

# Enterprise Management

## User Guide

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# 1 Enterprise Center

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## 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 multiple Huawei IDs with Huawei Cloud services enabled to be associated with each other for management. You can create a hierarchical organization and a master account, add member accounts to this organization, and associate them with the master account.

### 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.

### 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 the HUAWEI CLOUD Enterprise Management Service Agreement** and click **Enable for Free**.

**Enable Enterprise Center**

When Enterprise Center is enabled, the current account will function as a master account and can associate with other HUAWEI CLOUD accounts (members) for fund and accounting management. You can set the accounting permissions for a member account when it is created or associated. If you invite an existing HUAWEI CLOUD account as a member account, the requested accounting permissions must be granted by the invited account.

**!** When Enterprise Center is enabled, the current account will function as an enterprise master account and cannot be invited by other master accounts for association.

I have read and agree to the HUAWEI CLOUD Enterprise Management Service Agreement.

**Enable for Free**

----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.

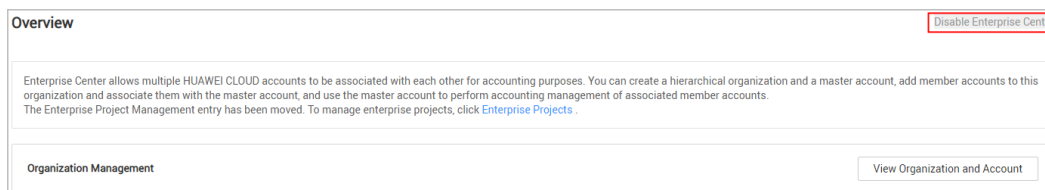
### Prerequisites

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.

The screenshot shows a web form titled "Organizations and Accounts / Create Organization". The form contains the following elements:

- A red asterisk icon followed by the label "Name:" and a text input field with the placeholder text "Enter a name."
- The label "Parent Organization:" followed by a dropdown menu showing a blurred selection and an "Edit" link.
- The label "Description:" followed by a large text area with the placeholder text "Enter a description." and a character count "0/200" in the bottom right corner.
- At the bottom of the form, there are two buttons: a red "Submit" button and a white "Cancel" button.

 **NOTE**

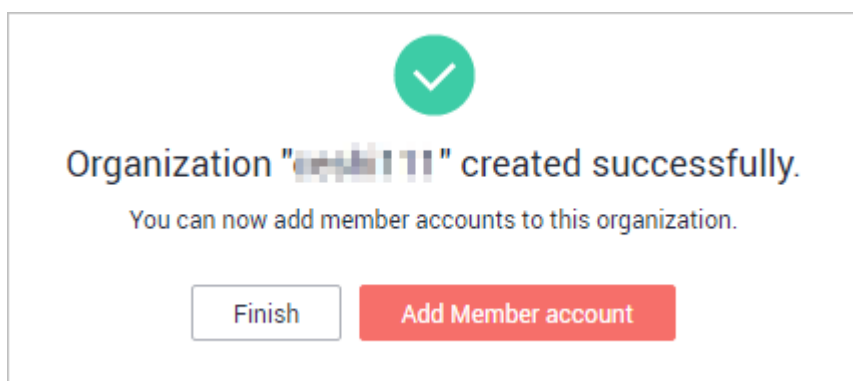
To change the parent organization, click **Edit** next to the **Parent Organization** field.

**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.

### 1.5.2.2 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.

The screenshot shows the 'Create Member Account' form with the following fields and options:

- Parent Organization:** A dropdown menu with a blurred selection and an 'Edit' link.
- \* Account Name:** A text input field with the placeholder 'Enter an account name.'
- Member Account Alias:** A text input field with the placeholder 'Enter an alias for the account.'
- \* Email Address:** A text input field with the placeholder 'Enter the account's email address.'
- Verification Code:** A text input field with the placeholder 'Enter the email verification code.' and a 'Send Code' button. Below the field, a note states: 'The verification code is valid for 1 hours. You can enter it later in the Requests area on the Enterprise Center > Overview page.'
- \* Password:** A text input field with the placeholder 'Password'.
- \* Confirm Password:** A text input field with the placeholder 'Confirm password'.
- Payment Method:** Two radio button options:
  - Automatic** (The system preferentially selects coupons that will expire in the current month and selects the coupon with the largest balance. [Learn more](#))
  - 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.)
- \* Agreement:** A checkbox with the text 'I have read and agree to the [Unified Accounting Management Agreement](#).'

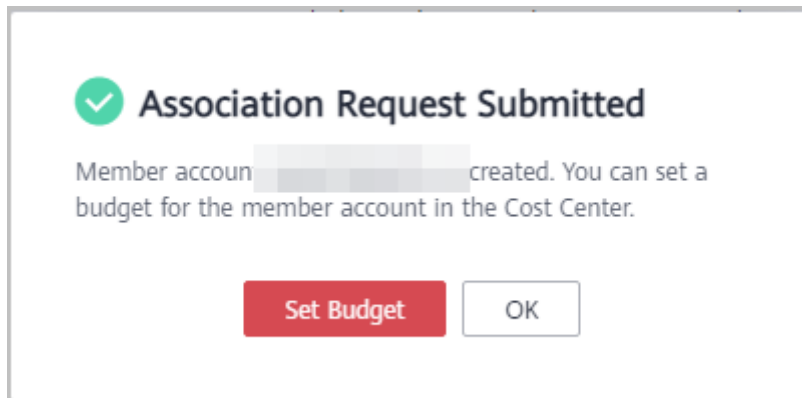
At the bottom of the form are two buttons: 'Submit' and 'Cancel'.

**Step 5** Click **Submit**.

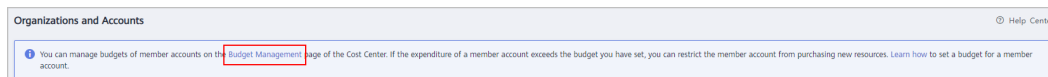
The system displays a message indicating that the member account is created.

**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 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**.

Invite Existing Account

Parent Organization

\* Account

Member Account Alias

Payment Method

Automatic (Discounts or cash coupons of the enterprise master account will be automatically matched for payment. [Learn more](#))

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.)

\* Agreement  I have read and agree to the Unified Accounting Management Agreement.

**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**.

Service	Permissions	Description	Effect	Operation
---------	-------------	-------------	--------	-----------

**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.	
		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

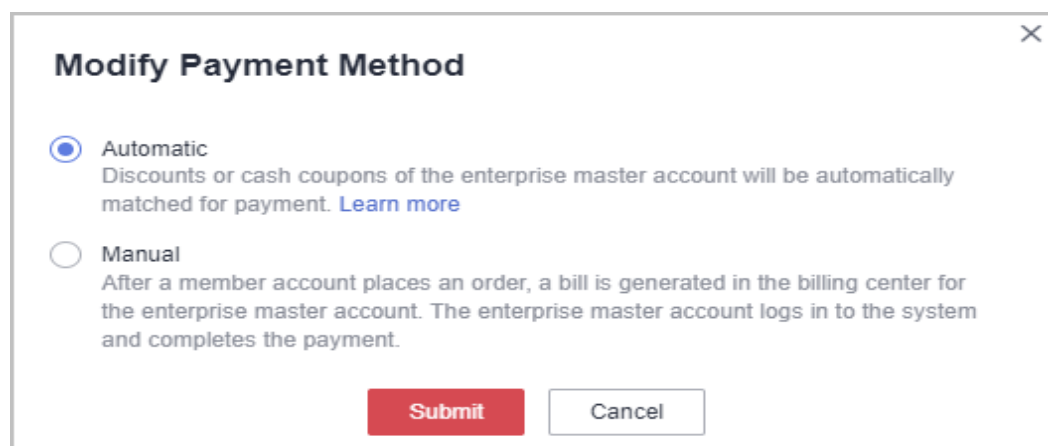
### 1.5.2.4.4 Modifying the Payment Method of a Member Account

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.



**Modify Payment Method**

**Automatic**  
Discounts or cash coupons of the enterprise master account will be automatically matched for payment. [Learn more](#)

**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.

**Submit** **Cancel**

**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.

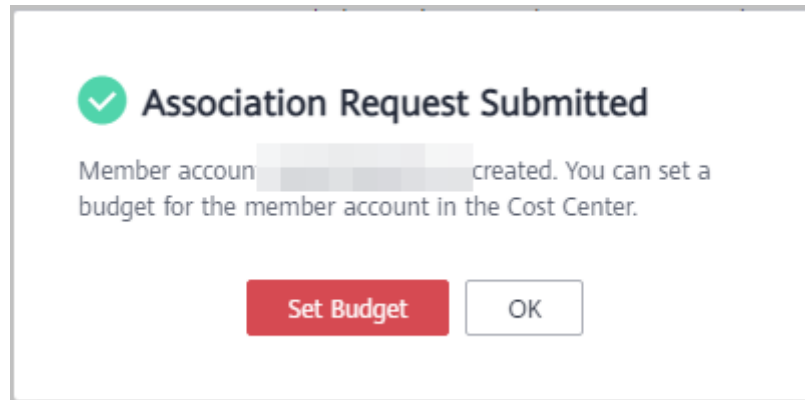
----End

### 1.5.2.7 Setting a Budget for a Member Account

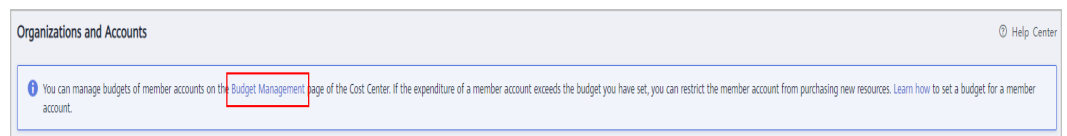
You can use either of the following methods to access the [Cost Center](#) and set budgets for your unified accounting members to control their expenditures.

- 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, <b>Account \Project Group 1</b> .
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:enterpriseOrganization:view	Querying details about an organization or member account
Updating an organization or member account	bss:enterpriseOrganization: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:enterpriseProjectFunction: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	dissociateMemberAccount
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.

Organizations and Accounts / Create Organization

\* Name:

Parent Organization: Parent Organization [Edit](#)

Description:

0/200

 **NOTE**

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

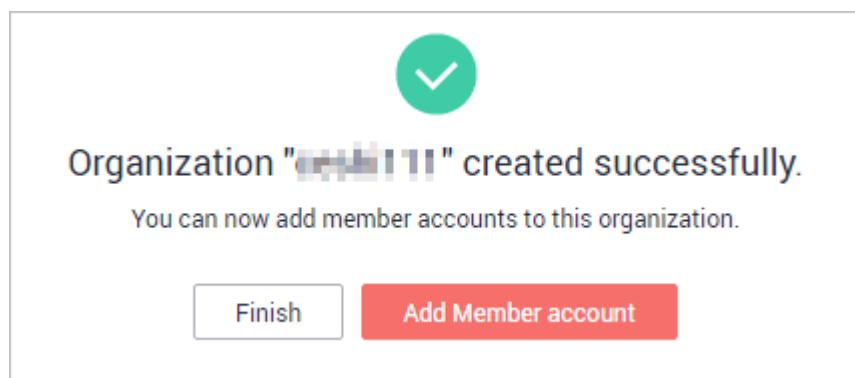
**Step 4** Click **Next**.

 **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**.

The screenshot shows the 'Create Account' step of a three-step process. The progress indicator at the top shows '1 Create Account' as the active step, followed by '2 Select Permissions' and '3 Submit'. Below the progress indicator, there are two required fields: 'Account Name' and 'Email Address'. The 'Account Name' field has a placeholder text 'Enter an account name.' and the 'Email Address' field has a placeholder text 'Enter the account's email address.' Below the 'Email Address' field, there is a note: 'An email will be sent to this address containing a link to reset an account password once the account is created.' At the bottom of the form, there are three buttons: 'Previous', 'Next' (highlighted in red), and 'Cancel'.

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

The screenshot shows the 'Select Permissions' step of a three-step process. The progress indicator at the top shows '2 Select Permissions' as the active step, with '1 Create Account' and '3 Submit' as previous and next steps. Below the progress indicator, there are several fields and options: 'Parent Organization' with a blurred image and an 'Edit' link; 'Member Account Alias' with a placeholder text 'Enter an alias for the account.'; 'Permissions' section with four checkboxes: 'View Accounting Information of Member Account (only in Enterprise Center)' (checked), 'View Expenditures of Member Account (only in Enterprise Center)' (checked), 'Allocate Credit to Member Account' (unchecked with a help icon), and 'Allow Member Account to Use Your Commercial Discounts' (checked). At the bottom, there is a required checkbox: '\* I have read and agree to the HUAWEI CLOUD Enterprise Management Service Agreement.' (checked). At the bottom of the form, there are three buttons: 'Previous', 'Next' (highlighted in red), and 'Cancel'.

#### 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.

Parent Organization Edit

\* Account

Member Account Alias

### 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**.

① Select Account ——— ② Select Permissions ——— ③ Submit

Permissions

- View Accounting Information of Member Account (only in Enterprise Center)
- View Expenditures of Member Account (only in Enterprise Center)
- Allocate Credit to Member Account
- Allow Member Account to Use Your Commercial Discounts

\*  I have read and agree to the HUAWEI CLOUD Enterprise Management Service Agreement.

Previous Next Cancel

#### 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**.

Organization Policies / Create Policy

Basic Information

\* Policy Name:

Description:  0/1,000

Permissions Set

\* Effect:  Deny  Allow  
Explanation: The specified operation is allowed, other operations are denied.

\* Service:

\* Permissions:

Service	Permissions	Description	Effect	Operation
---------	-------------	-------------	--------	-----------

**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.

Basic Information

Account Name: [redacted] Status: Associated [Disassociate Account](#)

Alias: [redacted] [Edit](#) Associated At: Nov 19, 2019 09:42:00 GMT+08:00

Operator: [redacted] Parent Organization: [redacted] [Change](#)

Permissions

Permissions:

- View Accounting Information of Member Account
- View Expenditures of Member Account
- Allocate Credit to Member Account [?](#)
- Allow Member Account to Use Your Commercial Discounts (Cancel)

Permission Change History [View](#) [View](#)

[OK](#)

**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

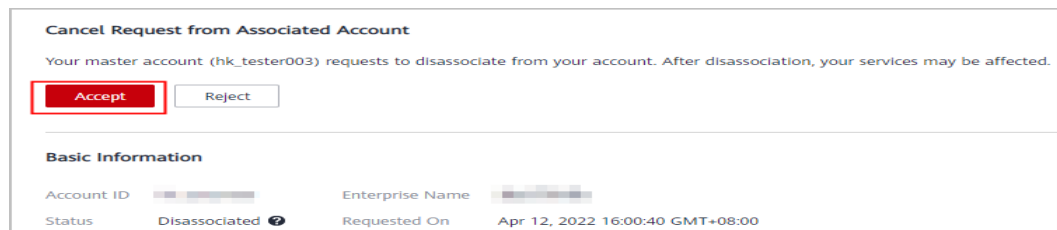
To disassociate a member account from its master account, both accounts must meet the following requirements:

- 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.

---

**Basic Information**

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

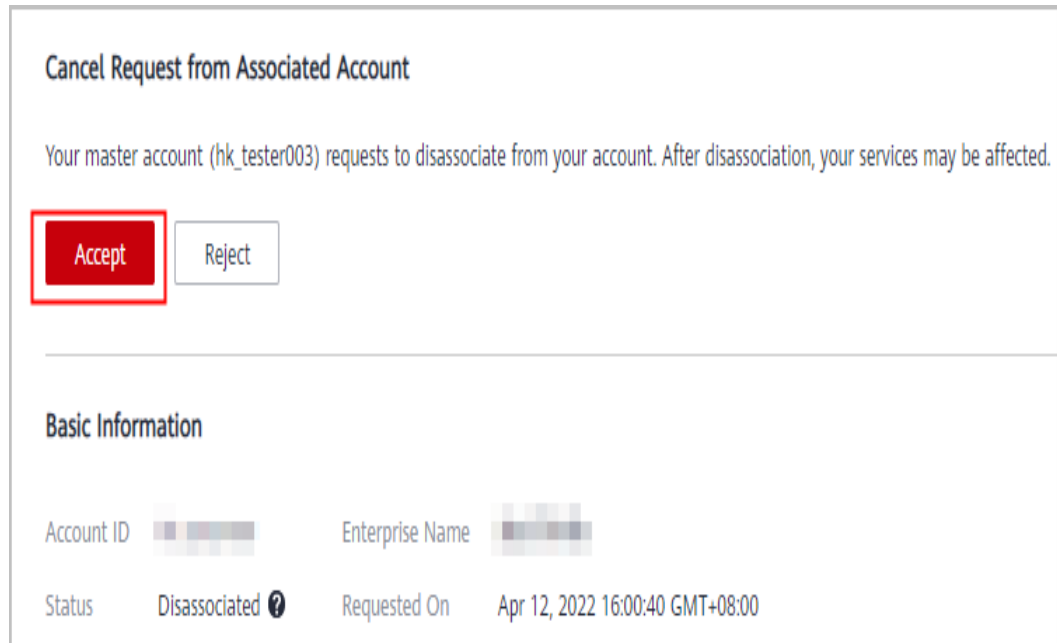
### NOTE

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.

Orders								
<a href="#">Export</a>			Created On: All		Enter an order No. <input type="text"/>		<input type="button" value="Q"/> <input type="button" value="C"/>	
Order No.	Service Type	Created On	Paid On	Order Status	Order Type	Sub-total (¥)	Payable Am...	Operation
	Elastic Cloud S...	Jun 25, 2018 17:07:...	Jun 25, 2018 17:03:...	Processing	New purcha...	161.80	161.80	<a href="#">Details</a>
	Elastic Cloud S...	Jun 25, 2018 17:07:...	Jun 25, 2018 17:04:...	Processing	New purcha...	161.80	161.80	<a href="#">Details</a>

### 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.

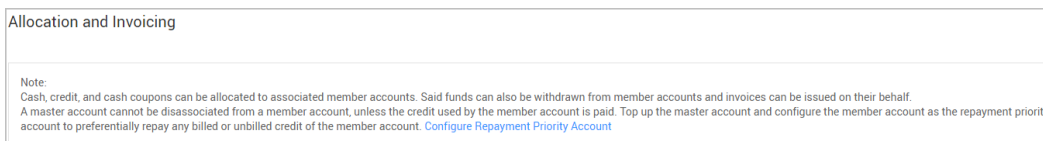
### NOTICE

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.



### 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

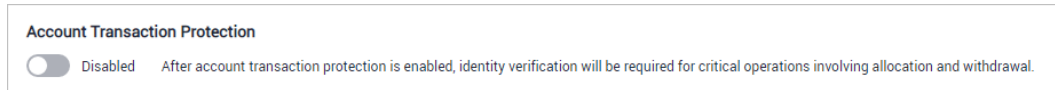
You can enable or disable account transaction protection on the **Overview** page. After this function is enabled, you need to complete identity verification before proceeding with a critical operation, for example, allocating or withdrawing a credit limit.

## 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

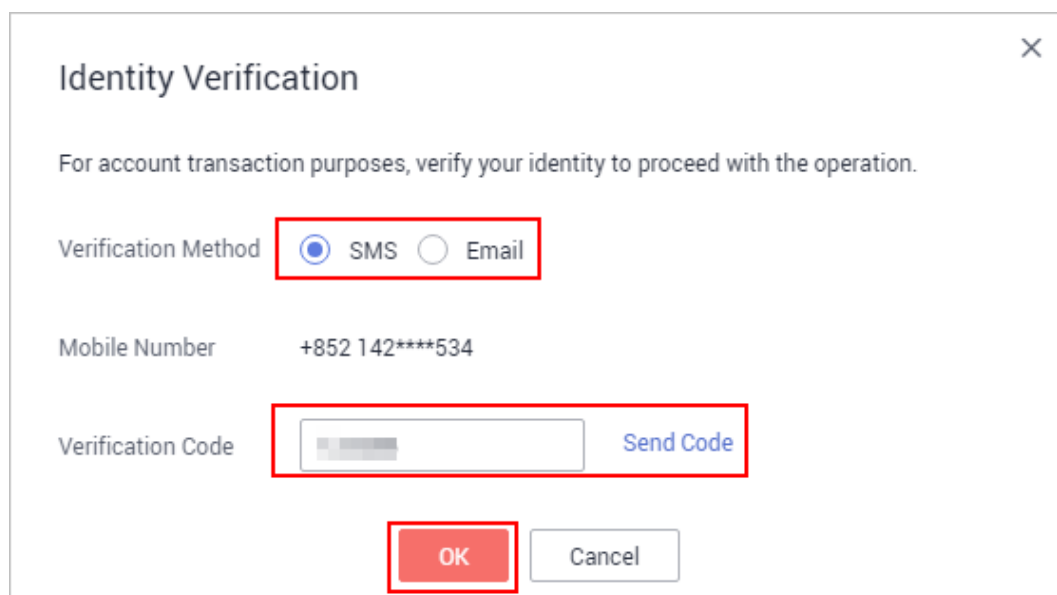


The **Identity Verification** dialog box is displayed.

**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

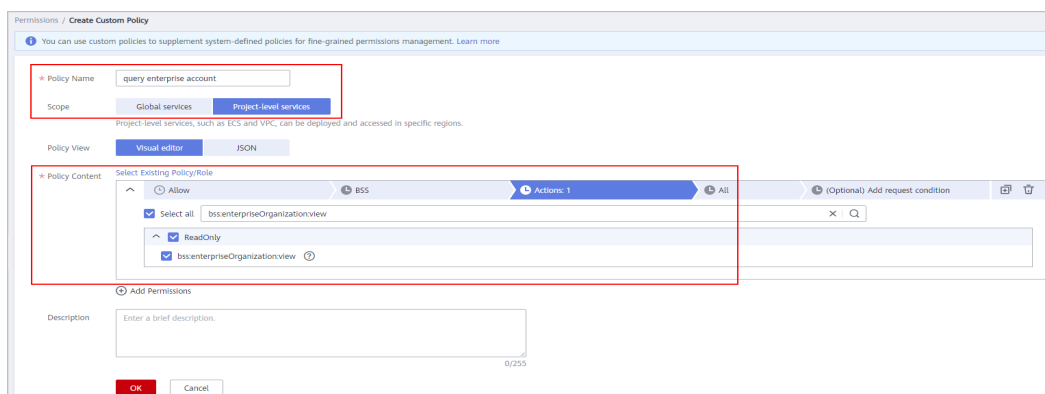
### 1.10.1 Common Issues

#### 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**.

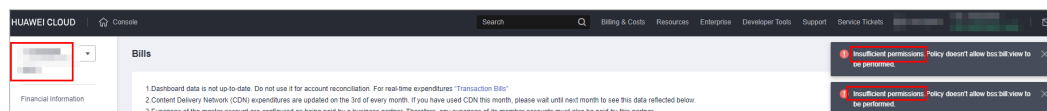
### 1.10.1.10 How Many Member Accounts Can I Associate with My Enterprise Master Account?

