function.

Procedure

Step 1 Go to the page for managing enterprise project accounting information.

◫ NOTE

For details, see **Accessing the Page for Managing Enterprise Project Accounting Information**.

Step 2 In the navigation pane, choose **Bills** > **Expenditure Bills**.

Step 3 Click a tab to view the bill details.

- **Overview**: Displays the expenditure summary by month.

- **Transaction Bills**: Displays bills based on transaction time.

- **Bill Details**: Displays bill information based on the specified data type and statistical period.

Step 4 Set search criteria to filter expenditure records.

----End

2.15.4.3 Exporting Records

Scenario

Exporting records by clicking **Export** on the **Expenditure Bills** page of an enterprise project, or conducting a batch export by clicking **Export** on the **Enterprise Project Accounting Information** > **Overview** page after choosing your target projects, then downloading the exported records from the **Export History** page.

◫ NOTE

- To access the **Expenditure Bills** page , see **Accessing the Page for Managing Enterprise Project Accounting Information**.

- For details about how to access the **Enterprise Project Accounting Information** > **Overview** page, see **Using the Billing Center**.

Prerequisites

You have enabled the enterprise project function.

Restrictions and Limitations

The exported records will be automatically deleted three days after the export request takes effect. Download the exported files in time.

Procedure

Step 1 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 2 Log in to the **Bills**.

Step 3 In the navigation pane, choose **Bills** > **Export History**.

📖 **NOTE**

You can download the export records on the **Enterprise Project Accounting Information** > **Export History** page.

Step 4 Click **Download** in the **Operation** column of the row containing the desired record.

You can download the record to a local directory.

----End

2.15.5 Managing Resources of an Enterprise Project

2.15.5.1 Unsubscribing from Resources in an Enterprise Project

Scenario

If you have enabled the enterprise project function, you can unsubscribe from resources of an enterprise project.

Prerequisites

You have enabled the enterprise project function.

Procedure

Step 1 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 2 Log in to the **Bills**.

Step 3 Choose **Orders**>**Unsubscriptions**.

Step 4 Select a resource and unsubscribe it.

- For details about how to unsubscribe from a resource in use, see **Unsubscribing from In-Use Resources**.

- For details about how to unsubscribe from inactive resources, see **Unsubscribing from Inactive Resources**.

- For details about how to unsubscribe from a renewal period, see **Unsubscribing from a Renewal Period**.

◌ NOTE

- For details about how to unsubscribe from a resource that fails to be created or changed, see **Unsubscribing from a Resource That Fails to Be Created or Changed**.
- To view unsubscription records, click **Historical Unsubscriptions** in the upper right corner of the **Cloud Service Unsubscriptions** page.

----End

2.15.5.2 Renewing Resources of an Enterprise Project

Scenario

If you have enabled the enterprise project function, you can view resources of every enterprise project and renew the resources that are about to expire.

Prerequisites

You have enabled the enterprise project function.

Procedure

Step 1 Go to the page for managing enterprise project accounting information.

◌ NOTE

For details, see **Accessing the Page for Managing Enterprise Project Accounting Information**.

Step 2 In the navigation pane, choose **Renewals**.

Step 3 Renew the desired resources.

- For manual renewal, see **Manually Renewing a Resource**.
- For automatic renewal, see **Enabling Auto-Renewal**.

----End

2.15.5.3 Changing the Billing Mode of Resources in an Enterprise Project

Scenario

Changing the billing mode of resources in an enterprise project, including from yearly/monthly to pay-per-use. A change to pay-per-use takes effect after the current subscription ends.

Prerequisites

You have enabled the enterprise project function.

Restrictions and Limitations

Currently, the billing mode of resources in an enterprise project cannot be changed from pay-per-use to yearly/monthly.

Procedure

Step 1 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 2 Log in to the **Bills**.

Step 3 In the navigation pane, choose **Renewals**.

Step 4 Set filter criteria and select the desired resources.