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

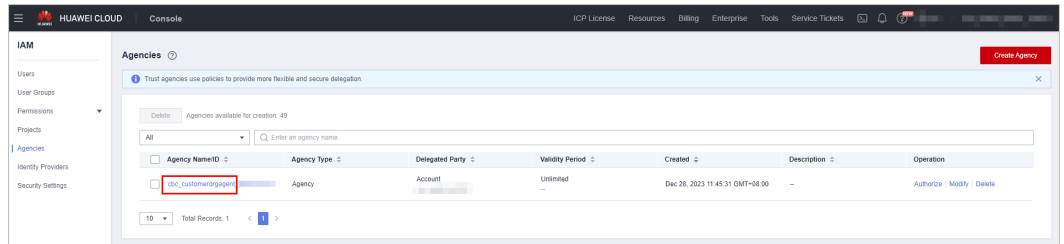
After I signed in to Huawei Cloud using an enterprise master account (an IAM account or a delegated account) and selected a member account from the upper left menu, one or more messages were displayed in the upper right corner of the page, indicating that I had insufficient permissions. The following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



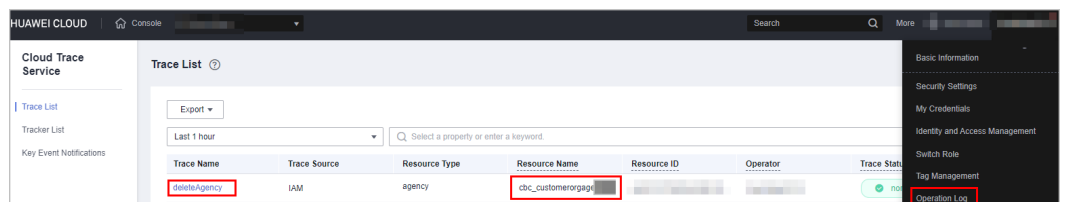
#### Causes and Solutions

1. The **cbc\_customerorgagent\_\*** agency was deleted by the selected member when they associated with you.

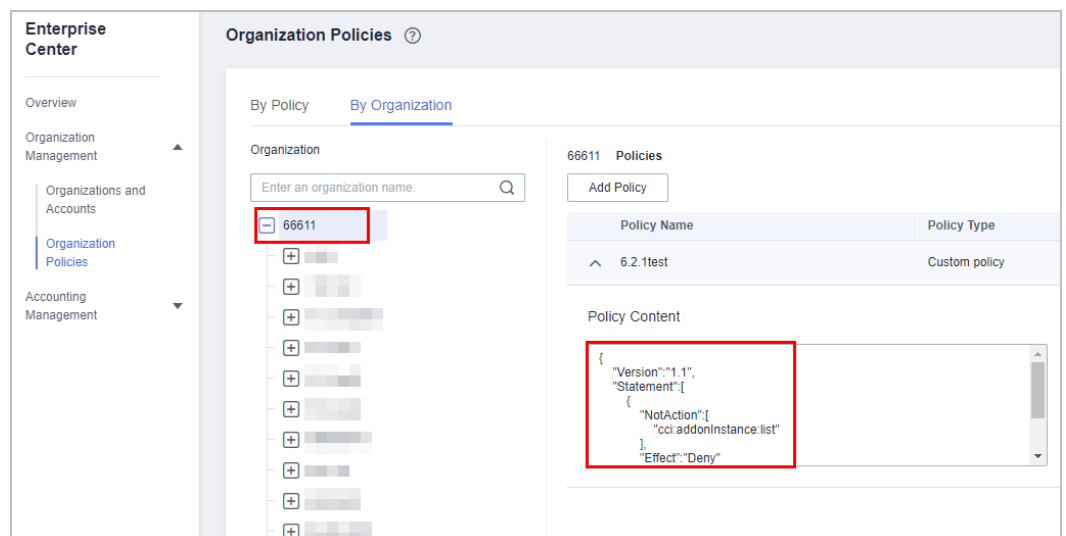
You can search for **cbc\_customerorgagent** on the Identity and Access Management (IAM) console.



- 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.

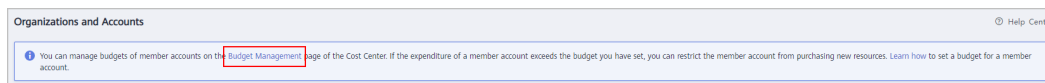
### **1.10.2.4 Can a Member Account Use the Credit, Cash Coupons, and Commercial Discounts of the Master Account to Pay For Services?**

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 Unified Accounting Member Account?

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

Scenario	Sub-Scenario	Resource Account	Member Account
Registration	-	<ol style="list-style-type: none"><li>1. A resource account cannot be independently created.</li><li>2. You can only create a resource account with an enterprise master account using <b>Organizations</b>. A resource account cannot be associated with an enterprise master account through invitations.</li></ol>	<ol style="list-style-type: none"><li>1. A member account can be independently created.</li><li>2. You can create a member account in Enterprise Center. You can also invite a member to associate with you.</li></ol>
Login	-	<ol style="list-style-type: none"><li>1. You cannot sign in to Huawei Cloud with a resource account.</li><li>2. Instead, you can <b>access account resources via agency or IAM</b>.</li></ol>	You can sign in to Huawei Cloud with a member account.
Real-name authentication	-	<ol style="list-style-type: none"><li>1. A member account inherits the real-name information from the enterprise master account that the member account was created with.</li><li>2. You cannot independently perform real-name authentication or change the information of real-name authentication for a resource account.</li></ol>	<ol style="list-style-type: none"><li>1. A member account inherits the real-name information from the enterprise master account that the member account was created with.</li><li>2. You cannot independently perform real-name authentication or change the information of real-name authentication for a resource account.</li></ol>

Account information	-	<ol style="list-style-type: none"> <li>1. You can view basic information, real-name information, address, and preference configurations.</li> <li>2. You cannot modify basic information, real-name information, address, and preference configurations.</li> <li>3. 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.</li> <li>4. You can add or change the mobile number or email address for a resource account.</li> </ol>	<ol style="list-style-type: none"> <li>1. You can view basic information, real-name information, address, and preference configurations.</li> <li>2. You can modify basic information, address, and preference configurations, but not the real-name information.</li> <li>3. If the real-name information of an enterprise master account is changed, the change will be synchronized to its member accounts.</li> </ol>
Resource subscription	Pay-per-use resources	<ol style="list-style-type: none"> <li>1. You can purchase pay-per-use resources with a resource account.</li> <li>2. You can view resources in a resource account.</li> <li>3. Resources are paid for by master accounts. Resource accounts can enjoy discounts of their master accounts.</li> <li>4. If resources are not paid for as required, they enter a grace period and a retention period.</li> </ol>	<ol style="list-style-type: none"> <li>1. You can purchase pay-per-use resources with a member account.</li> <li>2. You can view resources on service consoles.</li> <li>3. Resources are paid for by master accounts. Member accounts can enjoy discounts of their master accounts.</li> <li>4. If resources are not paid for as required, they enter a grace period and a retention period.</li> </ol>
	Yearly / monthly resources	<ol style="list-style-type: none"> <li>1. You can purchase yearly/monthly resources with a resource account.</li> <li>2. In Billing Center, you can view all of your orders that are pending payment, newly purchased, unsubscribed from, or renewed.</li> <li>3. You can view, modify, renew, and unsubscribe from resources on service consoles.</li> </ol>	<ol style="list-style-type: none"> <li>1. You can purchase yearly/monthly resources with a member account.</li> <li>2. In Billing Center, you can view all of your orders that are to be paid, newly purchased, unsubscribed from, or renewed.</li> <li>3. You can view, modify, renew, and unsubscribe from resources on service consoles.</li> </ol>

	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	<ol style="list-style-type: none"><li>1. You cannot top up a resource account.</li><li>2. You cannot withdraw money from a resource account.</li></ol>	<ol style="list-style-type: none"><li>1. You can top up a member account.</li><li>2. You can withdraw money from a member account.</li></ol>
	Paying orders	Resources in resource accounts are paid for by their master accounts.	Resources in a member account are paid for by the master account (for direct sales and referral customers only).  An enterprise master only pays for orders in a resource account that are generated after the resource account was associated with the enterprise master.



	<p>Bill generation and settlement</p>	<ol style="list-style-type: none"> <li>1. Bills are not generated for resource accounts.</li> <li>2. If an enterprise master is a direct-sales or referral customer of Huawei Cloud, the master is billed for resource usage of their resource accounts. If an enterprise master is a resale customer or authorized distributor of Huawei Cloud, their partners are billed for resource usage of the master account and the resource accounts associated with the master account.</li> <li>3. You can view bills and expenditure details with your resource account.</li> <li>4. An enterprise master can view all bills and expenditure details in their own and their resource accounts.</li> </ol>	<ol style="list-style-type: none"> <li>1. Bills are not generated for member accounts.</li> <li>2. If an enterprise master is a direct-sales or referral customer of Huawei Cloud, the master is billed for resource usage of their member accounts.</li> <li>3. You can view bills and expenditure details with your member account.</li> <li>4. An enterprise master can view all bills and expenditure details in their own and their member accounts.</li> </ol>
	<p>Invoicing</p>	<ol style="list-style-type: none"> <li>1. Invoices are not issued to resource accounts.</li> <li>2. 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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Invoices are not issued to member accounts that are associated with enterprise master accounts.</li> <li>2. If an enterprise master is a direct-sales or referral customer of Huawei Cloud, they are billed for their associated member accounts. If you have not been associated with an enterprise master, you are invoiced directly.</li> </ol>

Sharing resource packages and savings plans	-	<ol style="list-style-type: none"> <li>1. If an enterprise master is a direct sales, referral, or resale customer of Huawei Cloud, they can enable resource package or savings plan sharing with their resource accounts.</li> <li>2. 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.</li> <li>3. An enterprise master can specify which resource accounts can share their resource packages and savings plans.</li> <li>4. 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.</li> </ol>	<ol style="list-style-type: none"> <li>1. If an enterprise master is a direct-sales or referral customer of Huawei Cloud, they can enable resource package or savings plan sharing with their member accounts.</li> <li>2. 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.</li> <li>3. An enterprise master can specify which member accounts can share their resource packages and savings plans.</li> <li>4. 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.</li> </ol>
Coupons	-	Cash coupons are not issued for resource accounts.	<ol style="list-style-type: none"> <li>1. Cash coupons are not issued for member accounts.</li> <li>2. You can apply legacy cash coupons to bills generated before you associate with an enterprise master account.</li> </ol>

Cost management	-	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.
Closing accounts	-	Your enterprise master can close your resource account through <b>Organizations</b> . You cannot close your own resource account.	You can close your own member account in <b>My Account</b> . Your enterprise master cannot close your 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 use 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

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## 2.1 What Is Enterprise Project Management Service?

### Overview

Enterprise Project Management Service (EPS) provides a cloud governance platform that matches the organizational structure and service management model of your enterprise. It provides enterprise project, resource, personnel, accounting, and application management. With EPS, you can manage personnel, accounting, materials, permissions, and services in the cloud based on the hierarchical organization structure (companies, departments, and projects) and project service structure.

#### NOTE

EPS is free of charge.

## 2.2 Applicable Scenarios

You can create projects based on your organization structures and perform unified management of cross-region resources. Hierarchical resource management is achieved by adding user groups and users to every enterprise project and granting them with different permissions. This section describes typical application scenarios of enterprise projects.

### Scenarios Classified by Business

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

**Scenario:** A game company launches games A, B, and C. The company wants to request different personnel to manage the games, manage resources by game, and settle resources in each game separately.

**Solution:**

- Sign up for a Huawei Cloud account and enable the enterprise project function.
- Create enterprise projects A, B, and C to manage the three games.
- Create user groups and users, add the user groups and users to the three enterprise projects, and assign management and access permissions to the user groups and users.
- Add resources to or remove resources from the three enterprise projects.
- 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

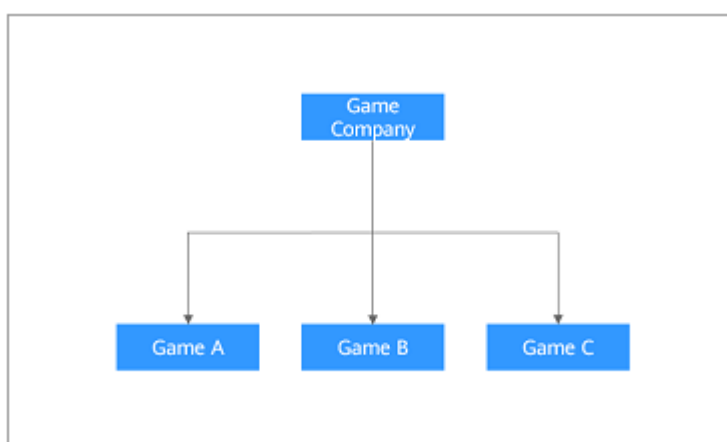
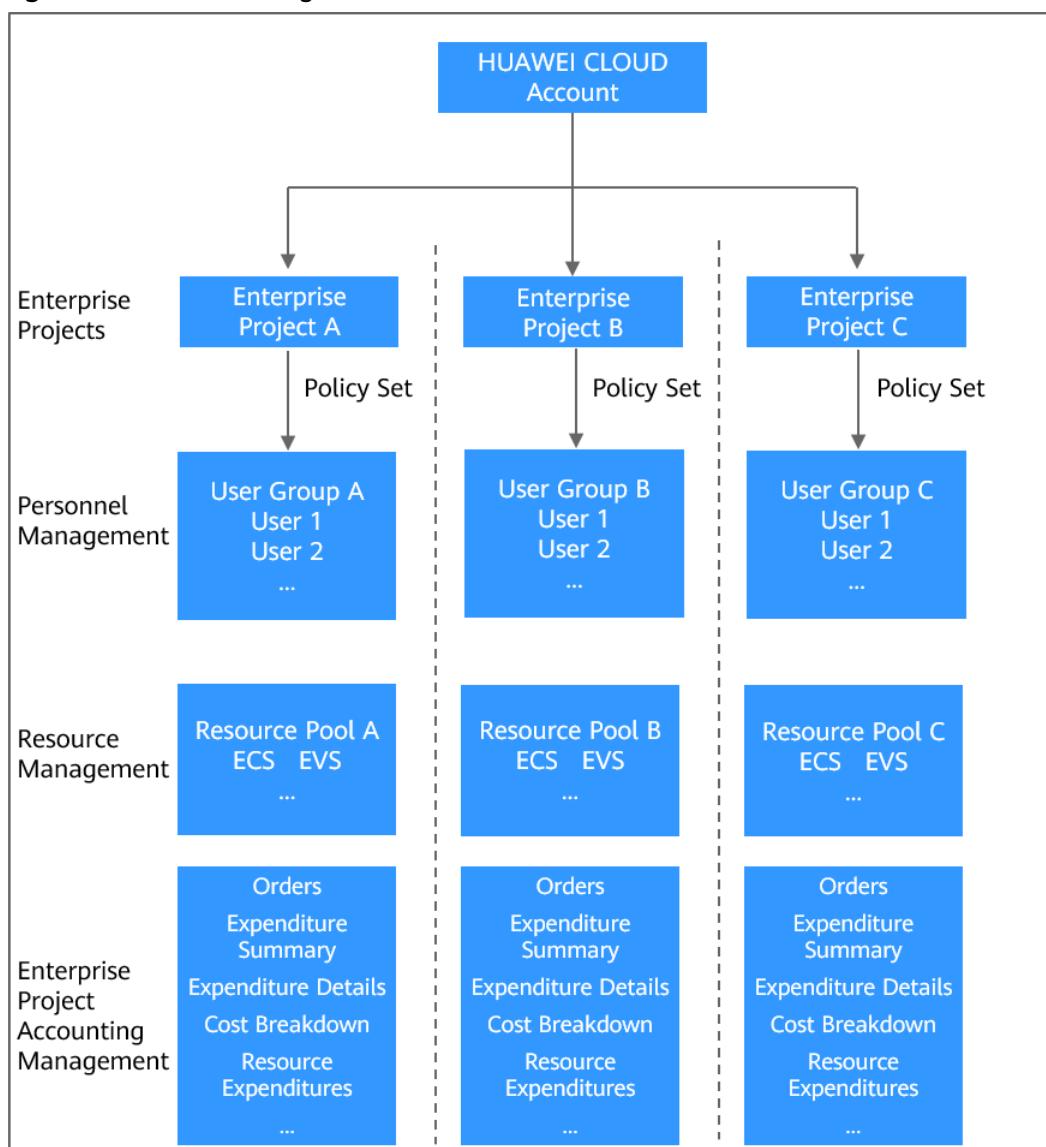




Figure 2-2 Solution diagram



### Scenarios Classified by Organizational Structure and Business

Enterprises can create enterprise projects and member accounts based on the organizational structure. The resources and networks of the member accounts are isolated from each other.

**Scenario:** A group has two subsidiaries (A and B), each of which has 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, assign management and access permissions to the user groups and users, and add them to 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

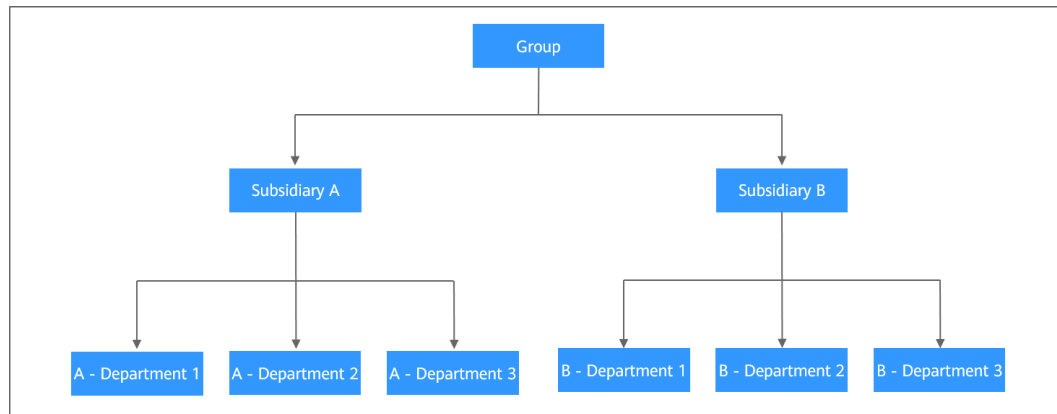
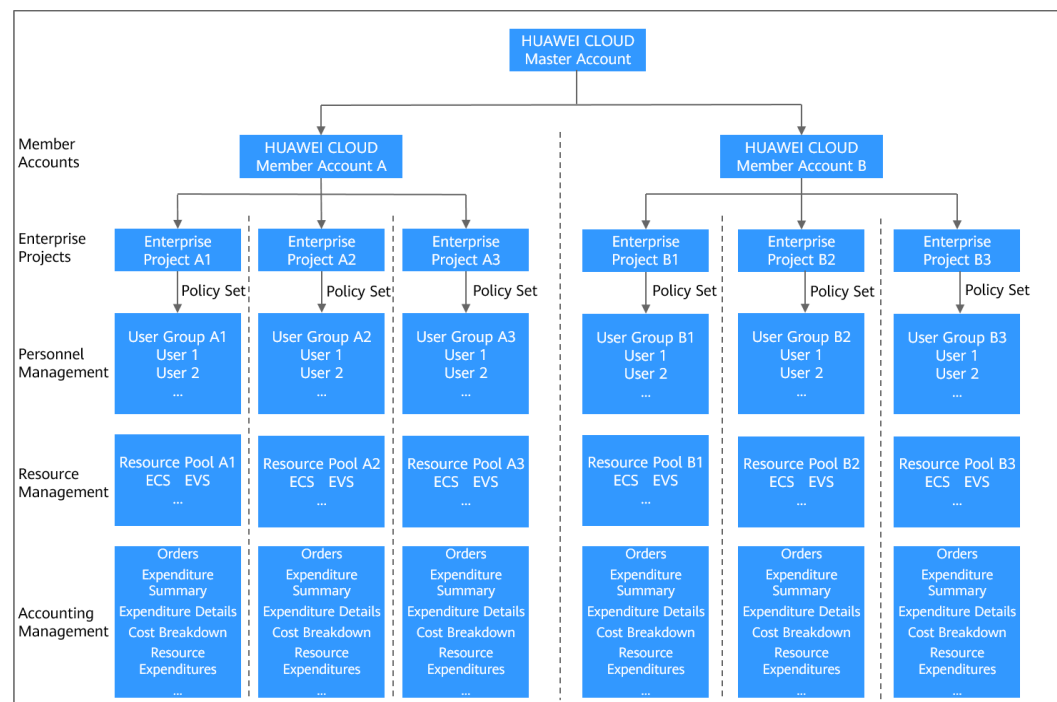


Figure 2-4 Solution diagram



## 2.3 Supported Cloud Services

For services and resources supported by EPS, you need to go to the EPS console to check it out.

Sign in to enterprise project management console, you can locate a target project and click **View Resource** in the **Operation** column to view the services and resources supported by the project.

The following table lists the cloud services and resources that can be managed by enterprise projects.

**Table 2-1** Resource types supported by enterprise projects

Service	Resource Type
Direct Connect	<ul style="list-style-type: none"><li>• Connection</li><li>• Virtual gateway</li><li>• Virtual interface</li><li>• Link aggregation group</li></ul>
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)	<ul style="list-style-type: none"><li>• File system</li><li>• SFS Turbo</li></ul>
Virtual Private Cloud (VPC)	<ul style="list-style-type: none"><li>• Virtual private cloud</li><li>• Security group</li><li>• IP address group</li><li>• Network ACL</li></ul>
Bandwidth	Shared bandwidth
Elastic IP (EIP)	Elastic IP
Elastic Load Balance (ELB)	Load balancer
NAT Gateway	Public NAT gateway
Domain Name Service (DNS)	<ul style="list-style-type: none"><li>• Private zone</li><li>• PTR record</li><li>• Public zone</li></ul>

Service	Resource Type
Cloud Container Engine (CCE)	<ul style="list-style-type: none"><li>Cluster</li><li>Autopilot cluster</li></ul>
Cloud Container Instance (CCI)	Namespace
Gene Container Service (GCS)	Environment
Advanced Anti-DDoS (AAD)	Instance
Web Application Firewall (WAF)	<ul style="list-style-type: none"><li>WAF instance</li><li>Web application firewall</li><li>Domain expansion package</li><li>Bandwidth expansion package</li></ul>
Host Security Service (HSS)	Host security
Key Management Service (KMS)	Key
Distributed Cache Service (DCS)	Instance
Distributed Message Service (DMS)	<ul style="list-style-type: none"><li>Kafka instance</li><li>RabbitMQ instance</li><li>RocketMQ instance</li></ul>
Simple Message Notification (SMN)	Topic
Blockchain Service (BCS)	<ul style="list-style-type: none"><li>BCS instance (enhanced Hyperledger Fabric)</li><li>Blockchain engine</li></ul>
API Gateway (APIG)	Dedicated gateway
Cloud Eye	<ul style="list-style-type: none"><li>Alarm rule</li><li>Monitoring panel</li><li>Resource group</li></ul>
Application Operations Management (AOM)	Resource group
Application Performance Management (APM)	Application
Log Tank Service (LTS)	Log stream
Cloud Connect (CC)	<ul style="list-style-type: none"><li>Cloud Connect</li><li>Bandwidth package</li></ul>
Relational Database Service (RDS)	Instance
Document Database Service (DDS)	Instance
Distributed Database Middleware (DDM)	Instance

Service	Resource Type
Data Replication Service (DRS)	<ul style="list-style-type: none"><li>• Real-time synchronization task</li><li>• Real-time migration task</li><li>• Backup migration task</li><li>• Data subscription task</li><li>• Real-time disaster recovery task</li></ul>
GaussDB	GaussDB instance
Cloud Data Migration (CDM)	Cluster
ModelArts	Workspace
MapReduce Service (MRS)	Cluster
Data Lake Insight (DLI)	<ul style="list-style-type: none"><li>• Cluster</li><li>• Queue</li><li>• Database</li><li>• Elastic resource pool</li></ul>
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	<ul style="list-style-type: none"><li>• ROMA instance</li><li>• ROMA task</li></ul>
SupportPlan Service	Support plan
Cloud Service Engine (CSE)	Engine
Private Number	Application
SSL Certificate Manager (SCM)	Certificate
DataArts Studio (DAYU)	DAYU instance
Dedicated Distributed Storage Service (DSS)	<ul style="list-style-type: none"><li>• Disk</li><li>• Storage pool</li></ul>
Dedicated Computing Cluster (DCC)	Dedicated computing cluster
Server Migration Service (SMS)	Source server

Service	Resource Type
Application Service Mesh (ASM)	Mesh
Database Security Service (DBSS)	Database audit instance
Virtual Private Network (Enterprise Edition)	VPN gateway
Video on Demand (VOD)	Domain name
Database and Application Migration UGO (UGO)	<ul style="list-style-type: none"><li>• Object migration task</li><li>• Object evaluation tasks</li></ul>
CloudSite	Site
Multi-Cloud High Availability Service	<ul style="list-style-type: none"><li>• MAS instance</li><li>• MAS namespace</li></ul>
Enterprise Router (ER)	Enterprise router
Change Management Service (CMS)	<ul style="list-style-type: none"><li>• Workflow</li><li>• Job</li><li>• Package</li><li>• Script</li></ul>
Private Certificate Authority (PCA)	<ul style="list-style-type: none"><li>• Private CA</li><li>• Private certificate</li></ul>
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	<ul style="list-style-type: none"><li>• Edge DDoS domain expansion package</li><li>• Edge WAF domain expansion package</li><li>• Edge DDoS</li><li>• Edge WAF</li></ul>
Workspace	Workspace-desktop
Enterprise Connect	<ul style="list-style-type: none"><li>• Enterprise connect network</li><li>• Intelligent enterprise gateway</li></ul>
EventGrid (EG)	Channel
Global Elastic IP	<ul style="list-style-type: none"><li>• Global Elastic IP</li><li>• Global internet bandwidth</li></ul>
Industrial Digital Model Engine (iDME)	<ul style="list-style-type: none"><li>• LinkX Foundation</li><li>• MBM Foundation Service</li><li>• Runtime</li><li>• Studio</li></ul>
Global Accelerator (GA)	Accelerator
Industrial Simulation Cloud Service	<ul style="list-style-type: none"><li>• SimSpace</li><li>• SimStudio</li><li>• CPU computing</li><li>• GUI computing</li></ul>
Integrated Product DevelopmentCenter Cloud Service	DigitalProductServices
ServiceStage	<ul style="list-style-type: none"><li>• ServiceStage environment</li><li>• ServiceStage application</li></ul>
GeminiDB	Instance

## 2.4 Restrictions and Limitations

- You can only enable Enterprise Project for an enterprise account.
- 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 still occupy the enterprise project quota. If your enterprise project quota is insufficient, you are advised to contact O&M personnel to enable you 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.
- An enterprise project contained in an unfinished order can only be disabled after the order is finished. 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.
- 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** page.

**IAM user:** An IAM user's permissions are granted by the administrator. After an IAM user logs in to the **Enterprise Project Management** page, the IAM user sees only the enterprise projects assigned by the administrator, and can only manage the resources allocated by the administrator. If the administrator assigns a policy for an IAM user, the IAM user has all the permissions included in the policy.

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

<b>Service Name</b>	<b>Permission Name</b>	<b>Permission Description</b>	<b>Typically Associated Personnel</b>
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	<p>Permissions for operations management of enterprise projects. The detailed permissions are as follows:</p> <ul style="list-style-type: none"><li>• Viewing fund quota settings of enterprise projects</li><li>• Viewing and exporting cost breakdowns of enterprise projects</li><li>• Viewing fund quota adjustment records of enterprise projects</li><li>• Viewing renewals of enterprise projects</li><li>• Enabling or disabling auto-renewal and manual renewal, changing billing mode from pay-per-use to yearly/monthly, and releasing resources</li><li>• Viewing yearly/monthly orders</li><li>• Placing yearly/monthly orders</li><li>• Unsubscribing from resources and viewing unsubscription records</li><li>• Viewing the expenditure summary of enterprise projects</li><li>• Exporting the expenditure summary of enterprise projects</li><li>• Viewing expenditure details of enterprise projects</li><li>• Exporting expenditure details of enterprise projects</li></ul> <p><b>NOTE</b> The order payment permissions of yearly/monthly products are at the account level, and the <b>Enterprise Project BSS FullAccess</b> permissions are specific to IAM users. Therefore, the <b>Enterprise Project BSS FullAccess</b> permissions do not include the order payment permissions of yearly/monthly products.</p>	Enterprise asset administrators

**Table 2-3** Common operations and required permissions

Operation	EPS FullAccess	EPS ReadOnlyAccesses	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 ReadOnlyAccesses	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 specify specific enterprise projects to implement access control for users or user groups. 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 supported 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 cloud service system policies to user groups. For details, see [Creating a User Group and Assigning Permissions](#).
- If the system-defined policies do not meet your requirements, you can create custom policies on the IAM console and assign custom policies to user groups to implement refined access control. Custom policies are supplemental to system-defined policies. For details, see [Creating a Custom Policy](#).

## 2.6 Security

### 2.6.1 Shared Responsibilities

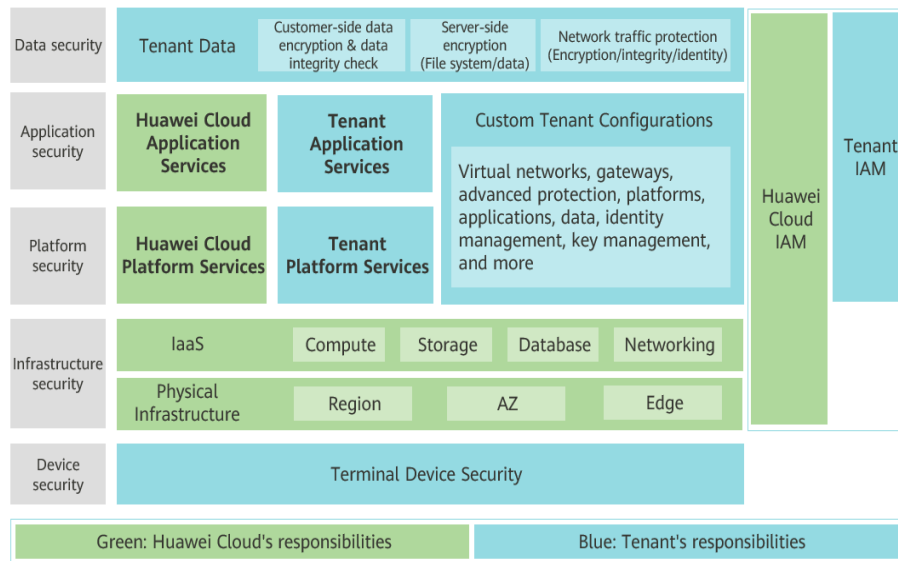
Huawei guarantees that its commitment to cyber security will never be outweighed by the consideration of commercial interests. To cope with emerging cloud security challenges and pervasive cloud security threats and attacks, Huawei Cloud builds a comprehensive cloud service security assurance system 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 for an enterprise account.

To enable the enterprise project function for an account, you need to [set account type](#) to **Enterprise** and you cannot leave the enterprise name empty.

### Procedure

**Step 1** Log in to the [Huawei Cloud](#) homepage.

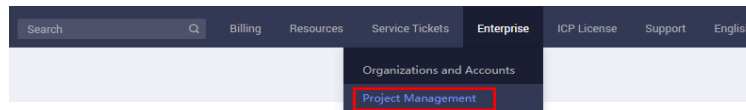
**Step 2** Click **Console** in the upper right corner.

The management console is displayed.

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

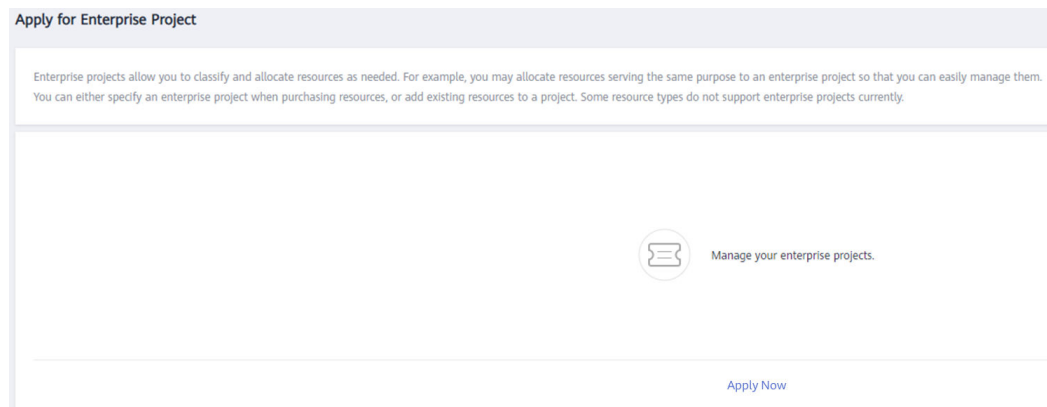
If the screen resolution is low, choose **More > Enterprise > Project Management**.

**Figure 2-6** Project Management



**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 Page

### Prerequisites

The current account must be an enterprise account.

### Procedure

**Step 1** Log in to the [Huawei Cloud](#) homepage.

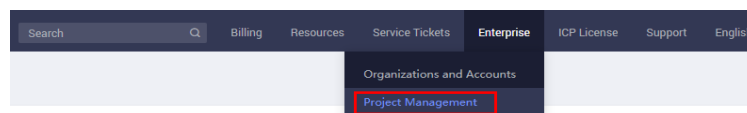
**Step 2** Click **Console** in the upper right corner.

The management console is displayed.

**Step 3** 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



----End

## 2.9 Getting Started

### 2.9.1 Overview

#### Scenario

EPS supports resource management using IAM users.

You can create multiple IAM users and grant permissions as needed to perform secure hierarchical access management.

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

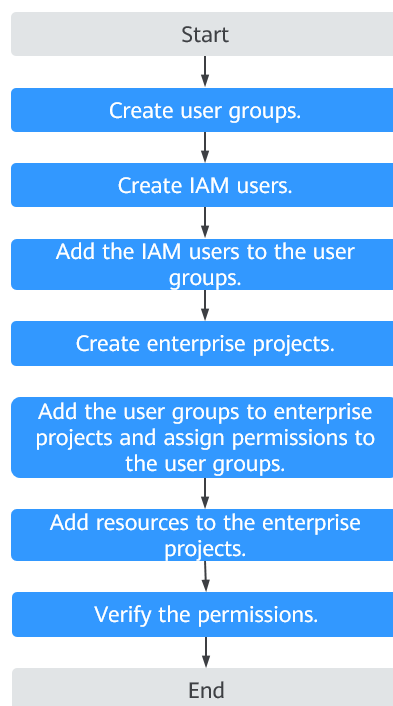
**Table 2-5** Planning

Operation	Description
Creating user groups	On the IAM console, create two user groups, Test_ECS_A and Test_ECS_B.

Operation	Description
Creating IAM users and adding them to user groups	On the IAM console, create two users, Test_User_A and Test_User_B. <ul style="list-style-type: none"> <li>• Add user Test_User_A to user group Test_ECS_A.</li> <li>• Add user Test_User_B to user group Test_ECS_B.</li> </ul>
Creating enterprise projects and adding user groups	On the <b>Enterprise Project Management</b> page, create two enterprise projects, project_A and project_B. <ul style="list-style-type: none"> <li>• Add user group Test_ECS_A to enterprise project project_A.</li> <li>• Add user group Test_ECS_B to enterprise project project_B.</li> </ul>
Adding resources	On the <b>Enterprise Project Management</b> page, add specific resources to enterprise projects project_A and project_B, respectively.

## Process

**Figure 2-9** Process



## Prerequisites

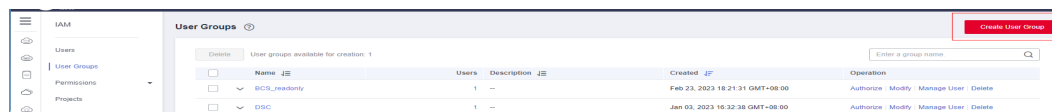
- You are an administrator or have been assigned the EPS FullAccess policy on IAM.
- There are multiple Huawei Cloud resources in the account.

## 2.9.2 Creating User Groups

You can create user groups Test\_ECS\_A and Test\_ECS\_B according to the following procedure:

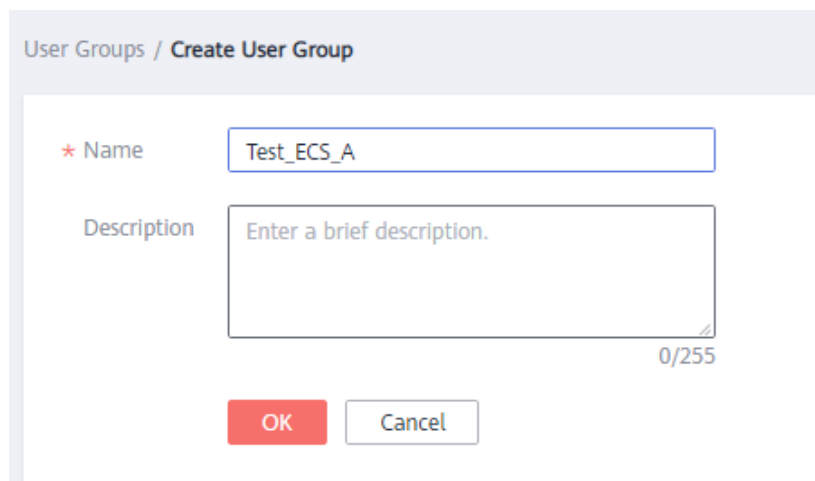
- Step 1** Log in to Huawei Cloud and click **Console** in the upper right corner.
- Step 2** On the management console, point to the username in the upper right corner, and choose **Identity and Access Management** from the drop-down list.
- Step 3** In the navigation pane on the left, click **User Groups**. 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** Create a user group



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

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

----End

### NOTE

For more information, see [create a user group and grant it permissions](#).

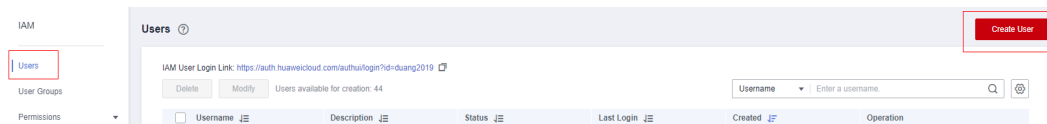
## 2.9.3 Creating IAM Users

You can create users Test\_User\_A and Test\_User\_B 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.

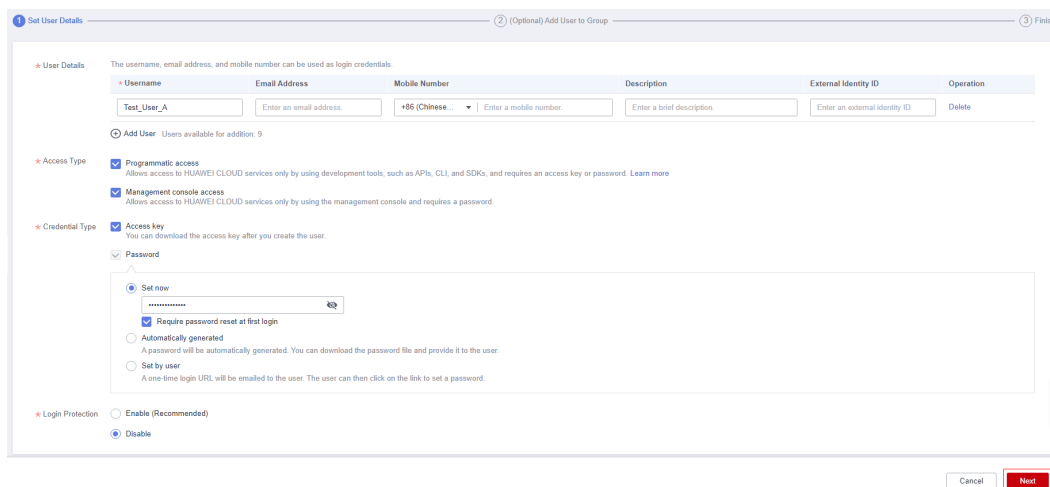
**Step 3** Choose **Users** from the navigation pane on the left, and click **Create User** in the upper right.

**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 IAM Users to User Groups

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:

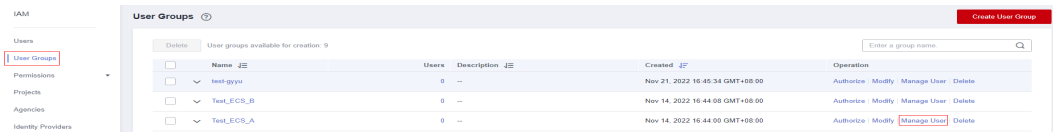
**Step 1** Log in to Huawei Cloud and click **Console** in the upper right corner.

**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**.

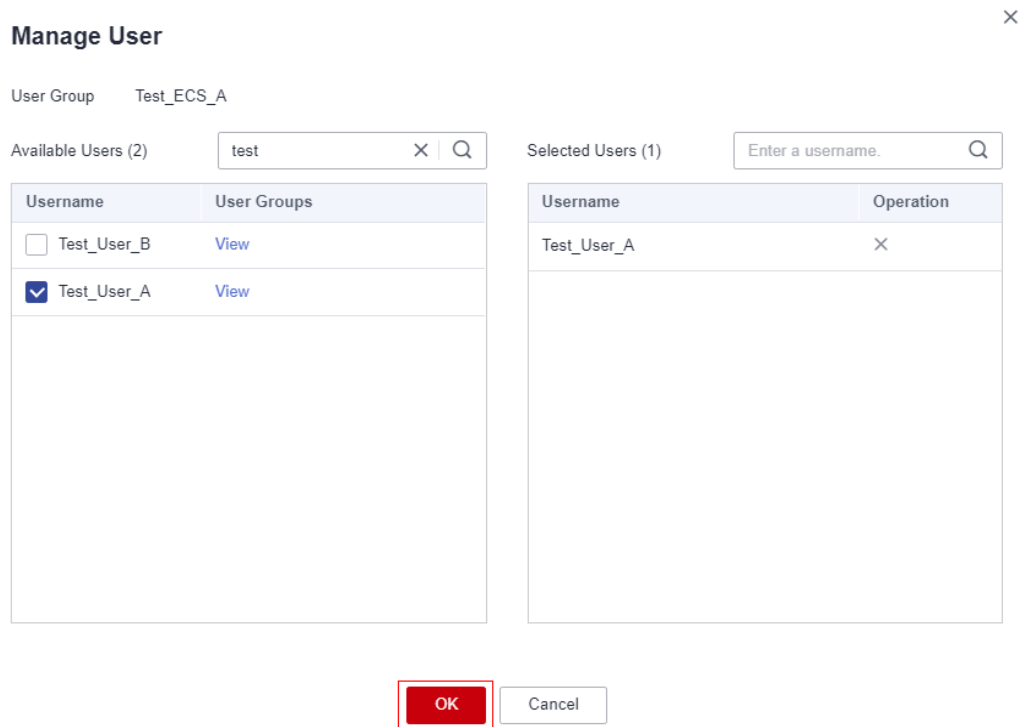
**Step 4** In the user group list, locate the row that contains **Test\_ECS\_A** and click **Manage User** in the **Operation** column.