Step 5 Click **Pay-per-Use After Expiration** above the resource list or choose **More** > **Change to Pay-per-Use After Expiration** in the **Operation** column for the desired resources.

Step 6 Confirm the subscription change details and click **Change to Pay-per-Use** on the **Change to Pay-per-Use After Expiration** page.

----End

📖 **NOTE**

For details, see **From Yearly/Monthly to Pay-per-Us**.

2.15.6 Setting a Fund Quota for an Enterprise Project

Scenario

You can set a fund quota for the enterprise project to control the use of funds for the enterprise project.

When the funds of an enterprise project are insufficient, you can configure fund quotas to restrict subsequent subscription of yearly/monthly cloud resources and provisioning of pay-per-use cloud resources. However, there is no restriction on existing cloud resources. You can continue to use pay-per-use cloud resources, renew yearly/monthly cloud resources both manually and automatically, change to yearly/monthly subscription, modify resource configuration, and perform other operations on existing cloud resources.

On the page for managing the accounting information of an enterprise project, you can view the fund quota of the enterprise project, enable or disable the fund quota, and enable or disable the quota balance alert.

📖 **NOTE**

Fund quotas set for enterprise projects are used only to ensure that funds are appropriately used for enterprise projects. When a user under an enterprise project purchases cloud resources, the fee is deducted from the user's Huawei Cloud account, and the fund quota of the enterprise project is also deducted.

Prerequisites

You have enabled the enterprise project function.

Setting a Fund Quota

Step 1 On the **Enterprise Project Management Service** page, click **View Expenditures** in the **Operation** column of the row that contains the target enterprise project.

Step 2 Log in to the **Bills**.

Step 3 Click **Quota Management** on the navigation pane and the **Set Quota** page will be displayed.

  ☐ NOTE

  A fund quota cannot be set for the **default** enterprise project.

Step 4 If the quota setting is disabled, enable it. If it is already enabled, go to **Step 5**.

  ☐ NOTE

  After the fund quota setting is disabled for an enterprise project, the expenditures of this enterprise project will no longer be controlled by the quota.

Step 5 Select a policy to deal with the circumstance in which the fee required to purchase a yearly/monthly subscribed or pay-per-use resource is greater than the quota balance, and set the quota balance.

The following two policies are available:

- Allow purchases of provisioning of pay-per-use cloud resources and yearly/monthly cloud resources: When the quota balance of an enterprise project is insufficient, the purchase of yearly/monthly cloud resources and provisioning of pay-per-use cloud resources are allowed.

- Prohibit purchases of provisioning of pay-per-use cloud resources and yearly/monthly cloud resources: When the quota balance of an enterprise project is insufficient, the purchase of yearly/monthly cloud resources and provisioning of pay-per-use cloud resources are prohibited. As pay-per-use resources are post-paid resources, their usage is not applied to the quota until the following day. This means that even if the quota will be exceeded on the following day, on that day before the usage has been applied, new pay-per use resources can still be subscribed to.

Step 6 Click **Sure**.

A message is displayed indicating that the operation is successful.

  ☐ NOTE

  - Click **Change** next to **Current Quota Balance** to modify the quota balance.
  - Click **Show** next to **Balance Change History** to view historical quota change records.

  ----End

Enabling the Balance Alert

When the fund quota balance decreases below the threshold, the system sends a text message and an email to notify the message receiver of the insufficiency.

Step 1 Go to the **Quota Management** page.

Step 2 If balance alert is disabled, enable it. If it is already enabled, go to **Step 3**.

     📖 **NOTE**

        After balance alert is disabled, Huawei Cloud will no longer send text messages for alerting an insufficient balance.

Step 3 Set the balance alert threshold.

- Click **Modify** next to the **Alarm Threshold** to change the alarm threshold.

- Click **Message Reception** in the **Notification** to set the recipients.

----End

2.16 FAQs

2.16.1 What Are the Differences Between IAM and Enterprise Management?

Enterprise Management allows you to hierarchically manage resources with enterprise projects to align with your organizational structure. It includes enterprise project, personnel, accounting, and application management.

Identity and Access Management (IAM) is an identity management service that provides identity authentication, permissions management, and access control.

You can use both IAM and Enterprise Management to manage personnel and permissions. Enterprise Management also provides accounting and application management, and supports more fine-grained access control. For medium- and large-sized enterprises, Enterprise Management is a better choice.

For more information about IAM features, see **Identity and Access Management**.

Differences Between IAM and Enterprise Management

- Enabling method

  - IAM is an identity management service. It is free of charge, and you can use it immediately after signing up for Huawei Cloud.

  - Enterprise Management is a resource management service. You need to enable it after you sign up for Huawei Cloud. For details, see **Enabling Enterprise Center** and **Enabling the Enterprise Project Function.**

         📖 **NOTE**

            The Enterprise Management service is free of charge. You only need to pay for your resources.

- Resource isolation

  - IAM allows you to create multiple projects in a region for resource isolation. An IAM project can contain resources of only one region. If you assign permissions based on IAM projects, users with related permissions can access all resources in a specific project.

  - Enterprise Management allows you to create multiple enterprise projects in a region for resource isolation. An enterprise project can contain resources of multiple regions. You can control access to a specific resource. For example, you can add an Elastic Cloud Server (ECS) to an

enterprise project, and assign permissions to a user for managing the ECS in the project instead of other ECSs.

- Supported services
  - See **Supported Cloud Services**.
  - For details about the cloud services supported by Enterprise Management, see **Supported Cloud Services**.

Authentication Process

When a user initiates an access request, the system authenticates the request based on the actions in the policies that have been attached to the group to which the user belongs. The following figure shows the authentication process.

Figure 2-81 Authentication process
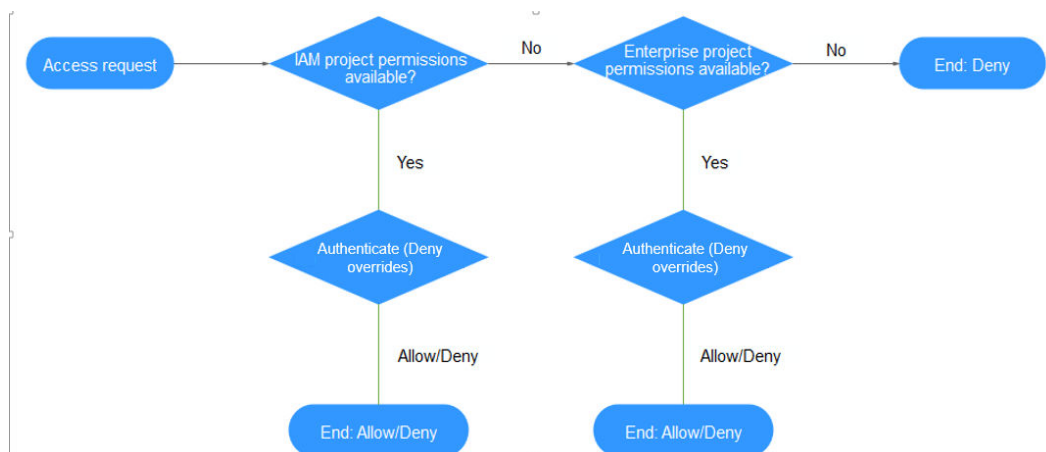
1. A user initiates an access request.

2. The system checks actions in IAM-project-based policies.

3. If a matched Allow or Deny action is found, the system returns an authentication result (Allow or Deny), and the authentication finishes.

4. If no matched actions are found in IAM project policies, the system continues to check actions in enterprise-project-based policies.

5. If a matched Allow or Deny action is found, the system returns an authentication result (Allow or Deny), and the authentication finishes.

6. If no matched actions are found, the system returns a Deny, and the authentication finishes.

2.16.2 What Are the Differences Between IAM Projects and Enterprise Projects?

IAM Projects

An IAM project can contain resources of only one region.