**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 Enterprise Projects

You can create enterprise projects project\_A and project\_B according to the following procedure:

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

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

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

Figure 2-16 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 <b>default</b> 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

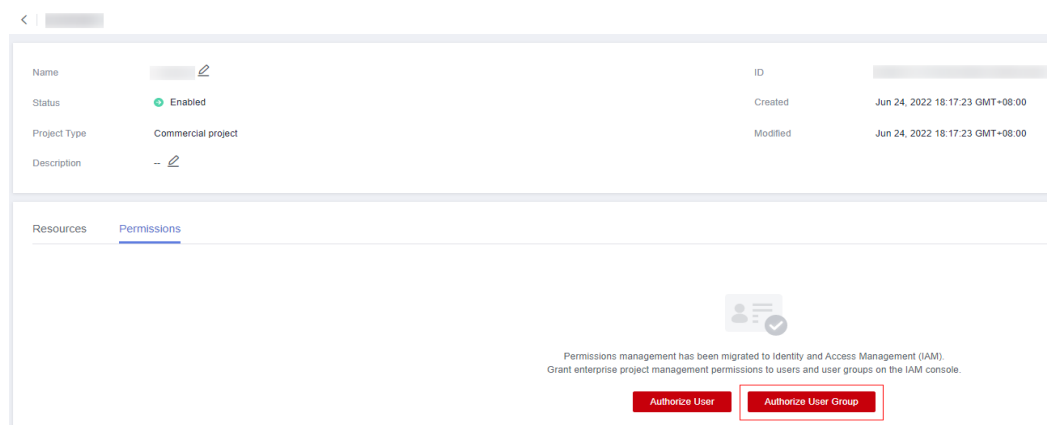
You can authorize users in user group **Test\_ECS\_A** to manage enterprise project **project\_A** and users in user group **Test\_ECS\_B** to manage **project\_B** by assigning selected permissions to the two user groups.

- Step 1** Log in to the Huawei Cloud 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**.
- Step 3** On the **Enterprise Project Management** 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 2-17** 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** Log in to the Huawei Cloud 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**.
- Step 3** On the **Enterprise Project Management** 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 page.
- Step 4** Click **Add**.  
The **Add Resource** dialog box is displayed.
- Step 5** Select a mode.
- **Independent resources:** Under this mode, 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 to the enterprise project.

- **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 only when adding ECSs. Currently, only ECSs and the associated EVS disks and EIPs can be added to an enterprise project at the same time.

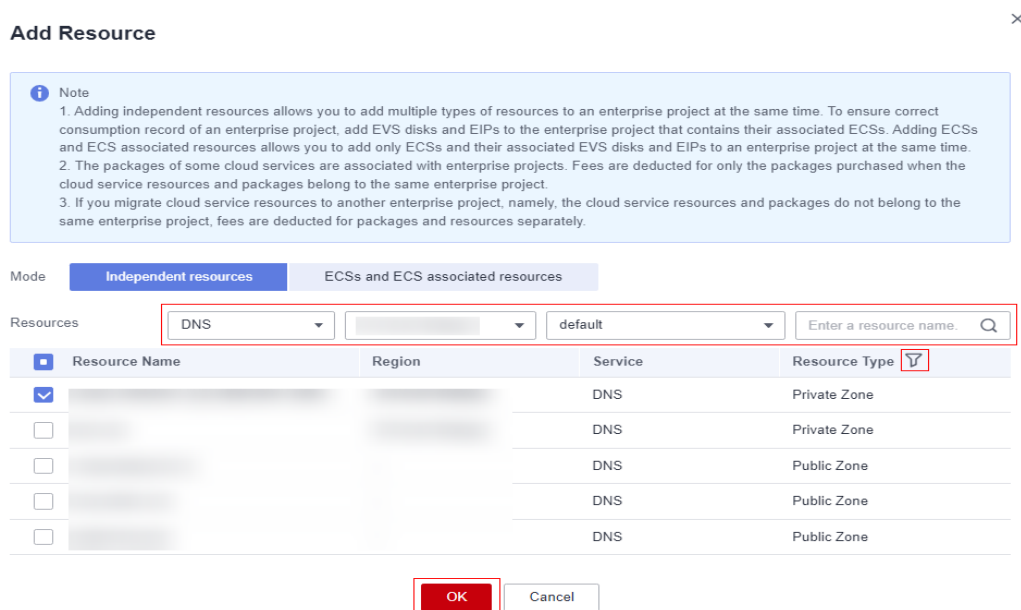
**Step 6** Filter resources by service, region, or enterprise project in the filter box above the resource list, or enter a resource name in the search box for exact search.

**Step 7** Click  in the **Resource Type** column to filter resource types.

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 2-18** Adding resources



**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**.
- 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 page, 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

Company A is an enterprise user of Huawei Cloud, and it has multiple project teams that require different resources and personnel. This section presents the best practice for multi-project management to address company A's requirements.

#### Requirements

- **Requirement 1:** Company A can purchase multiple types of resources in **CN-Hong Kong** and **AP-Singapore** for two project teams. Resources of the two project teams need to be isolated from each other. Access to specific cloud services needs to be authorized, for example, only authorized IAM users can access and use ECS.
- **Requirement 2:** Each member of the project teams can access only the resources of the project team to which the member belongs, and only has the permissions required to complete tasks.
- **Requirement 3:** Each project team makes payments only for the resources used by its members, and the project expenditures are clear.

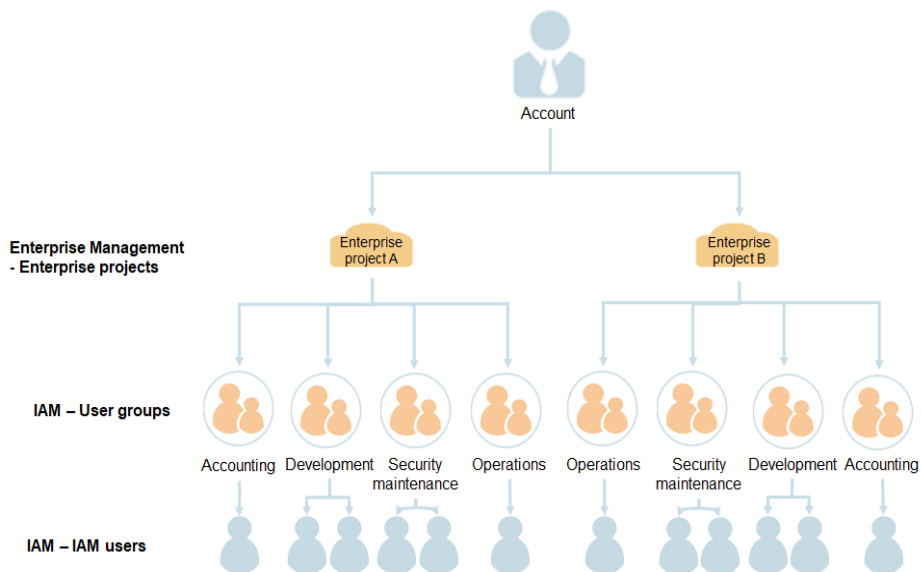
#### Solution

- **Solution to requirement 1:** Enterprise Management (EPS) and Identity and Access Management (IAM) are two cloud services of Huawei Cloud that can isolate resources between projects. However, the implementation logic and functions of the two services are different.
  - **Enterprise Management:** You can create enterprise projects to group and manage resources across regions. Resources in enterprise projects are logically isolated from each other. **Each enterprise project can contain resources of multiple regions**, and resources can be added to or removed from enterprise projects. Specified resources of certain services, for example, a specific ECS, can be added to or removed from enterprise projects.
  - **IAM:** IAM projects group and physically isolate resources in a region, **and each IAM project can only contain resources in the same region**.

In conclusion, Enterprise Management provides more flexible cross-region resource isolation between projects than IAM. Therefore, it is recommended that company A use Enterprise Management to manage project resources. The solutions to the following requirements are proposed using the Enterprise Management service. For details about the two services, see [What Are the Differences Between IAM and Enterprise Management?](#)

- Solution to requirement 2:** In IAM, company A creates IAM users for employees and adds the IAM users to different groups. In Enterprise Management, company A adds the user groups to the enterprise projects created to address [Requirement 1](#) and assigns required resource access permissions (see [Table 2-7](#)) to each user group.

**Figure 2-19** Personnel management model of company A



**Table 2-7** User group permissions in company A

User Group	Responsibility	Permissions	Description
Accounting team	Project expenditure management	Enterprise Project BSS FullAccess	Permissions for accounting management of enterprise projects
Development 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 maintenance team	Security O&M of the project	ECS CommonOperations	Permissions for basic ECS operations

User Group	Responsibility	Permissions	Description
		CAD Administrator	Full permissions for Advanced Anti-DDoS (AAD)
Operations team	Overall operations of the project	EPS FullAccess	Full permissions for Enterprise Management, including modifying, enabling, disabling, and viewing enterprise projects

**NOTE**

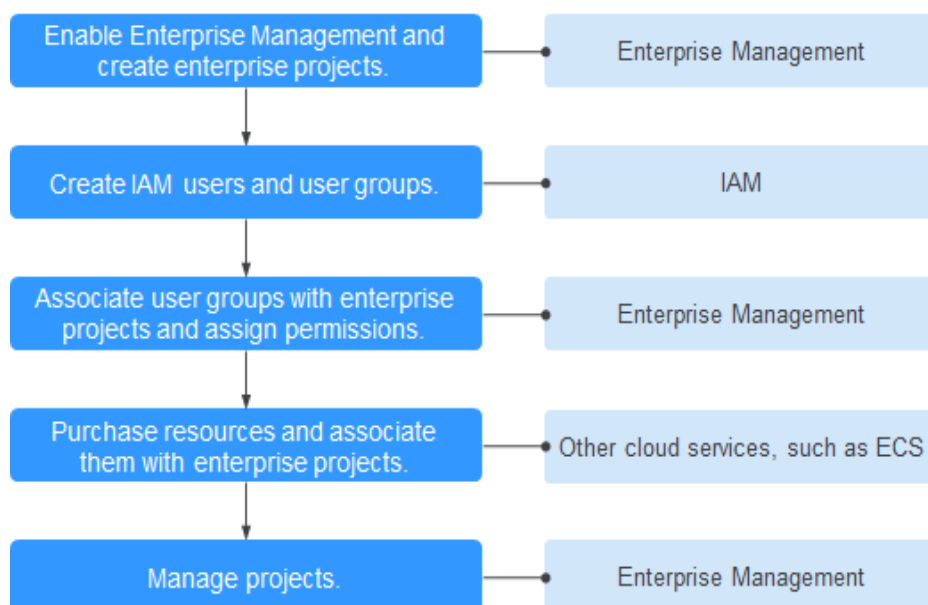
For details about permissions of all Huawei Cloud services, see [System-defined Permissions](#).

- **Solution to requirement 3:** Company A uses Enterprise Management to 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 figure illustrates the process of enterprise project management for addressing company A's requirements.

**Figure 2-20** Enterprise project management process



**Step 1:** Enable the Enterprise Management service and create enterprise projects on the **Enterprise Management console**.

**Step 2:** On the **IAM console**, create a user group for each functional team, create IAM users for employees, and add the users to different user groups.

**Step 3:** On the **Enterprise Management console**, assign the required permissions to each user group, and add the user group to the corresponding enterprise project. Users in the group automatically inherit its permissions.

**Step 4:** Purchase resources on **other cloud service consoles** and associate the resources with the corresponding enterprise projects.

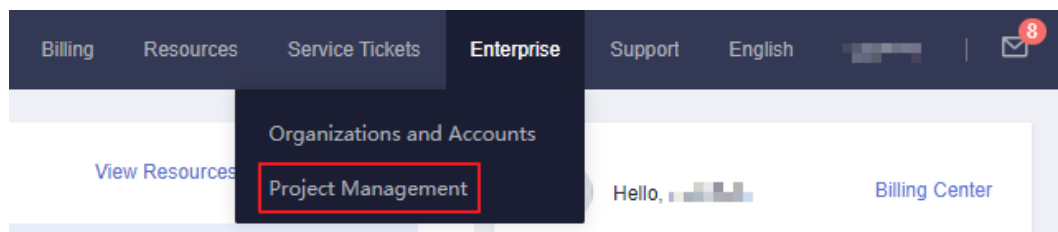
**Follow-Up Operation: Enterprise Project Management:** Perform personnel, resource, and accounting management on the **Enterprise Management console**.

## Enabling Enterprise Management and Creating Enterprise Projects

Perform the following procedure to create two enterprise projects (A and B) on the Enterprise Management console. If you have enabled Enterprise Project, go to **Step 4**.

- Step 1** Log in to the Huawei Cloud console, hover over the account name in the upper right corner and choose **Basic Information**.
- Step 2** On the **Basic Information** page, click **Enable Enterprise Project Function**.
- Step 3** Read and agree to the *Huawei Cloud Enterprise Management Agreement*, and click **Apply Now**.
- Step 4** On the Huawei Cloud management console, choose **Enterprise > Project Management**.

**Figure 2-21** Accessing the Enterprise Project Management page



- Step 5** On the **Enterprise Project Management Service** page, click **Create Enterprise Project**.

**Figure 2-22** Creating an enterprise project



- Step 6** Enter **Enterprise\_Project\_A** for **Name** and click **OK**.
- Step 7** Repeat steps **5** to **6** to create **Enterprise\_Project\_B**.

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

----End

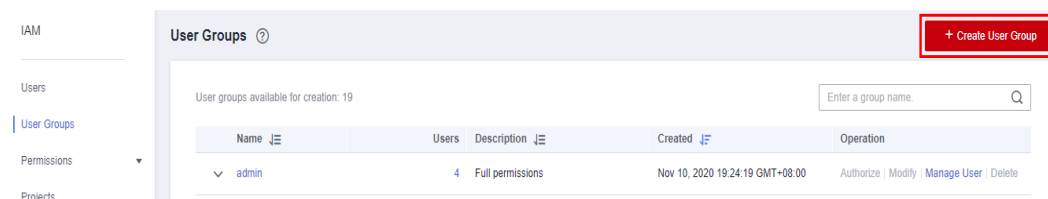
## Creating IAM Users and User Groups

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 Huawei Cloud 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 2-23** Creating a user group



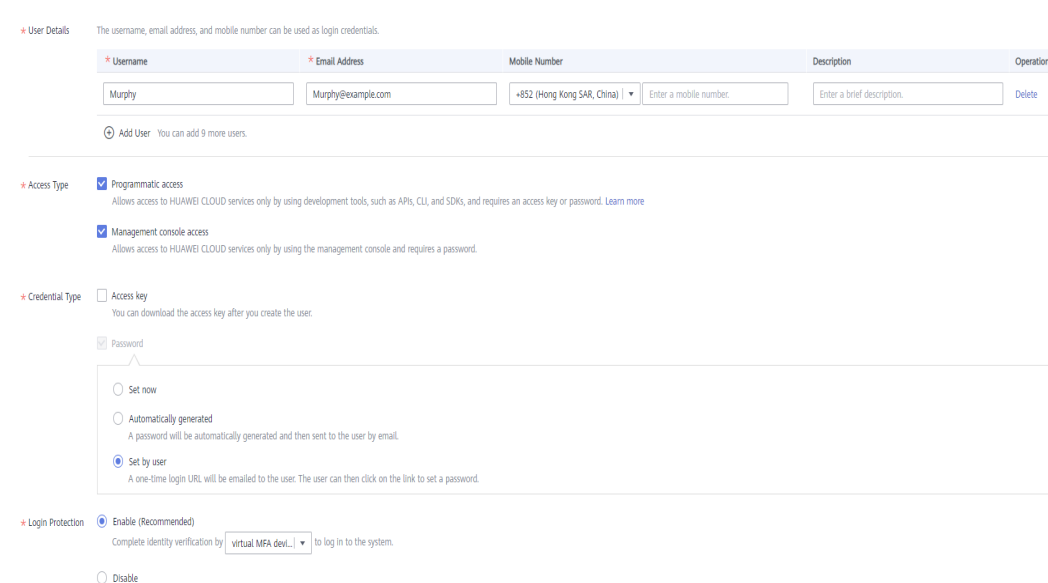
3. Set the user group name to **Enterprise Project A\_Accounting** and click **OK**.
4. Repeat steps 2 to 3 to create the accounting, development, security maintenance, and operations teams for the two enterprise projects.

The user groups are displayed in the user group list.

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

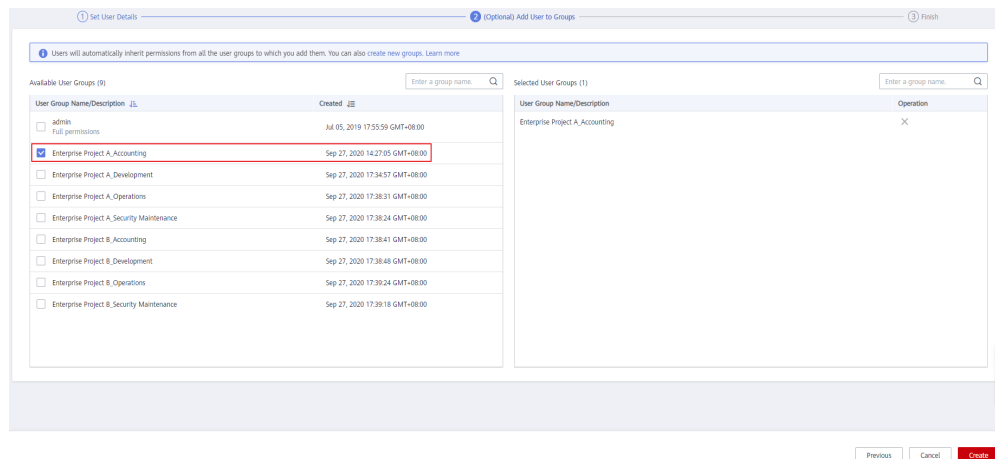
1. In the navigation pane of the IAM console, choose **Users**. Then click **Create User**.
2. Specify the user information, select an **access type** (see [Figure 2-24](#)), and click **Next**.

**Figure 2-24** Creating an IAM user



3. Add user **Murphy** to the user group **Enterprise Project A\_Accounting** and click **Create**.

Figure 2-25 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 page.

----End

## Associating User Groups with Enterprise Projects

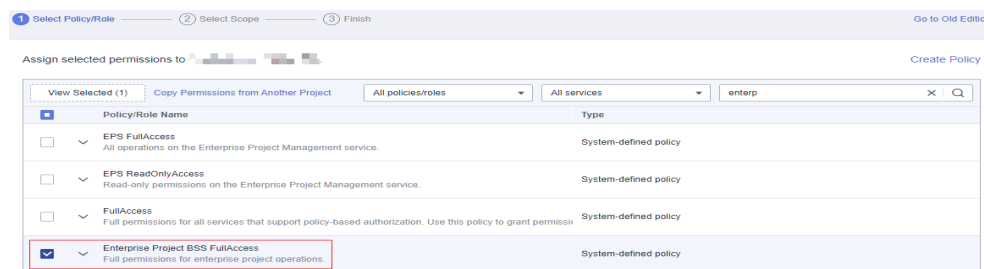
Assign permissions to a user group and apply user group permissions to enterprise projects.

- 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**.

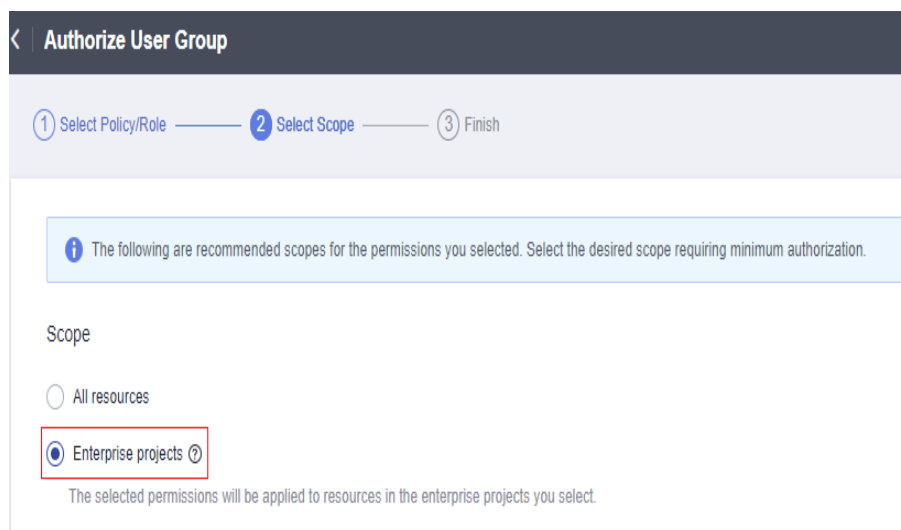
### NOTE

You can create custom policies to supplement system-defined policies for fine-grained permissions management. For details, see [Creating a Custom Policy](#).

Figure 2-26 Selecting permissions



**Step 4** Select the **Enterprise projects** authorization scope.



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

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

----End

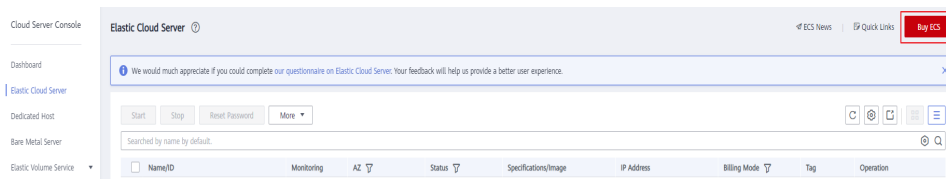
## Purchasing Resources and Associating Them with Enterprise Projects

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

**Step 1** Log in to the Huawei Cloud management console, click  in the upper left corner, and choose **Compute > Elastic Cloud Server**.

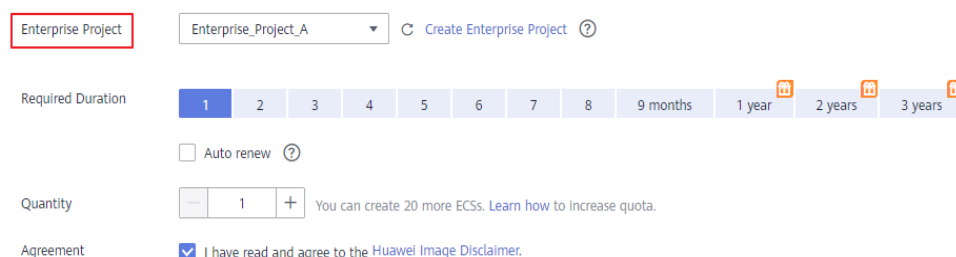
**Step 2** Click **Buy ECS** in the upper right corner.

**Figure 2-27** Buying an ECS



**Step 3** **Specify the ECS information** and select **Enterprise\_Project\_A** from the **Enterprise Project** drop-down list.

**Figure 2-28** 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 required 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 enterprise project A or B.

 **NOTE**

- Currently, Enterprise Management only supports [specific Huawei Cloud services](#).
- If you have already purchased required 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 business.

#### Prerequisites

Only the administrator or the user attached 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.

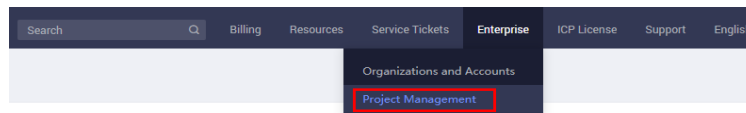


## Procedure

**Step 1** Log in to the Huawei Cloud 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 2-29** Project Management



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

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

**Figure 2-30** Creating an enterprise project

×

### Create Enterprise Project

**\* Project Type**     Commercial project     Test project

Resources of a commercial project are deployed in the production environment are rated based on the commercial discounts offered for VIP customers. Enterprise projects are commercial projects by default.

**\* Name**   

Description   

0/512

OK    Cancel

**Step 4** Select a project type based on service requirements.

**Table 2-8** Project type parameters

Parameter	Description
Commercial project	Resources of a commercial project are deployed in the production environment are rated based on the commercial discounts offered for VIP customers. Enterprise projects are commercial projects by default.
Test project	Test projects are used for testing the enterprise project. 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 for VIP customers cannot be used for 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 letters, digits, underscores (_), and hyphens (-) are allowed. It cannot contain the word <b>default</b> 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 personal data leakage, you are advised not to include personal and 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 projects when your business changes.

For resource security, enterprise projects cannot be deleted. If a project will no longer be used, disable it.

### Restrictions and Limitations

- Disabled enterprise projects cannot be modified.

- Disabled enterprise projects still occupy the enterprise project quota. If your enterprise project quota is insufficient, you are advised to contact O&M personnel to delete enterprise projects.
- Disabled enterprise projects are not 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 unfinished order contains the enterprise project that will be disabled, the enterprise project can be disabled only after the order is completed. Unfinished orders refer to the orders in the following states: pending payment, processing, pending review, pending approval.
- The default enterprise project cannot be modified or disabled.
- Test projects cannot be disabled.
- Currently, commercial projects cannot be converted to test projects.

## Modifying an Enterprise Project

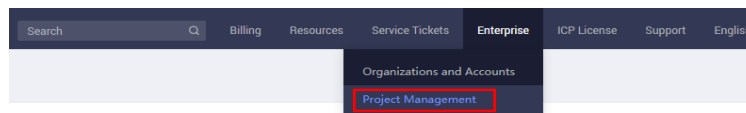
To modify the name or description of an enterprise project, perform the following steps:

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

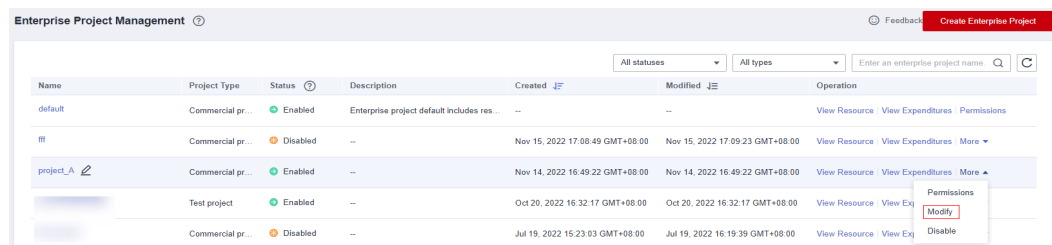
Figure 2-31 Project Management



**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 2-32 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 letters, digits, underscores (_), and hyphens (-) are allowed. It cannot contain the word <b>default</b> 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

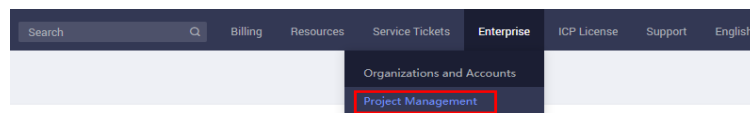
## Enabling an Enterprise Project

To use a disabled enterprise project again, enable it.

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

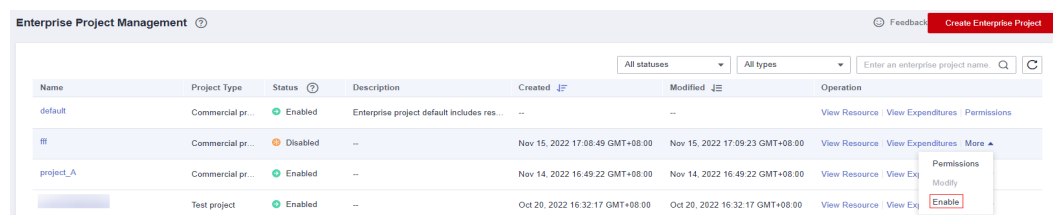
**Step 2** Choose **Enterprise > Project Management** in the upper right corner of the page.

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

**Figure 2-33** Project Management

**Step 3** On the **Enterprise Project Management** 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 2-34** Enabling an enterprise project

**Step 4** Click **Yes**.

----End

## Disabling an Enterprise Project

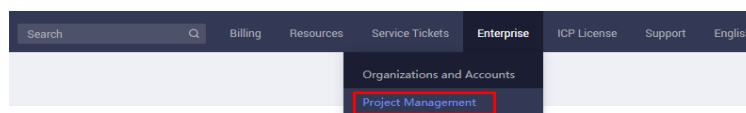
You can disable an enterprise project if you no longer need to use it because your enterprise structure is adjusted or business is reduced.

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

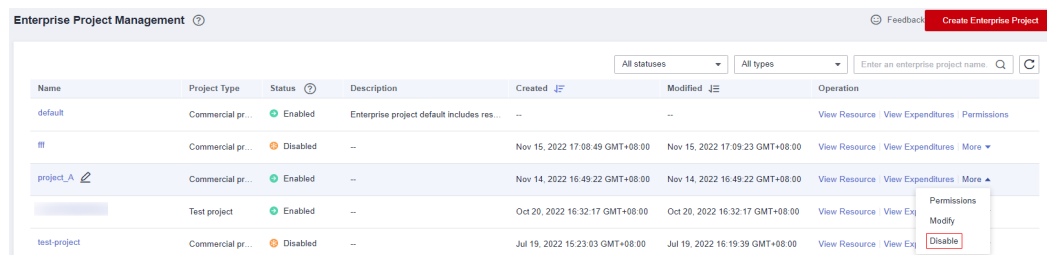
**Figure 2-35** Project Management



**Step 3** On the **Enterprise Project Management** 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 2-36** Disabling an enterprise project



**Step 4** Click **Yes**.

----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 at the project level.

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

- EPS console
- Console of cloud services that support EPS

### Restrictions and Limitations

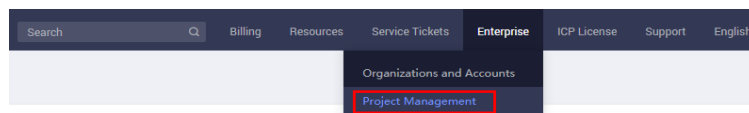
New cloud resources cannot be added to a disabled enterprise project. You can add cloud resources only after enabling the enterprise project.

## Using the EPS Console

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

----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.
- You can plan the network using only the following three types of cloud resources: Virtual Private Cloud, VPC Peering, and Security Group.
- For details about all cloud resources that can be managed by enterprise projects, see [Supported Cloud Services](#).

## Using the Console of Cloud Services That Support EPS

You can select an enabled enterprise project when configuring **Enterprise Project** on the cloud resource creation page. New cloud resources can be managed by the selected enterprise project.

Take ECS as an example. Perform the following operations:

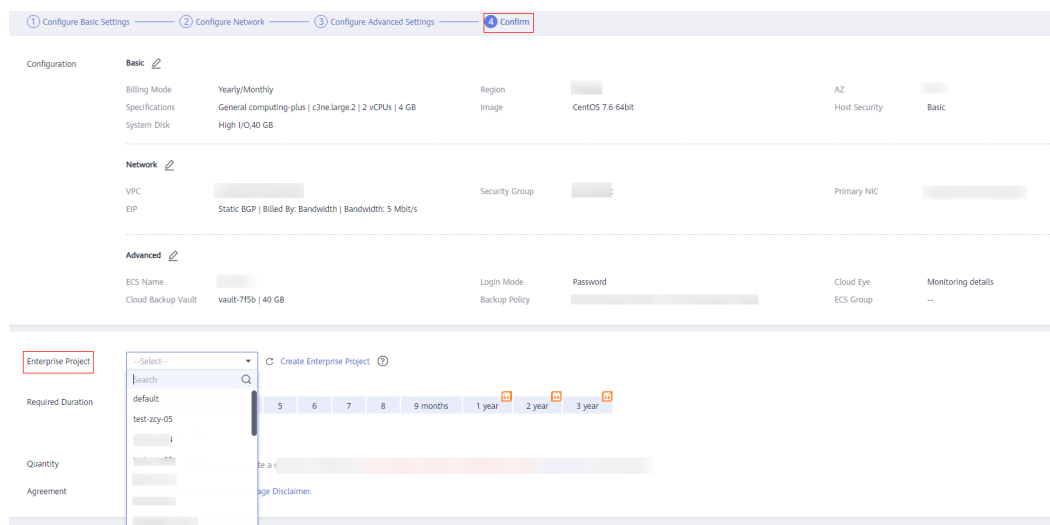
**Step 1** Log in to the Huawei Cloud console.

**Step 2** Click  in the upper left corner to select a region and a project.

**Step 3** Under **Service List**, choose **Compute > Elastic Cloud Server**.

**Step 4** Click **Buy ECS**. The **Buy ECS** page is displayed.

**Step 5** Configure the ECS information. On the **Confirm** page, select the target enterprise project from the **Enterprise Project** drop-down list.

**Figure 2-38** Selecting an enterprise project

**Step 6** Click **Next** on the lower right of the page.

You can view the ECS and the enterprise project to which the ECS belongs on the **Elastic Cloud Server** page.

----End

## 2.11.4 Changing a Test Project to a Commercial Project

### Scenario

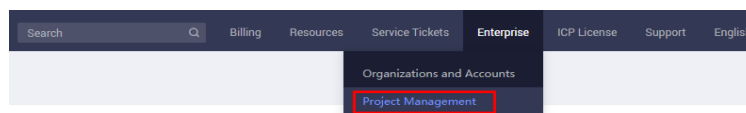
You can change a test project to a commercial project based on service requirements. Currently, commercial projects cannot be converted to test projects.

### Procedure

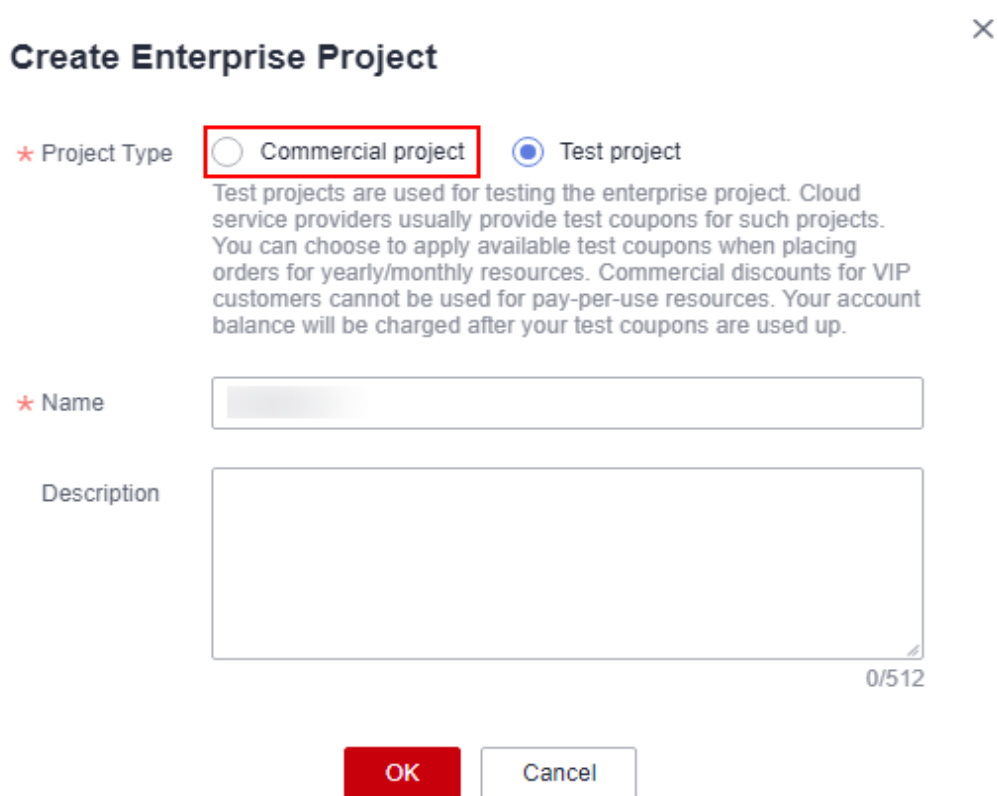
**Step 1** Log in to the Huawei Cloud console.

**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** Choose **More > Modify** in the **Operation** column of the row containing the test project to change.

**Figure 2-40** Changing a test project into a commercial project

**Create Enterprise Project** ×

\* Project Type  Commercial project  Test project

Test projects are used for testing the enterprise project. 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 for VIP customers cannot be used for pay-per-use resources. Your account balance will be charged after your test coupons are used up.

\* Name

Description

0/512

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

----End

## 2.12 Managing Resources in an Enterprise Project

### 2.12.1 Resource Management Overview

You can group related cloud resources (for example, resources used for the same purpose) and manage them by enterprise project.

Migrating a resource from one enterprise project to another does not affect the resource itself. For example, the resource instance will not be restarted, the network configuration will not be changed, and the ownership of the resource will not be changed.

However, the access to the resources of an enterprise project may be affected if resource permissions are configured based on the project and the project is adjusted. For example, if you only grant a member the permissions to access resources of project A, the member may be rejected to access the resources when project A is migrated to another project, such as project B.

#### 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 All Resources

### Scenarios

On the **Resource List** page, you can view all resources in the current account.

#### NOTICE


There is a delay in synchronizing resource data to Config, so if there is a resource change, the change may not be updated in the resource list immediately. If the resource recorder is enabled, Config will update resource changes within 24 hours.

To use the resource list, you must enable the resource recorder. If you cannot find resources on the **Resource List** page, check if the resource recorder is enabled or if the resource type is within the monitoring scope. For details about how to configure the resource recorder, see [Configuring the Resource Recorder](#).

If you need to view resources before the resource recorder is enabled, go to [My Resources](#).

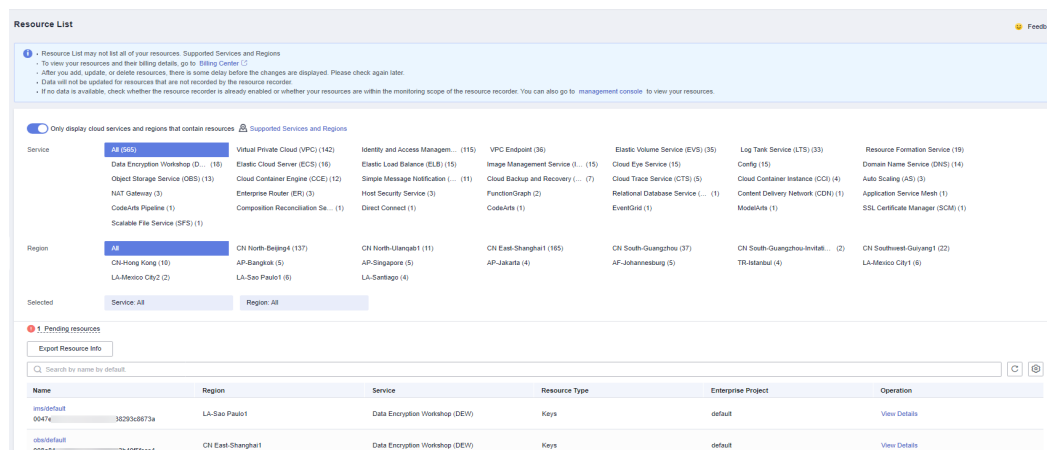
### Procedure

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

**Step 2** Click  in the upper left corner of the page. Under **Management & Governance**, select **Config**.

By default, your services that contain resources are displayed in the **Service** area, and all your resources are displayed in the list.

Figure 2-41 Resource List



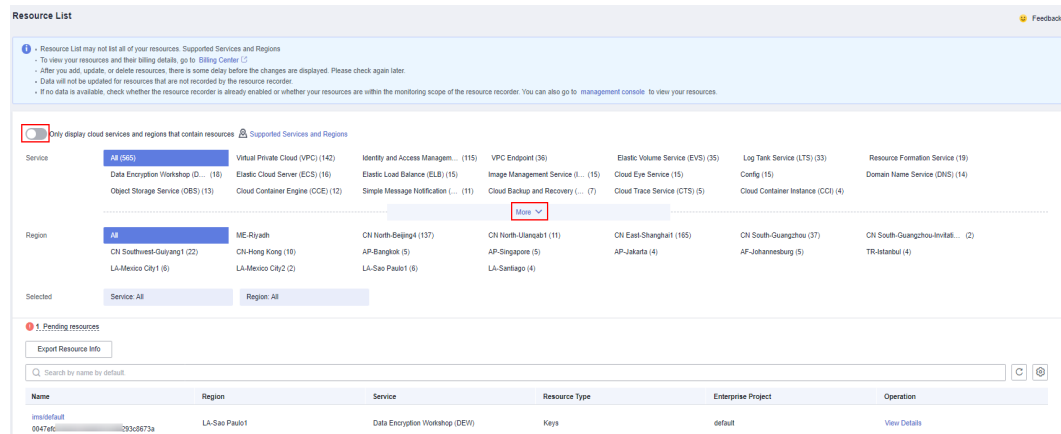
The screenshot shows the 'Resource List' page with the following details:

- Service Filter:** All (663)
- Region Filter:** All
- Table Data:**

Name	Region	Service	Resource Type	Enterprise Project	Operation
msdetail 0047e	38295d873a LA-Sao Paulo1	Data Encryption Workshop (DEW)	Keys	default	<a href="#">View Details</a>
detaildetail 000a81	38405f6c4 CN East-Shanghai1	Data Encryption Workshop (DEW)	Keys	default	<a href="#">View Details</a>

**Step 3** To view all services supported by Config, disable **Only display cloud services and regions that contain resources**.

Figure 2-42 Viewing all supported services



**Step 4** To view all supported services and regions, click **Supported Services and Regions**.

----End

**NOTE**

For details about how to view resources, see [Config User Guide](#).

## 2.12.3 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](#).

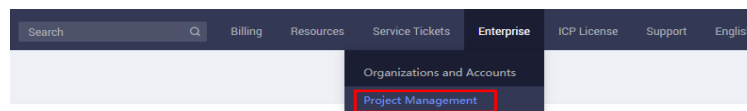
### Procedure

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

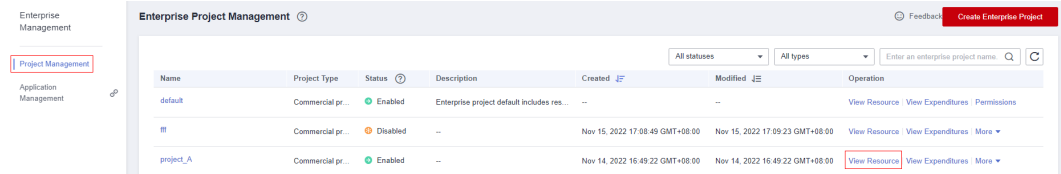
Figure 2-43 Project Management



**Step 3** On the **Enterprise Project Management** 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 page. .

Figure 2-44 Viewing resources



**Step 4** Set the resource search options.

1. Set **Region**.
2. Set **Service**.

Select a service type and then a resource type.

To view all resources of an enterprise project, select **All** for both the **Region** and **Service** options.

**NOTE**

When **Service** is set to **EIP**, you can view the 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

To export resource information for an enterprise project, go to Config console. Exporting resource information is not supported by Enterprise Project Management Service.

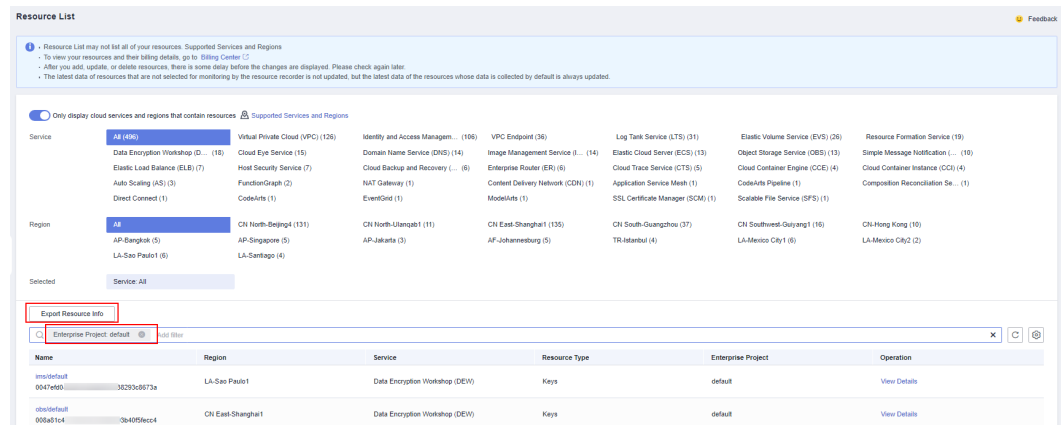
**Step 1** Log in to the management console.

**Step 2** Click  in the upper left corner. Under **Management & Governance**, click **Config**.

**Step 3** On the **Resource List** page, filter resources by enterprise project.

**Step 4** Click **Export Resource Info** to export all resources for the specified enterprise project.

Figure 2-45 Exporting resource information



 NOTE

Resource information will be exported to an Excel file for the specified enterprise project.

----End

## 2.12.4 Adding Resources to an Enterprise Project

### Scenario

If your need to group and manage resources based on your business or when resource groups need to be changed, you can add or remove resources to reallocate them.

EPS allows allocation of cross-region resources to the same enterprise project for management.