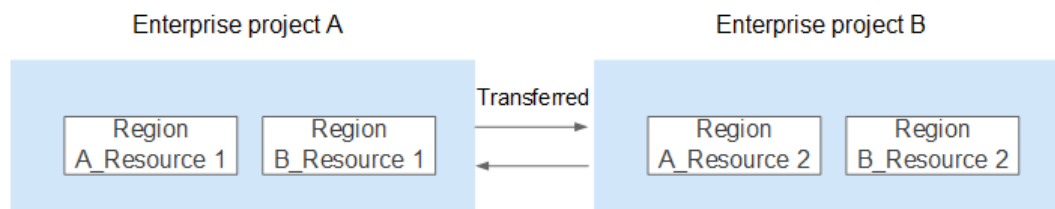You cannot transfer resources between IAM projects.
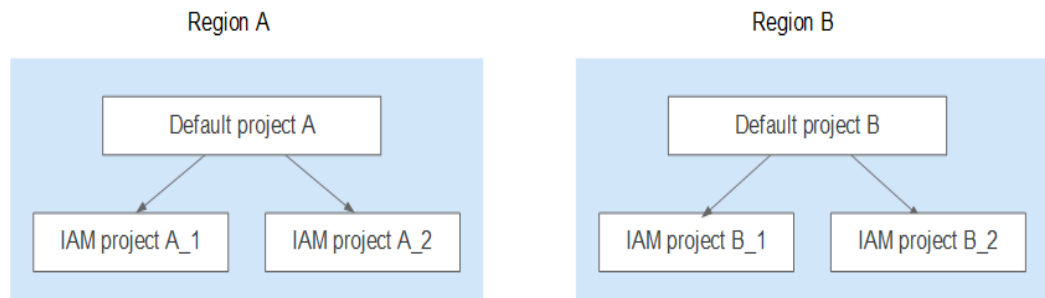
Enterprise Projects

An enterprise project can contain resources of different regions.

You can transfer resources between enterprise projects.

If you have enabled Enterprise Management, you will no longer be able to create IAM projects.

2.16.3 What Are the Differences Between IAM Users and Enterprise Member Accounts?

IAM Users

IAM users are created using an account in IAM or Enterprise Management (**User Management** page). They are managed and granted permissions by the account. **Bills generated by the IAM users' use of resources are paid by the account.**

In an enterprise, if there are multiple employees who need to use the resources purchased from Huawei Cloud through an account, the account can be used to create IAM users for these employees and assign permissions to the users for using resources. The IAM users have their own passwords for accessing the resources under the account.

For details about how to create an IAM user, see **Creating an IAM User**.

Enterprise Member Accounts

Both enterprise master accounts and member accounts are generated upon successful registration with Huawei Cloud. **Accounting Management** of Enterprise Management allows multiple Huawei Cloud accounts to be associated with each other for accounting purposes. You can create a hierarchical organization and a master account, add member accounts to this organization, and associate them with the master account.

The master account can allocate funds to member accounts so that the member accounts can use the funds to **manage resources**.

Both the master account and member accounts can create IAM users to control access to specific resources. An account can only manage its own IAM users but cannot manage the IAM users created by other accounts.