### 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.

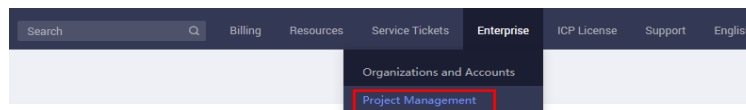
### Procedure

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

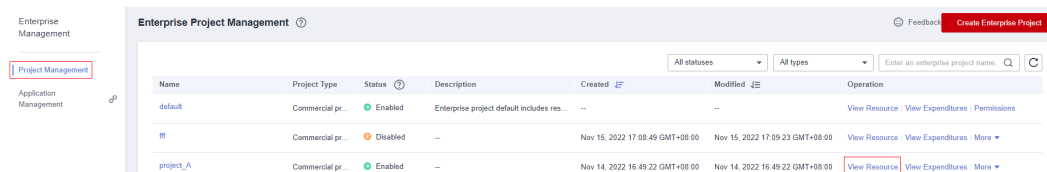
**Figure 2-46** Project Management



**Step 3** On the **Enterprise Project Management** 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 page.

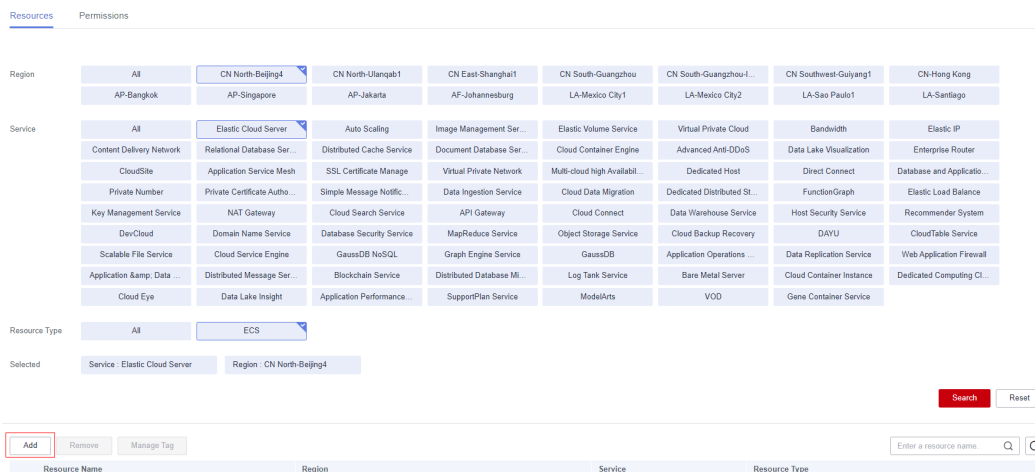
**Figure 2-47** Viewing resources



**Step 4** Click **Add**.

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

Figure 2-48 Accessing the Add Resource dialog box

**Step 5** Select a mode.

- **Independent resources:** Under this mode, 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 to the enterprise project.
- **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 only when adding ECSs. Currently, only ECSs and the associated EVS disks and EIPs can be added to an enterprise project at the same time.

**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** Click  in the **Resource Type** column to filter resource types.

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 2-49** Adding resources

**Add Resource** ×

**Note**

1. Adding independent resources allows you to add multiple types of resources to an enterprise project at the same time. To ensure correct consumption record of an enterprise project, add EVS disks and EIPs to the enterprise project that contains their associated ECSs. Adding ECSs and ECS associated resources allows you to add only ECSs and their associated EVS disks and EIPs to an enterprise project at the same time.
2. The packages of some cloud services are associated with enterprise projects. Fees are deducted for only the packages purchased when the cloud service resources and packages belong to the same enterprise project.
3. If you migrate cloud service resources to another enterprise project, namely, the cloud service resources and packages do not belong to the same enterprise project, fees are deducted for packages and resources separately.

Mode: **Independent resources** | ECSs and ECS associated resources

Resources:

<input checked="" type="checkbox"/>	Resource Name	Region	Service	Resource Type <input type="button" value="v"/>
<input checked="" type="checkbox"/>			DNS	Private Zone
<input type="checkbox"/>			DNS	Private Zone
<input type="checkbox"/>			DNS	Public Zone
<input type="checkbox"/>			DNS	Public Zone
<input type="checkbox"/>			DNS	Public Zone

**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

## 2.12.5 Removing Resources from an Enterprise Project

### Scenario

If your need to group and manage resources based on your business or when resource groups need to be changed, you can add or remove resources to reallocate them.

EPS allows removal of cross-region resources from the same enterprise project for management.

You can remove resources from an enterprise project to which the resources belong in the following two scenarios:

- Remove resources from the enterprise project to another enterprise project.
- Remove resources from the enterprise project and no longer manage them by enterprise project. The resources are automatically moved to the **default** enterprise project.

### 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.

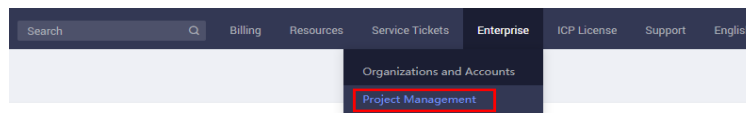
## Procedure

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

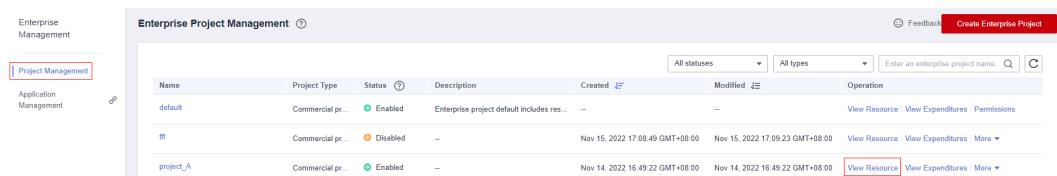
**Figure 2-50** Project Management



**Step 3** On the **Enterprise Project Management** 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 page.

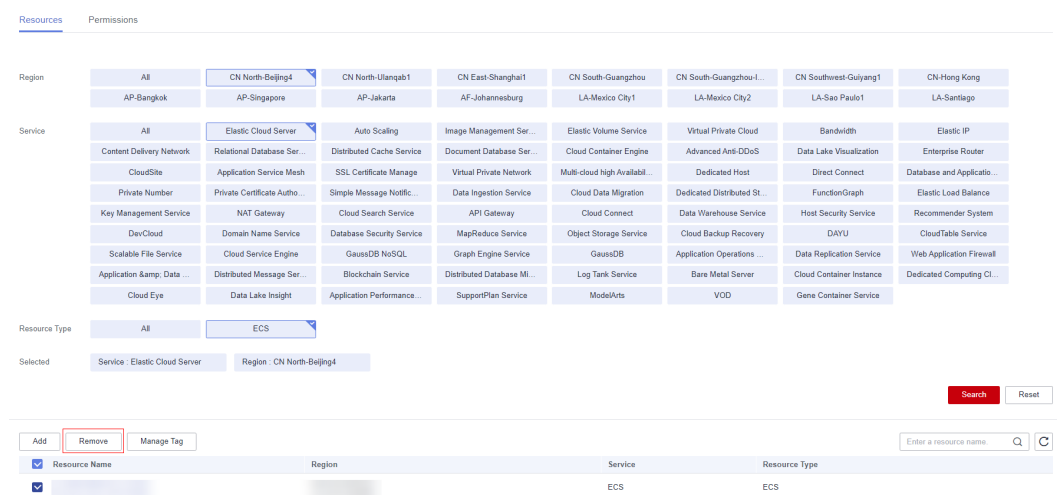
**Figure 2-51** Viewing resources



**Step 4** Select the resources to be removed, and click **Remove**.

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

**Figure 2-52** Accessing the Remove Resource dialog box



**Step 5** Select a mode.

- **Independent resources:** Under this mode, each resource is removed as an independent resource, and multiple resources can be removed at a time. Select this mode when removing resources other than ECSs.

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

- **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. Currently, only ECSs and the associated EVS disks and EIPs can be removed from an enterprise project at the same time.

Figure 2-53 Removing resources

**Remove Resource**

**Note**

1. Removing independent resources allows you to remove multiple types of resources from an enterprise project at the same time. To ensure correct consumption record of an enterprise project, remove EVS disks and EIPs from the enterprise project that contains their associated ECSs. Removing ECSs and ECS associated resources allows you to remove only ECSs and their associated EVS disks and EIPs from an enterprise project at the same time.
2. The packages of some cloud services are associated with enterprise projects. Fees are deducted for only the packages purchased when the cloud service resources and packages belong to the same enterprise project.
3. If you migrate cloud service resources to another enterprise project, namely, the cloud service resources and packages do not belong to the same enterprise project, fees are deducted for packages and resources separately.

Mode:  Independent resources  ECSs and ECS associated resources

Destination Enterprise Project: default

1 of the 1 selected resources can be removed.

Resource Name	Project	Region	Service	Resource Type
			ECS	ECS

OK Cancel

**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.

## 2.12.6 Viewing Migration Events

### Scenario

You can view details of migration events, including time, operator, operation, resource ID, source enterprise project, and destination enterprise project of each event.



## Restrictions and Limitations

Migration events of up to last seven days are listed.

Only enterprise master accounts or IAM users with administrator permissions can view migration events.

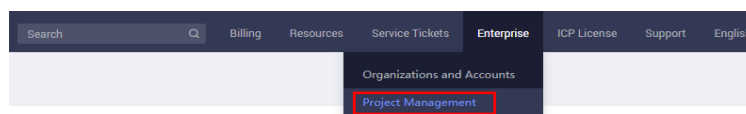
## Procedure

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

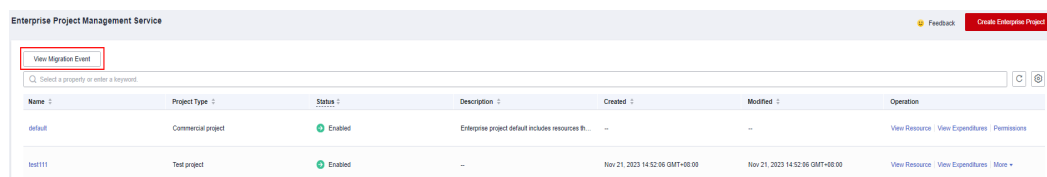
**Figure 2-54** Project Management



**Step 3** On the **Enterprise Project Management Service** page, click **View 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 2-55** Viewing migration events



----End

## 2.12.7 Managing Resource Tags

### Scenario

With EPS, you can manage resource tags of an enterprise project. You can add, modify, or delete resource tags. Batch operations are supported.

Adding tags to resources allows you to manage resources by usage, ownership, or conditions.

For supported services and resources, see [TMS and Other Services](#).

## Restrictions and Limitations

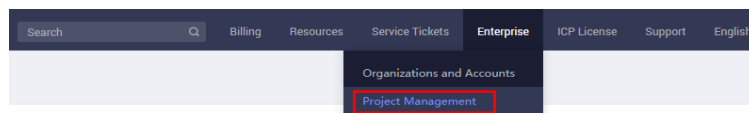
- You can add up to 10 tags to each resource.
- A key can contain up to 36 characters, including letters, digits, underscores (\_), and hyphens (-).
- A value can contain up to 43 characters, including letters, digits, underscores (\_), periods (.), and hyphens (-).

## Procedure

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

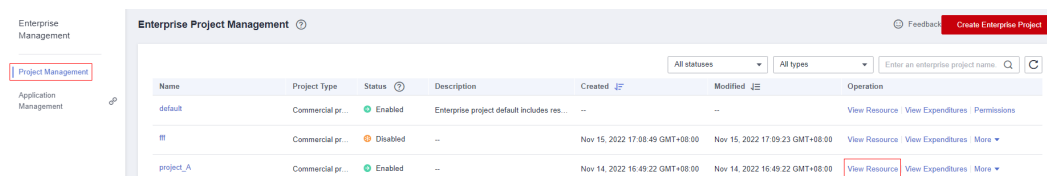
**Step 2** Choose **Enterprise > Project Management** in the upper right corner of the page.  
If the screen resolution is low, choose **More > Enterprise > Project Management**.

**Figure 2-56** Project Management



**Step 3** On the Enterprise Project Management page, click **View Resource** in the Operation column of an enterprise project. The project details are displayed.

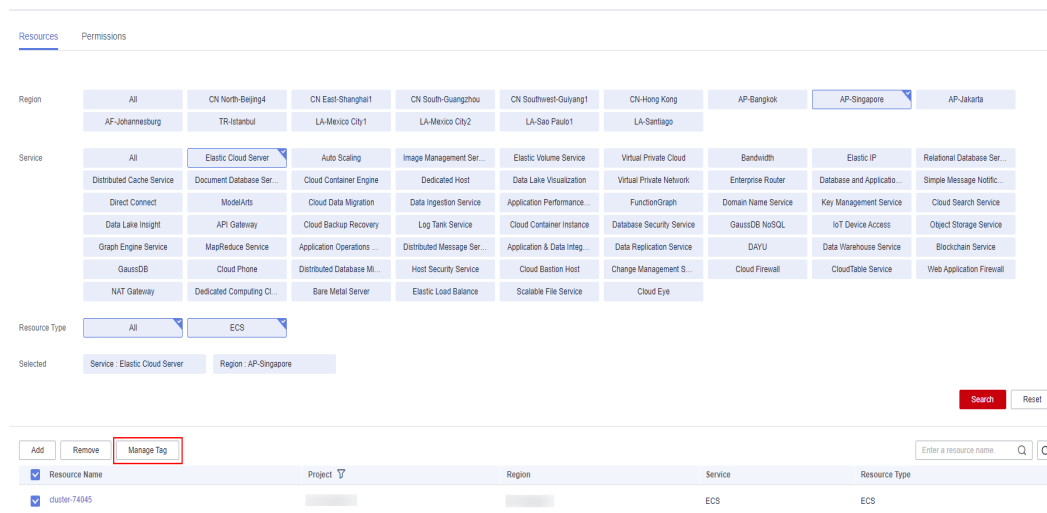
**Figure 2-57** Viewing resources



**Step 4** Select the target resource in the **Resources** tab page and click **Manage Tag**.

You can select one or more resources. You can also select all resources at one time.

**Figure 2-58** Managing tags



**Step 5** On the Manage Tag page, enter the tag key and tag value.

Figure 2-59 Adding a tag

✕

### Manage Tag

If you edit multiple tags at a time, the tag values will be modified and you will not be able to retrieve their original values.

If this tag has been changed to be the same as an existing tag, this operation will overwrite the existing tag.

**Add Tag**

1 ✕

2 ✕

Tag key

Tag value

You can add 9 more tags.

OK
Cancel

- 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 2-60 Modifying or Deleting a Tag

✕

### Manage Tag

If you edit multiple tags at a time, the tag values will be modified and you will not be able to retrieve their original values.

If this tag has been changed to be the same as an existing tag, this operation will overwrite the existing tag.

**Edit Tag**

Key	Original Value	New Value	Operation
1	2	Not Changed	Delete

---

**Add Tag**

Tag key

Tag value

You can add 9 more tags.

OK
Cancel

----End

## 2.13 Personnel Management

Enterprise projects can be managed by one or more user groups. You can create a user group under an enterprise project, and grant permissions (roles or policies) to the user group. Then, you can add users to the user group so that the users can obtain the corresponding permissions required to manage enterprise projects and resources in the 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 use cloud services based on the assigned permissions.

### 2.13.1 Managing User Groups in an Enterprise Project

#### 2.13.1.1 Viewing User Groups That Are Authorized to Manage an Enterprise Project

##### Scenario

You can view all user groups that are authorized to manage an enterprise project.

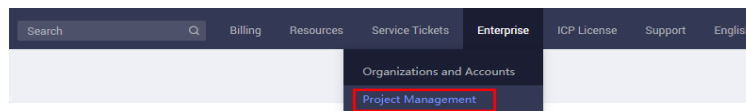
##### Procedure

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

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

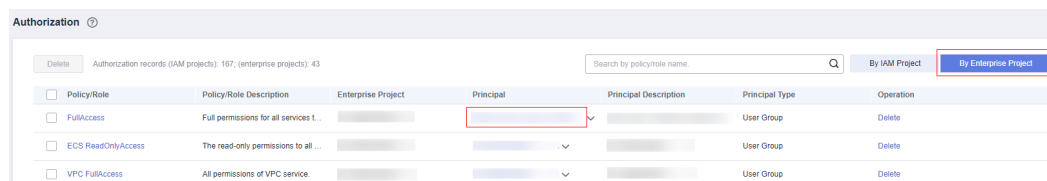
If the screen resolution is low, choose **More > Enterprise > Project Management**.

**Figure 2-61** Project Management



**Step 3** On the **Enterprise Project Management** 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** in the upper right corner of the page. Locate an enterprise project you want to view. In the **Principal** column, view information about the user group that is authorized to manage the enterprise project. **Principal Type** of the enterprise project whose principal is to be viewed must be **User Group**.

**Figure 2-62** Viewing the principal information of the enterprise project

----End

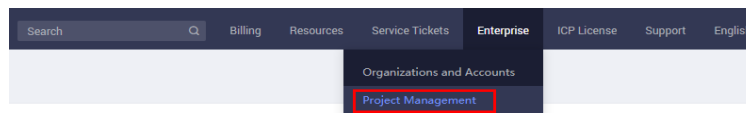
### 2.13.1.2 Authorizing a User Group to Manage an Enterprise Project

#### Scenario

After you authorize a user group to manage an enterprise project and assign permissions to the user group, users in the user group inherit the permissions. This topic describes how to authorize a user group to manage an enterprise project.

#### Procedure

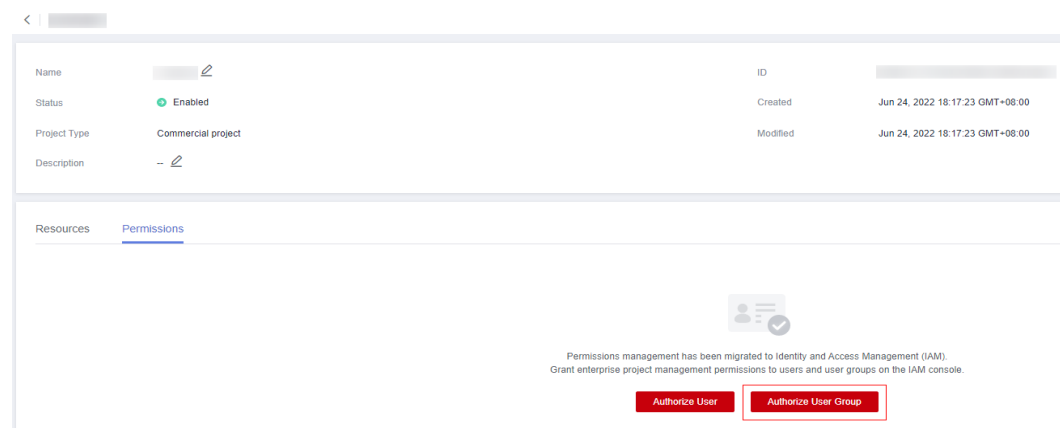
- Step 1** Log in to the Huawei Cloud console.
- Step 2** Choose **Enterprise > Project Management** in the upper right corner of the page.  
If the screen resolution is low, choose **More > Enterprise > Project Management**.

**Figure 2-63** Project Management

- Step 3** On the **Enterprise Project Management** 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 2-64** Authorize User Group

----End

### 2.13.1.3 Removing User Groups from an Enterprise Project

#### Scenario

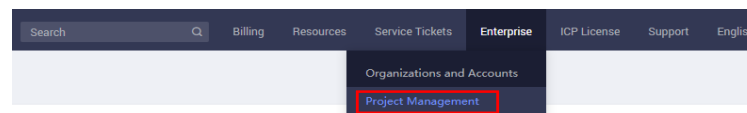
You can delete a user group that was authorized to manage an enterprise project if the enterprise's business has changed and the user group should not have the permissions to manage the enterprise project.

You can delete a user group or multiple user groups.

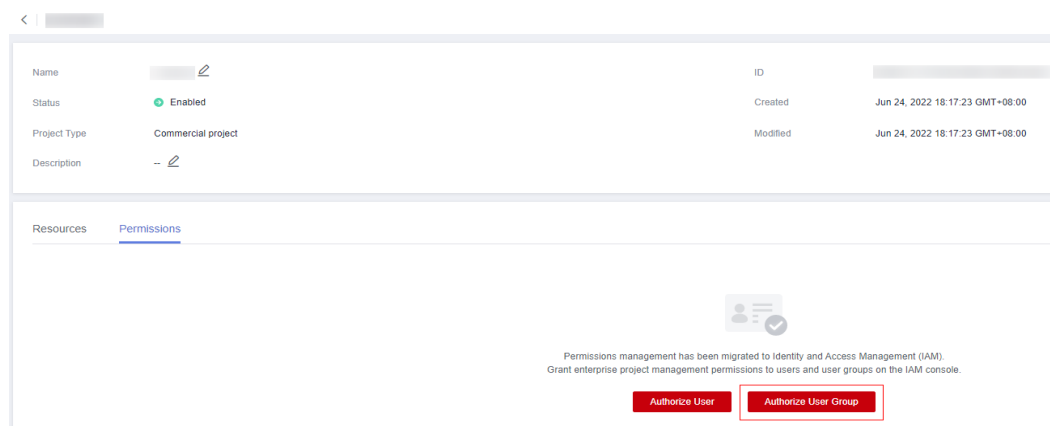
A user can no longer manage an enterprise project dissociated from the user group to which the user belongs. Users can manage the project only when the project is associated with the group.

#### Procedure

- Step 1** Log in to the Huawei Cloud 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 2-65** Project Management

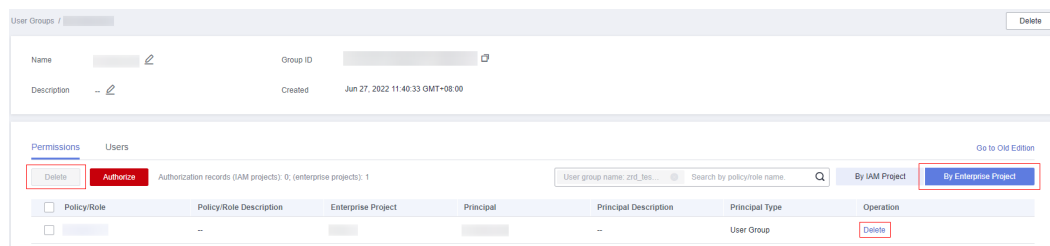
- Step 3** On the **Enterprise Project Management** page, click the name of the enterprise project you want to view.
- Step 4** On the enterprise project details page that is displayed, click the **Permissions** tab, and click **Authorize User Group**.

**Figure 2-66** 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 enterprise project that is managed by the user group and is to be deleted, 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 2-67** Deleting enterprise projects that are managed by a user group

**Step 7** In the displayed dialog box, click **Yes**.

The enterprise projects that are managed by the user group are deleted.