For details about how to create a member account, see **Creating a Member Account**.
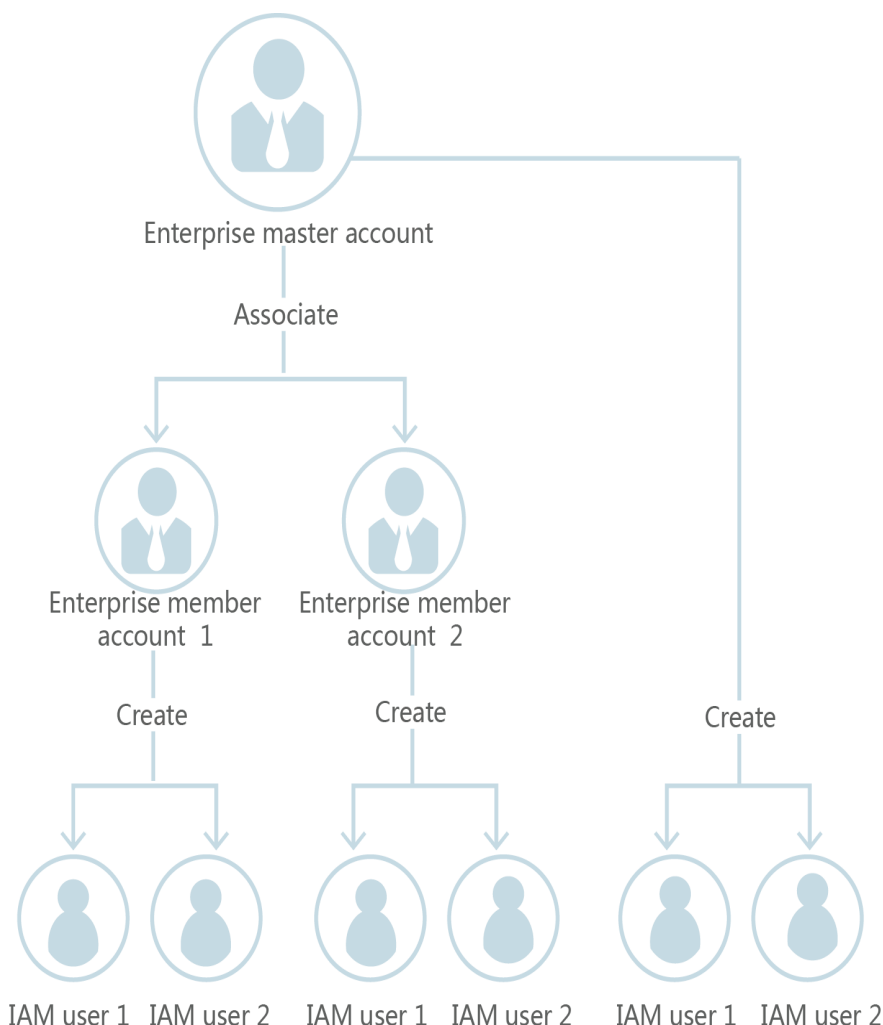
2.16.4 How Can I View All Enterprise Projects?

- An enterprise administrator can view all information about all enterprise projects.
- An IAM user with related permissions can view information about all enterprise projects.

2.16.5 How Do I Obtain an Enterprise Project ID?

- By calling an API

  You can call the API for querying enterprise project IDs provided by Enterprise Management. For details, see **Enterprise Management API Reference**.

- From the enterprise project details page. The procedure is as follows:

  a. Sign in to the management console.

b. Choose **Enterprise** > **Project Management** in the upper right corner of the page.

If the screen resolution is low, choose **More** > **Enterprise** > **Project Management**.

c. Click the enterprise name to be queried to view its ID on the displayed details page.

2.16.6 What Can I do if I Cannot Obtain Enterprise Projects Using the EPS Java or Python SDK?

If you cannot obtain enterprise projects using the EPS Java or Python SDK, you can follow the following procedure to find out the reason:

Step 1 Check whether the token is obtained in DomainToken mode. EPS is a global service. Therefore, DomainToken is required.

Step 2 If you use the SDK in AK/SK authentication mode, check whether the authentication mode is domain-level. When the AK/SK is transferred to API Gateway, API Gateway converts the AK/SK into a response token, which is used to invoke EPS.

Step 3 Check whether the domain name of the HTTP API for requesting EPS is correct. You can view the domain name in the detailed logs. Set the log displaying statement before calling the API.

● To print logs in Java, run the following statement:

OSFactory.enableHttpLoggingFilter(true);

● To print logs in Python, run the following statement:

utils.enable_logging(debug=True,stream=sys.stdout)

Step 4 The public cloud domain name of EPS is unique. The endpoint is https://eps.myhuaweicloud.com/v1.0.