----End

## 2.13.2 Managing Users in an Enterprise Project

### 2.13.2.1 Authorizing a User to Manage an Enterprise Project

#### Scenario

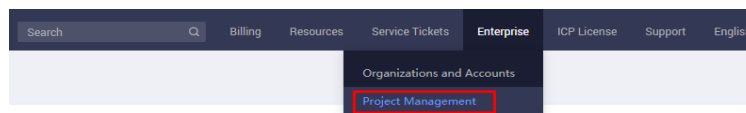
After you authorize a user to manage an enterprise project and assign permissions to the user, the user can use the assigned permissions to manage resources in the enterprise project. This topic describes how to authorize a user to manage an enterprise project.

## Procedure

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



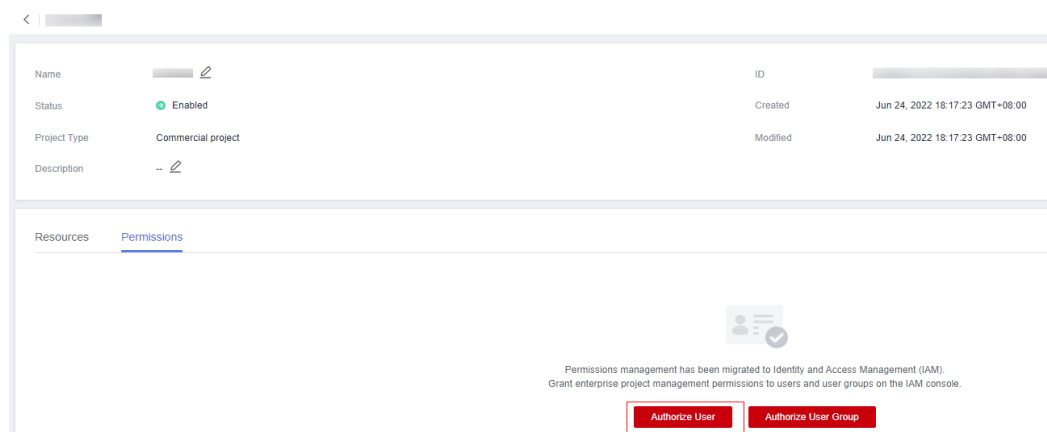
**Step 3** On the **Enterprise Project Management** page, click the name of the enterprise project you want to view.

**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 2-69** User Authorization



----End

## Other Operations

A user inherits permissions from the groups to which the user belongs. To change the permissions of a user, add the user to a new group or remove the user from an existing group. For details, see [Adding Users to or Removing Users from a User Group](#).



## 2.13.2.2 Removing Users from an Enterprise Project

### Scenario

You can delete a user that was authorized to manage an enterprise project if the enterprise's business has changed and the user should not have the permissions to manage the enterprise project.

You can delete a user or multiple users.

Users can no longer manage an enterprise project dissociated from them. Users can manage the project only when they are associated with the project.

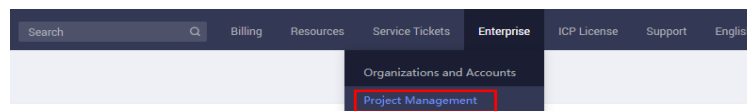
### Procedure

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

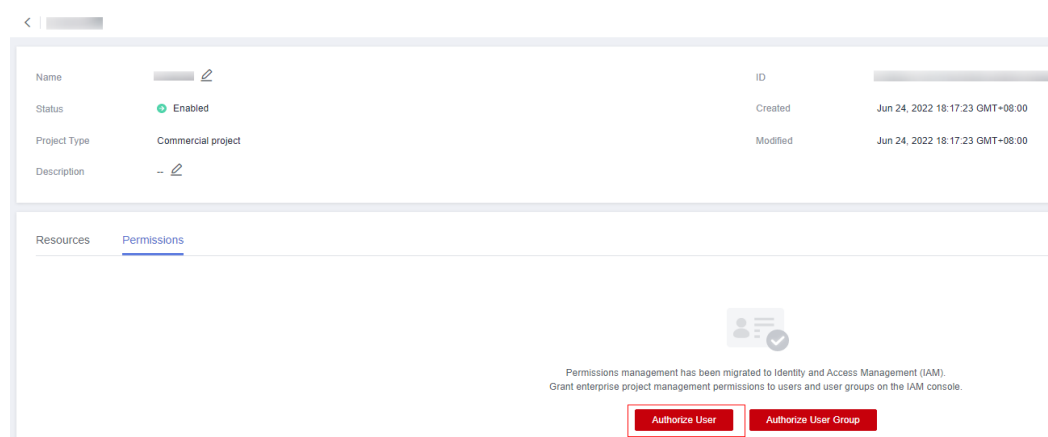
**Figure 2-70** Project Management



**Step 3** On the **Enterprise Project Management** 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 2-71** User Authorization

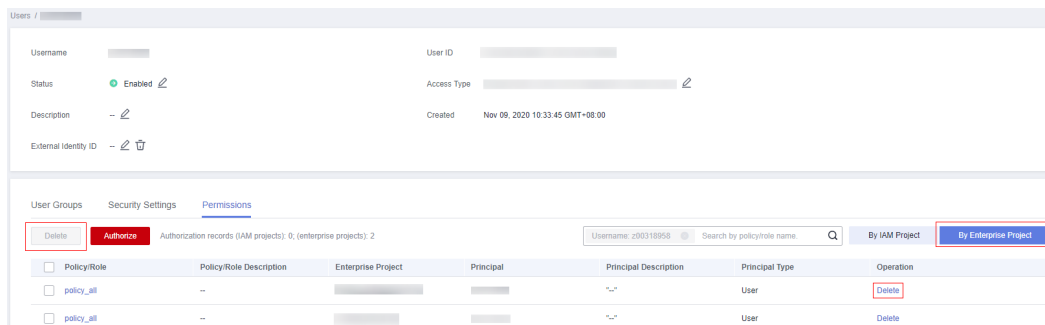


**Step 5** On the IAM **Users** page that is displayed, click the user name to go to the user details page.

**Step 6** On the **Permissions** tab, click **By Enterprise Project**, select the enterprise project that is managed by the user and is to be deleted, 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 2-72** Deleting enterprise projects that are managed by a user



**Step 7** In the displayed dialog box, click **Yes**.

The enterprise projects that are managed by the user are deleted.

----End

## Other Operations

A user inherits permissions from the groups to which the user belongs. To change the permissions of a user, add the user to a new group or remove the user from an existing group. 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.

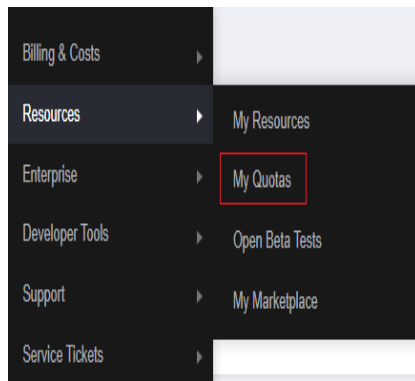
You can create up to 100 enterprise projects for an account. If you need to increase the quota, see [How Do I Apply for a Higher Quota?](#)

The quota can be increased to a maximum amount of 256.

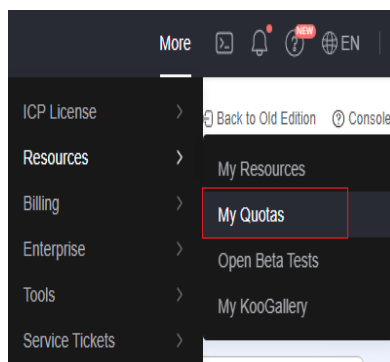
### How Do I Apply for a Higher Quota?

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 2-73 My Quotas**

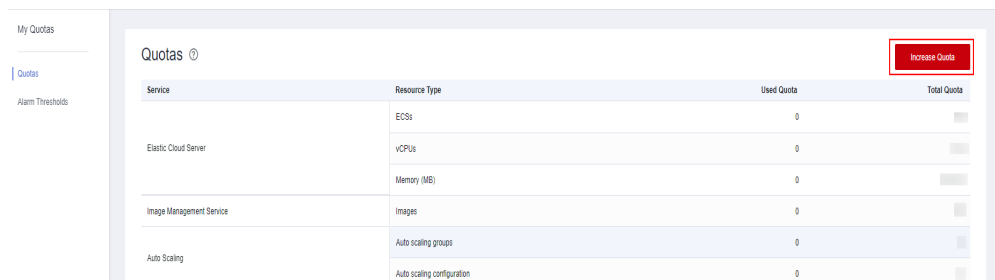


**Figure 2-74 My Quotas**

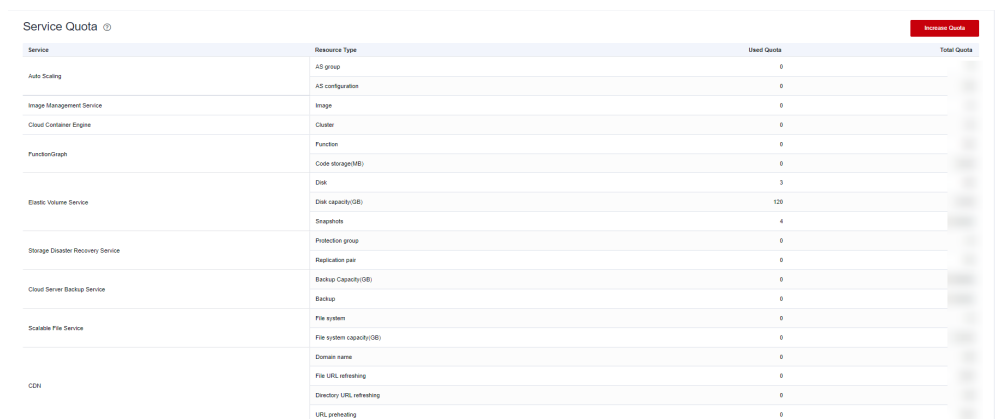


3. Click **Increase Quota** in the upper right corner of the page.

**Figure 2-75 Increasing quota**



**Figure 2-76 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 Enterprise Project Accounting Management

Enterprise project accounting management allows you to manage enterprise accounting details by project.

You can create a master account and multiple member accounts based on your enterprise structure, associate the member accounts with the master account, create enterprise projects under member accounts, and manage accounting details of these enterprise projects.

### 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 information.

##### Prerequisites

You have enabled the enterprise project function.

##### Procedure

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

**Figure 2-77** Creating an enterprise project group

**Create Project Group**

① Configure Project Group ——— ② Select Projects

\* Name

Description

0/200

**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.

**Figure 2-78** Selecting enterprise projects

**Create Project Group**

① Configure Project Group ——— ② Select Projects

Available Projects (Total: 19)


Project Name	
<input type="checkbox"/> curreent	
<input type="checkbox"/> @revent	
<input type="checkbox"/> :	
<input type="checkbox"/> test	
<input type="checkbox"/> test-project	
<input checked="" type="checkbox"/> test-zcy-02	
<input checked="" type="checkbox"/> test-zcy-03	
<input checked="" type="checkbox"/> test-zcy-04	
<input checked="" type="checkbox"/> test-zcy-05	

Selected Projects (Total: 4)

Project Name	
test-zcy-02	×
test-zcy-03	×
test-zcy-04	×
test-zcy-05	×

Notes: 1. Press and hold the SHIFT key to select multiple projects. 2. Each project can belong to only one project group. Before moving a project to another group, remove the project from the original group first.

 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 one enterprise project group only. Before moving an enterprise project to another group, remove the enterprise project from the original group first.
- The expenditure summary of an enterprise project group is refreshed based on the latest member enterprise projects. If an enterprise project leaves a group, the expenditure summary (including historical expenditures) of the enterprise project will no longer be counted in that 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 or 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, its overall accounting information will no longer be displayed for you. However, you can still view the accounting information of 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** Log in to the Huawei Cloud 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.

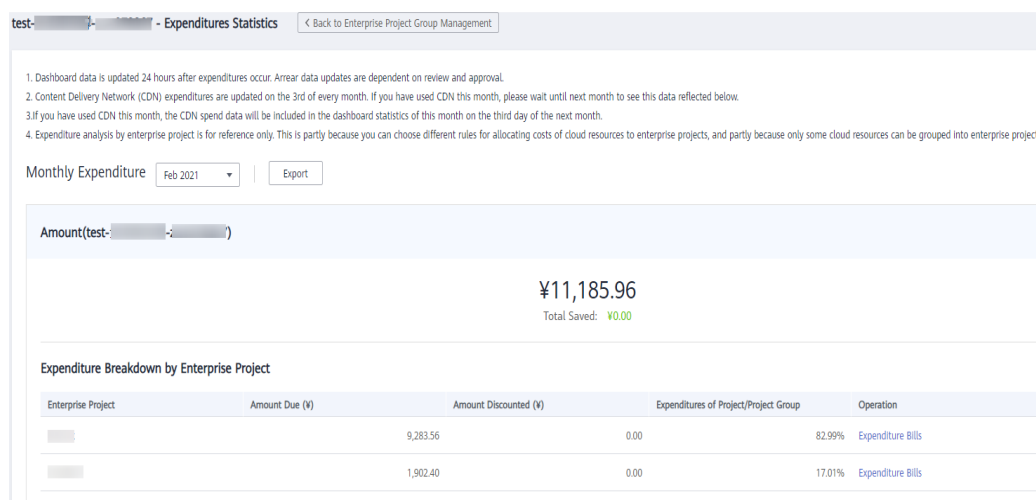
The **Enterprise Project Group Management** page is displayed.

**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.

**Figure 2-79** Expenditure statistics of an enterprise project group



#### 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:

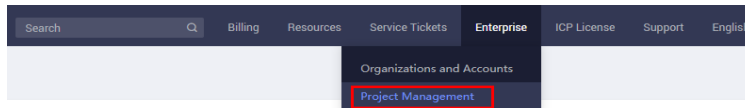
- The **EPS console**
- The **Billing Center**

### Using the EPS Console

**Step 1** Log in to the Huawei Cloud 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** page, click **View Expenditures** in the **Operation** column of the row containing the target enterprise project.
- Step 4** In the navigation pane of the **Bills** page, choose **Renewals, Orders, Bills, Unsubscriptions and Changes, Quota Management, and Message Reception** to perform related operations.

----End

## Using the Billing Center

- Step 1** Log in to the Huawei Cloud 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 of an Enterprise Project

### Scenario

Paying orders, canceling orders, exporting orders, and viewing order details in your 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 **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

You can export the monthly expenditure bills of one or more enterprise projects.

#### Prerequisites

You have enabled the enterprise project function.

#### Viewing the Monthly Expenditure of an Enterprise Project

**Step 1** On the [Enterprise Project Management](#) page, click **View Expenditures** in the **Operation** column of the row containing 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 Expenditure Bill of an Enterprise Project

**Step 1** On the [Enterprise Project Management](#) page, click **View Expenditures** in the **Operation** column of the row containing 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 Expenditure 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 Expenditure 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](#) page, click **View Expenditures** in the **Operation** column of the row containing 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](#) page, click **View Expenditures** in the **Operation** column of the row containing 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](#) page, click **View Expenditures** in the **Operation** column of the row containing 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](#) page, click **View Expenditures** in the **Operation** column of the row containing 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.

## Set Fund Quota Control Policy

In the Case of Insufficient Quota Balance ?

Allow purchases of provisioning of pay-per-use cloud resources and yearly/monthly cloud resources

Prohibit purchases of provisioning of pay-per-use cloud resources and yearly/monthly cloud resources

Quota Balance (¥)

### Step 6 Click **Sure**.

A message is displayed indicating that the operation is successful.

**Figure 2-81** Setting a fund quota

**Set Quota** [← Back to Enterprise Project Management](#)

When the fund quota of an enterprise project is insufficient, you can choose whether to allow or prohibit subsequent purchases of yearly/monthly cloud resources and provisioning of pay-per-use cloud resources. However, there is no restriction on existing cloud resources in the enterprise project. You can continue to perform operations on existing cloud resources, including using pay-per-use cloud resources, renewing yearly/monthly cloud resources both manually and automatically, changing to yearly/monthly subscription, and modifying resource configurations.

**Fund Quota Control**

In the Case of Insufficient Quota Balance ?

Allow purchases of provisioning of pay-per-use cloud resources and yearly/monthly cloud resources

Prohibit purchases of provisioning of pay-per-use cloud resources and yearly/monthly cloud resources

Current Quota Balance \$1,000.00 [Change](#)

Balance Change History [View](#)

**Balance Alert**

Alert Threshold: \$200.00 USD [Modify](#)

Notification ? (system administrator)

To enable more recipients to be notified of balance alerts, go to [Message Reception](#)

 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 Application Management

### 2.16.1 Overview

This topic helps you quickly master the application management operations.

Application Management consists of the following parts:

- **Applications:** By creating an application, you can invoke a template in the application to provision cloud resources and deploy service software. You can create monitoring tasks and monitor the application resource usage, alarms, and SAP system running status on the SAP monitoring screen in real time.
- **Template Management:** Resource templates simplify cloud computing resource management and automate O&M. Based on the defined template specifications, you can compile a template file and define a collection of cloud computing resources, dependencies between resources, and resource configurations. Then you can use the orchestration engine to achieve automatic creation and configuration of all resources in the template, simplifying O&M.

Templates are classified as example templates and custom templates. You can view and use example templates. You can also create and manage your own templates.

- **O&M Management:** By creating O&M tasks, you can expand, back up, and recover enterprise project application resources.



## 2.16.2 Applications

### 2.16.2.1 Viewing an Application

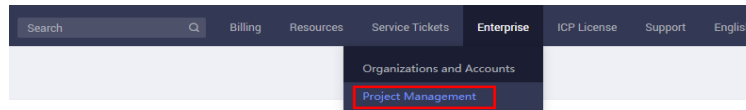
#### Scenario

You can view details of existing applications.

#### Procedure

- Step 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 2-82** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.  
The application list is displayed in the lower part of the page.
- Step 3** Select the region where the applications to be viewed are deployed.  
The application list of the selected region is displayed in the lower part of the page.
- Step 4** Filter applications.  
In the upper right corner of the list, select an enterprise project or enter an application name to filter applications.
- Step 5** Click an application name to go to the application details page.  
You can view resources, parameters, and events about the application on the details page.

----End

### 2.16.2.2 Creating an Application

#### Scenario

By creating an application, you can invoke a template to provision cloud resources and deploy service software.

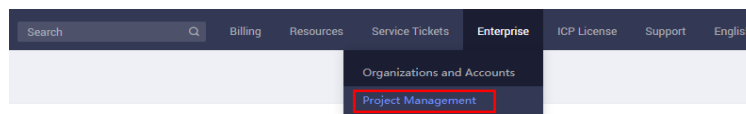
The creation of an application is free of charge, but related services are charged as required.

#### Procedure

- Step 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 2-83** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **Create Application** in the upper right corner of the page.

The **Create Application** page is displayed.

**Step 4** Configure basic application information based on [Table 2-11](#).

**Table 2-11** Basic application parameters

Parameter	Description
Enterprise Project Name	Select an existing enterprise project from the drop-down list box or click <b>Create Enterprise Project</b> on the right.
Region	Select a region to create the application. Up to 100 applications can be created in each region.
Application Name	Set an application name as required. The application name cannot be empty, can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter. It can contain 1 to 64 characters.
Application Description	Optional. The description can contain up to 256 characters.
Source Type	<ul style="list-style-type: none"><li>● <b>Example templates:</b> You can select a template provided by the system.</li><li>● <b>My templates:</b> You can select a custom template.</li></ul>
Template Type	<ul style="list-style-type: none"><li>● SAP</li><li>● Common</li></ul>
Select Template	Select the template from the list. If there are many templates, you can enter the template name in the search box to search for the template.

**Step 5** Click **Next**.

The **Configure Parameters** page is displayed. On this page, you can set template parameters based on your requirements.

**Step 6** Click **Next**.

The **Confirm Specifications** page is displayed. On this page, you can confirm the basic information and template parameters.

**Step 7** Click **Submit**.

After the application is created, you can view it in the application list.

----End

## 2.16.2.3 Modifying an Application

### Scenario

When the application information changes, you can modify its name, description, and application parameters.

### Restrictions and Limitations

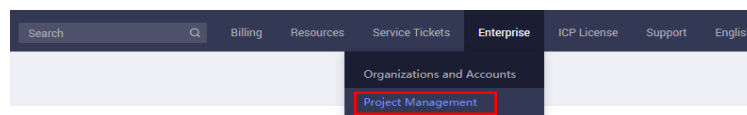
An application can be modified only when it is successfully created, updated, or managed.

### Procedure

**Step 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 2-84** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Locate an application you want to modify and click **Modify** in the **Operation** column.

The **Modify Application** page is displayed.

**Step 4** Modify the application name.

Set an application name as required. The application name cannot be empty, can contain only letters, digits, hyphens (-), and underscores (\_), and must start with a letter. It can contain 1 to 64 characters.

**Step 5** (Optional) Enter an application description.

The description can contain up to 256 characters.

**Step 6** Modify application parameters.

The parameters that can be modified are displayed. Change parameter values in the gray area in the lower part of the page.

 **NOTE**

Parameters invoked by resources of this application are not displayed and cannot be modified. To check whether a parameter is invoked by the resources, choose **Application Management > Template Management**, click the source template of the application on the **Example templates** or **My templates** tab, and view **Template Content** on the displayed template details page. The parameters listed in the **resources** section are invoked by resources.

**Step 7** Click **Next**.

The application modification details page is displayed.

**Step 8** Confirm the application details and click **Submit**.

Then you can access the application details page to check whether the application information has been modified.

----End

## 2.16.2.4 Deleting an Application

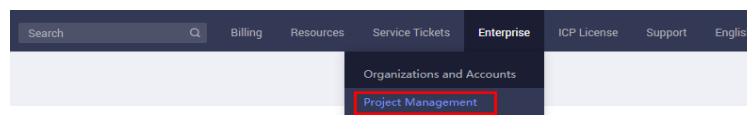
### Scenario

You can delete an application that is no longer used.

### Procedure

- Step 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 2-85** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

- Step 3** Locate an application you want to delete and click **Delete** in the **Operation** column.

The **Delete Application** dialog box is displayed.

- Step 4** Click **Yes**.

After the application is deleted, it is no longer displayed in the application list.