If the domain name of the HTTP interface for requesting EPS is incorrect, perform the following operations to set the correct EPS endpoint:

● In Java, most code is displayed in the SDK Demo and you only need to pay attention to the following comments:

// Generate an endpoint parser.

OverridableEndpointURLResolver endpointResolver = new OverridableEndpointURLResolver();

endpointResolver.addOverrideEndpoint(ServiceType.EPS, "https://eps.myhuaweicloud.com/v1.0");

String user = "xxxxx";

String password = "******";

String userDomainId = "yyyyyyyyyyy";

String authUrl = "https://iam.xxxx.com/v3";

// Configure log display.

OSFactory.enableHttpLoggingFilter(true);

// Generate the **config** object.

Config config = Config.newConfig().withEndpointURLResolver(endpointResolver);

// Request the client to use the **config** object.

OSClient.OSClientV3 osclient =
OSFactory.builderV3().endpoint(authUrl).withConfig(config)

.credentials(user, password,
Identifier.byId(userDomainId)).scopeToDomain(Identifier.byId(userDomainId)).auth
enticate();

- Python:

os.environ.setdefault('OS_EPS_ENDPOINT_OVERRIDE', 'https://
eps.myhuaweicloud.com/v1.0')

Step 5 If a 500 error is reported when the API is called, contact customer service.

☐ **NOTE**

The SDK of an earlier version is complex to use. You are advised to use the Union SDK of
the latest version.

----End

2.16.7 How Many Enterprise Projects Can I Create?

By default, you can create up to 100 enterprise projects with an account.

If you need more enterprise projects to manage resources, **create a member
account**, and you can create more enterprise projects with the member account.

If you still need more enterprise projects, you can apply for a higher quota. For
details, see **How Do I Apply for a Higher Quota?**.

2.16.8 Will Adding or Removing a Resource from an Enterprise Project Change the VPC and Related IPs of the Resource?

No.

Transferring resources between enterprise projects may affect resource access for
users that are added to the projects. It will not change the VPC or related IPs of
the resource.

Transferring a resource between enterprise projects does not affect the resource
itself. For example, the transferring will not cause an instance to restart, change
network configurations, or change the ownership of resources.

However, if you grant resource access based on enterprise projects, users may be
affected to access related resources. For example, if you grant a user only the
permissions to access resources of project A, after the resources are transferred to
project B, the user may fail to access the resources due to insufficient permissions.

2.16.9 How Do I Limit Specific Enterprise Projects to Different IAM Users?

Background

Your account A has two IAM users (User B and User C) and two enterprise projects (B and C).

You want to:

- Allow user B to view and manage resources only in enterprise project B.
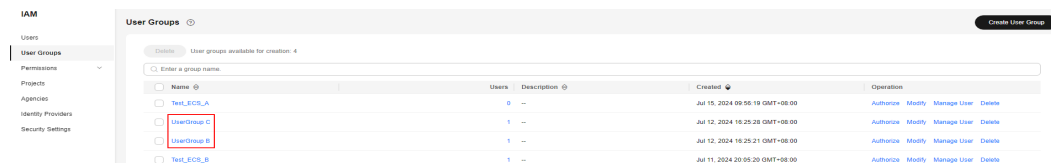- Allow user C to view and manage resources only in enterprise project C.

Procedure

Step 1 Create user groups.

In the IAM console, create user groups B and C.

For details how to create a user group and assign permissions, see **Creating a User Group and Assigning Permissions**.
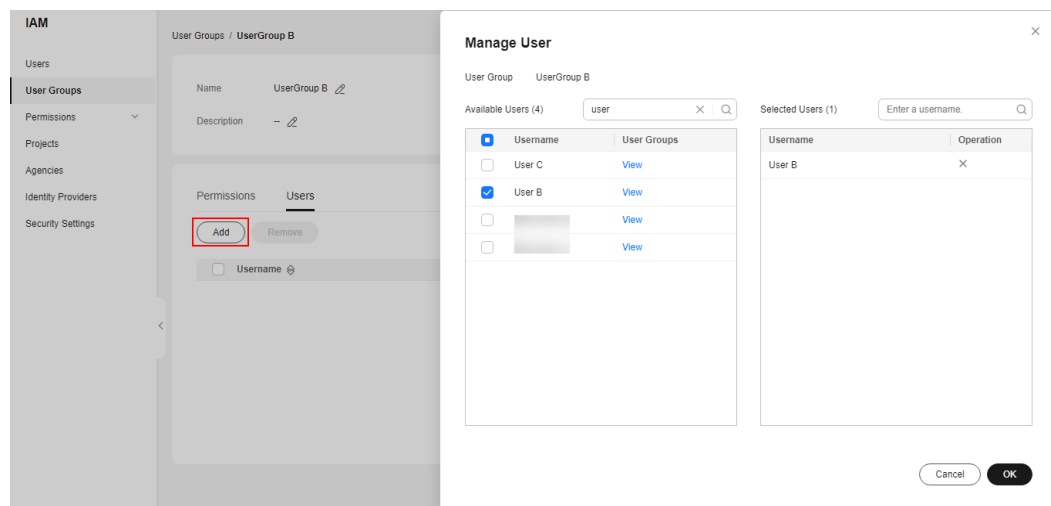
Figure 2-82 Created user groups

Step 2 Add users to user groups.

Add user B and user C to groups B and C, respectively.

For details about how to create a user and add it to the user group, see **Creating an IAM User**.

**Figure 2-83** Adding a user to a user group

Step 3 Assign permissions to user groups.

Assign policies, for example, ELB FullAccess, to groups B and C.

1. In the **Operation** column of the row containing user group B, click **Authorize**.
2. Select the ELB FullAccess policy and click **Next**.
3. Select a scope and click **OK**.

   Select **Enterprise projects** for **Scope**, and select enterprise project B in the displayed enterprise project list.

   Figure 2-84 Selecting a scope
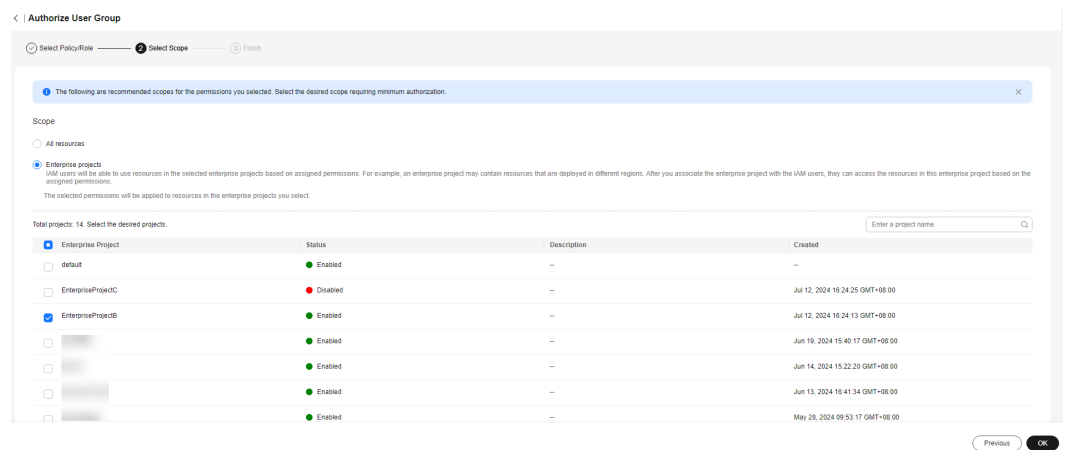
4. Click **Finish**.
5. Repeat steps **3.1** to **3.4** to assign the ELB FullAccess policy to user group C.

----End

Verification

Log in to the management console as user B and create a load balancer. If only enterprise project B can be selected, the permissions have taken effect.