----End

## 2.16.2.5 Creating a Monitoring Panel and Viewing Monitoring Data

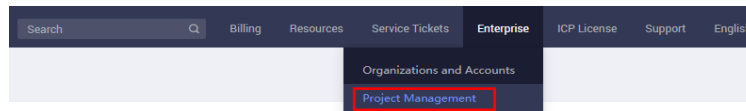
### Scenario

By creating a monitoring panel for an application, you can view metrics you are interested and monitoring data of resources in the application in the monitoring panel.

### Procedure

- Step 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 2-86** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.  
The application list is displayed in the lower part of the page.
- Step 3** Click **Create Monitoring Panel** in the **Operation** column of the row containing the target application.  
The **Create Monitoring Panel** dialog box is displayed.
- Step 4** Enter the name of the monitoring panel.  
The monitoring panel name cannot be empty. It can contain only letters, digits, hyphens (-), and underscores (\_), and must start with a letter. It can contain 1 to 64 characters.
- Step 5** Click **OK**.  
After a monitoring panel is created, **Create Monitoring Panel** in the **Operation** column switches to **View Metric**.
- Step 6** Click **View Metric**.  
By default, the created monitoring panel is displayed on the **Monitoring Panels** page of the Cloud Eye console.  
On the monitoring panel, five graphs of CPU usage, disk read IOPS, disk write IOPS, disk read bandwidth, and disk write bandwidth are displayed by default.  
You can add a graph on this page to monitor metrics of the resources that you are interested. For details about how to add a monitoring graph, see [Adding a Graph](#).

----End

## 2.16.2.6 Managing Resources Using Applications

### Scenario

You can use applications to manage resources that are not created by using applications.

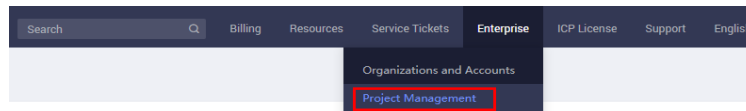
### Restrictions and Limitations

Only ECSs in the running or stopped state can be managed currently. Applications created by using templates cannot be used for resource management.

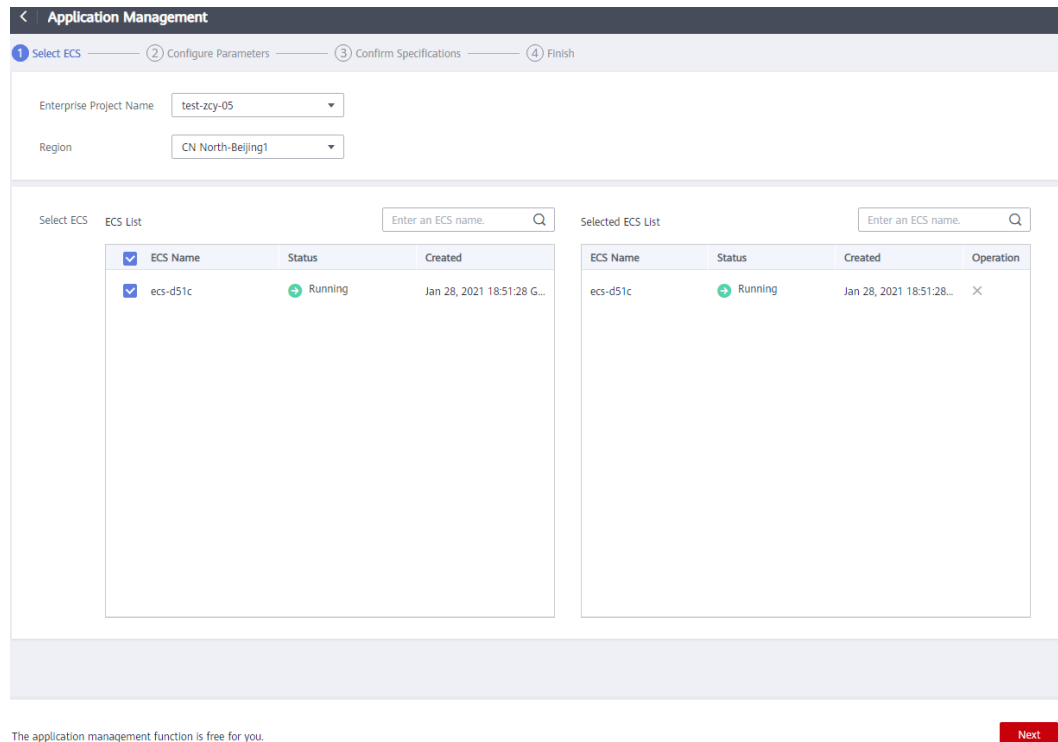
### Procedure

- Step 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 2-87** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.  
The application list is displayed in the lower part of the page.
- Step 3** Click **Manage Resource** in the upper right corner of the page.  
The **Application Management** page is displayed.
- Step 4** Select an ECS.
1. In the **Enterprise Project Name** drop-down list, click the drop-down arrow, and select the enterprise project to which the resource to be managed belongs.
  2. In the **Region** drop-down list, click the drop-down arrow, and select the region to which the resource to be managed belongs.
  3. Select the resource to be managed in the ECS list.
  4. Click **Next**.

**Figure 2-88** Selecting an ECS**Step 5** Configure the parameters.

1. Select an application.
  - Click the drop-down arrow, and select an application.
  - Click **Create Application**, and enter information such as the name to create an application.

2. (Optional) Configure parameters.

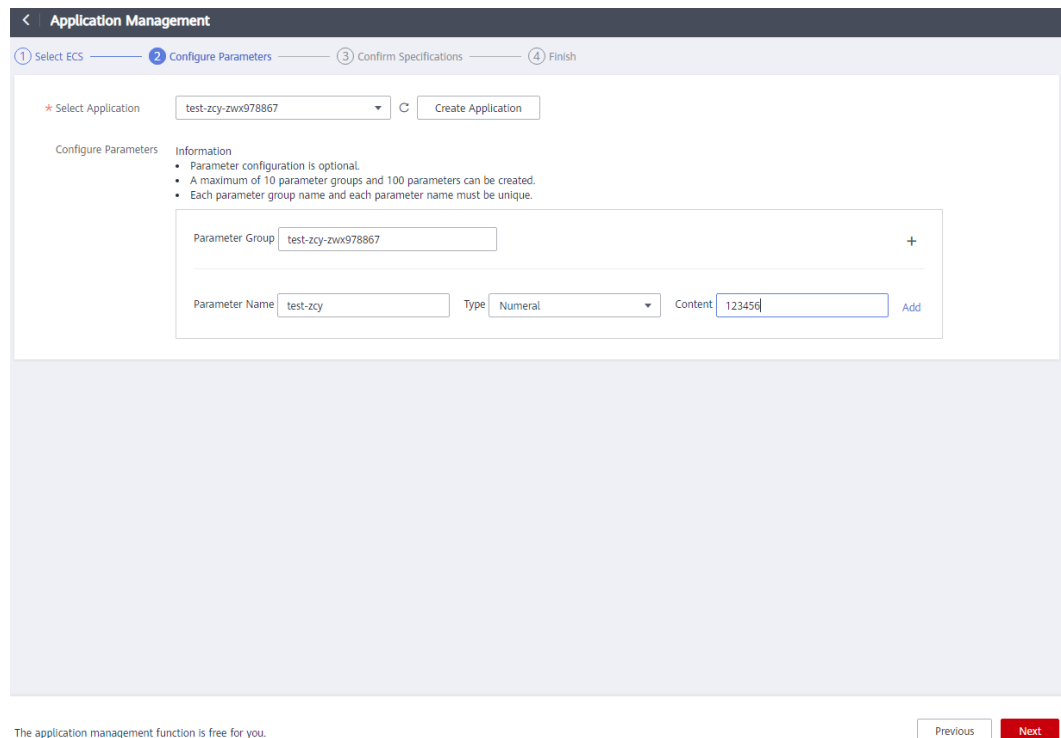
You can add parameters to identify applications.

You can add a parameter group, specify the name and type of each parameter in the group, and add parameter content. For the **Type** parameter, select either **Text** or **Numeral** as required.

Up to 10 parameter groups and 100 parameters can be created. The parameter group names and parameter names must be unique.

3. Click **Next**.

**Figure 2-89** Configuring parameters



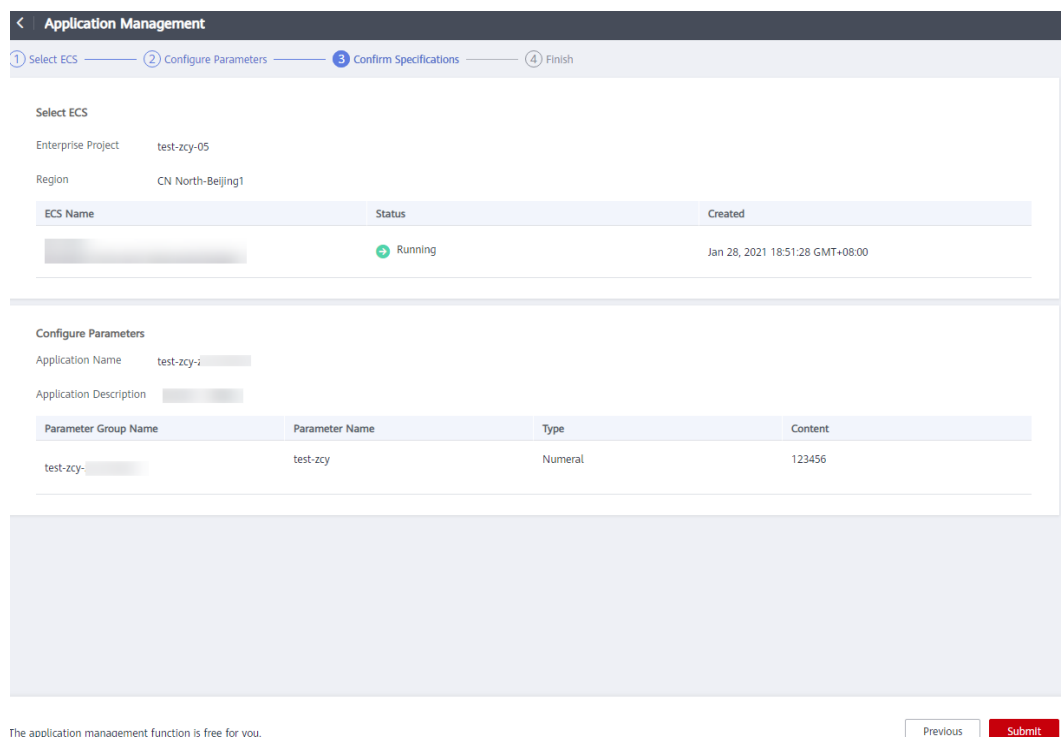
The application management function is free for you.

Previous Next

**Step 6** Confirm the specifications of the resource to be managed, and click **Submit**.

Resources in the application have been managed. You can view the application status in the application list.

**Figure 2-90** Confirming specifications



The application management function is free for you.

Previous Submit



**Figure 2-91** Managed application

Name	Source Template	Status	Region	Enterprise Project	Description	Created	Operation
test-zy-05	--		CN North-Beijing1	test-zy-05		Feb 05, 2021 15:41:57 GMT+08:00	Modify   Delete   Create Monitoring Panel

----End

## Follow-Up Operations

After resources in the application are managed, you can perform the following operations on the application.

- By creating a monitoring panel, you can monitor the metrics of the resources managed by the application. For details about how to create a monitoring panel, see [Creating a Monitoring Panel and Viewing Monitoring Data](#).
- O&M management allows you to scale, back up, and recover managed resources of an application. For details, see [Expanding the Capacity of an EVS Disk](#) to [Backing Up and Restoring an Application](#).

### 2.16.2.7 SAP Full Screen Monitoring

The SAP full screen monitoring provides functions such as SAP system monitoring, alarm statistics, application overview, CPU usage, memory usage, disk I/O, and network traffic overview. The SAP full screen monitoring helps you better understand the application resource usage, alarms, and SAP system running status in real time.

This section describes how to perform the following operations:

- [Installing Configuration Plug-ins](#)
- [Viewing the SAP Full Screen Monitoring Page](#)
- [Adding an Application Monitoring Task](#)
- [Modifying an Application Monitoring Task](#)
- [Deleting an Application Monitoring Task](#)
- [Viewing a Monitoring Graph](#)
- [Modifying a Monitoring Graph](#)
- [Deleting a Monitoring Graph](#)
- [Adding a Monitoring Graph](#)

## Installing Configuration Plug-ins

To view the SAP full screen monitoring, you need to install the relevant configuration plug-ins. For details about the SAP scenarios and the plug-in configurations, see:

- [SAP HANA \(Single-Node Deployment Without HA Required\)](#)
- [SAP HANA \(Single-Node Deployment With HA Required\)](#)
- [SAP S/4HANA \(Single-Node Deployment Without HA Required\)](#)

- [SAP S/4HANA \(Single-Node Deployment With HA Required\)](#)
- [SAP S/4HANA \(Distributed Deployment with HA Required\)](#)
- [SAP S/4HANA \(Distributed Deployment Without HA Required\)](#)

## Viewing the SAP Full Screen Monitoring Page

The SAP full screen monitoring helps you better understand the application resource usage, alarms, and SAP system running status in real time.

The system will be disconnected automatically if no operation is performed within 30 minutes as an administrator account. You are advised to use the dedicated account for full screen monitoring. For details about how to add a dedicated account, see [How Do I Add a Dedicated Account for the SAP Large Screen Monitoring?](#).

Figure 2-92 SAP full screen monitoring



**Alarm Statistics:** Displays the number of alarms at different ranks. The collection of alarm information depends on Cloud Eye.

After you install and configure the plug-ins required by the SAP full screen monitoring, the system reports the collected monitoring data on the **Custom Monitoring** page of the Cloud Eye console. You only need to create alarm rules in Cloud Eye to view alarm statistics on the **SAP Full Screen Monitoring** page. For details about customizing monitoring and creating alarm rules, see [Using Custom Monitoring](#).

### NOTE

The **Alarm Statistics** function takes effect only on the applications that meet the following conditions:

- A monitoring task has been added for the application. For details, see [Adding an Application Monitoring Task](#).
- Alarm rules have been created for the application.

**ABAP Dumps:** Displays the top three applications with the largest number of dump tasks in the last hour.

**Background Jobs:** Displays the top three application SIDs with the largest number of background jobs in the last hour.

**Lock Entries Usage:** Displays the top three applications with the largest number of lock entries usage.

**Overview Status:** Displays custom application monitoring data. You can add, modify, and delete application monitoring data as required.

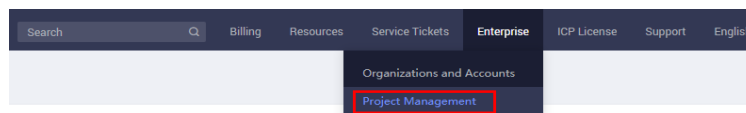
**Resource Usage:** Displays the top three resource usage metrics in the last three minutes. The available metrics are **Extended Memory Usage**, **Heap Memory Usage**, **Dialog Work Processes Usage**, **Background Work Processes Usage**, **Spool Work Processes Usage**, **Update 1 Work Processes Usage**, **Update 2 Work Processes Usage**, **CPU Usage**, **Memory Usage**, **Disk I/O**, **Network**, and **File System Usage**.

To view the SAP full screen monitoring page, perform the following steps.

**Step 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 2-93** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed.

**Step 4** Click **Full Screen Monitoring**.

The **SAP Full Screen Monitoring** page is displayed.

----End

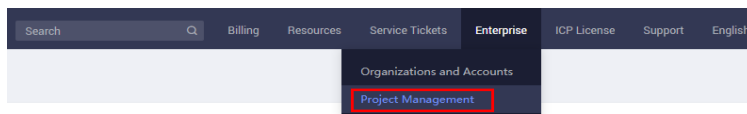
## Adding an Application Monitoring Task

After adding an application monitoring task, you can monitor the metrics of resources in the application in real time.

If you add an application monitoring task for the first time, the system displays the monitoring graphs of the following metrics by default: ABAP Dumps, Background Jobs, Lock Entries Usage, CPU Usage, Memory Usage, Disk I/O, Network, and File System Usage. You can modify the graph to display other metrics that you concern.

**Step 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 2-94** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

**Step 4** Click  in the **Overview Status** area.

The **Add Application Monitoring** dialog box is displayed.

 **NOTE**

Up to 18 application monitoring data records can be added currently.

**Step 5** Specify the monitoring information about the application.

- **Application:** Select an existing application.
- **Database:** Select the database to which the application is connected.
- **Application SID:** Enter the SID of the SAP application system.
- **Database SID:** Enter the SID of the SAP database.

 **NOTE**

The SID information cannot be empty. The value must contain 3 characters, can contain uppercase letters and digits, and must start with a letter.

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

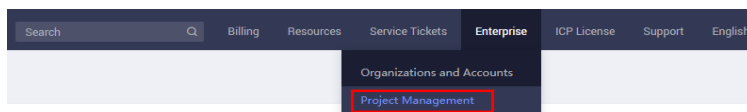
----End

## Modifying an Application Monitoring Task

To modify the original application monitoring information, perform the following steps:

**Step 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 2-95** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

**Step 4** Locate the application monitoring data to be modified in the **Overview Status** area, and click .

The **Modify Application Monitoring** dialog box is displayed. You can modify the application, database, application SID, and database SID.

**Step 5** Click **OK**.

----End

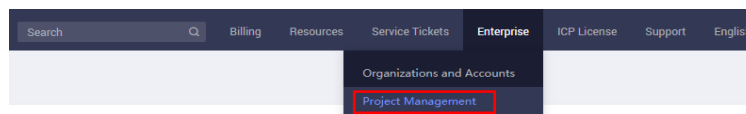
## Deleting an Application Monitoring Task

To stop monitoring an application, perform the following steps:

**Step 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 2-96** Project Management




**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

**Step 4** Locate the application monitoring data to be deleted in the **Overview Status** area, and click .

The **Delete Application Monitoring** dialog box is displayed.

**Step 5** Click **OK**.

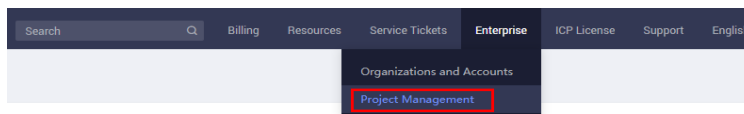
----End

## Viewing a Monitoring Graph

After setting the application monitoring, you can view the data of each metric of the application resource in the monitoring graph.

**Step 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 2-97** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

**Step 4** Locate the monitoring graph to be viewed in the **SAP Full Screen Monitoring** area, and click .

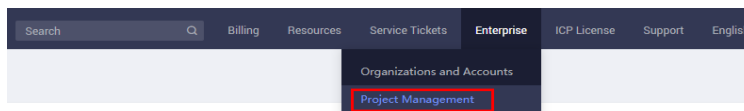
The system displays the expanded monitoring graph and the ranking of all the metrics data.

----End

## Modifying a Monitoring Graph

To change the original metrics in a graph to other metrics, perform the following steps:

**Step 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 2-98** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

**Step 4** Locate the monitoring graph to be modified in the **SAP Full Screen Monitoring** area, and click .

The **Modify Application Monitoring** dialog box is displayed.

**Step 5** Select the metrics to be displayed from the drop-down list.

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

If the new metrics are displayed in the graph, the modification is successful.

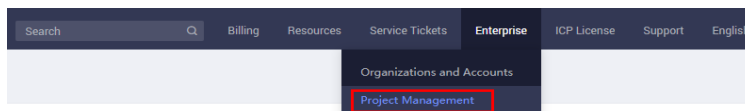
----End

## Deleting a Monitoring Graph

To stop monitoring a metric, perform the following steps:

- Step 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 2-99** Project Management




- Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

- Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

- Step 4** Locate the application graph to be deleted in the **SAP Full Screen Monitoring** area, and click .

The **Delete Application Monitoring** dialog box is displayed.

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

If the graph is not displayed on **SAP Full Screen Monitoring**, it is deleted successfully.

----End

## Adding a Monitoring Graph

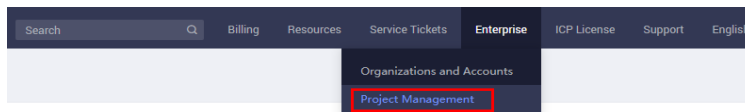
You can add a monitoring graph to monitor the required metrics in the **SAP Full Screen Monitoring** area.

You can add a graph only when there is a blank graph on the page.

To add a monitoring graph, perform the following operations:

- Step 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 2-100** Project Management




- Step 2** In the navigation pane on the left, click **Application Management**.

The application list is displayed in the lower part of the page.

**Step 3** Click **SAP Full Screen Monitoring** in the upper left of the application list.

The monitoring management page is displayed. You can change the metrics to be displayed in the **SAP Full Screen Monitoring** area.

**Step 4** Click  in the left or right pane in the **SAP Full Screen Monitoring** area.

The **Add Monitoring Graph** dialog box is displayed.

**Step 5** Select the metrics to be displayed from the drop-down list.

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

If the graph is displayed on **SAP Full Screen Monitoring**, it is added successfully.

----End

## 2.16.3 Template Management

### 2.16.3.1 Example Templates

An example template is the heat template for service resource provisioning and software deployment. You can select an example template to create an application or modify it to create your own template.

### Viewing an Example Template

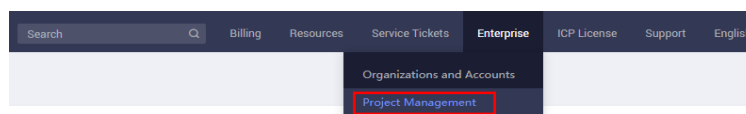
The example template details page contains the name, type, description, resource view, and content of the example template.

To view the sample template information, perform the following steps.

**Step 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 2-101** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

**Step 4** Click the name of the example template to be viewed. The example template details page is displayed.

You can view the details and content of the example template on this page. You can also click **Create Application** in the upper right corner to create an application, or click **Download Template** to save the template as your own template.



For details about how to create an application, see [Creating an Application](#).

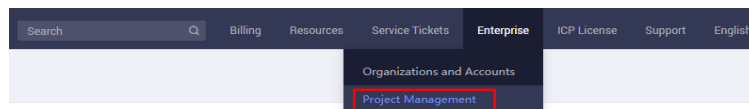
----End

## Creating an Application

You can create an application by using the example templates provided by the system.

- Step 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 2-102** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.

- Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

- Step 4** Click **Create Application** in the **Operation** column of the row containing the target example template.

Create an application based on your requirements. For details, see [Creating an Application](#).

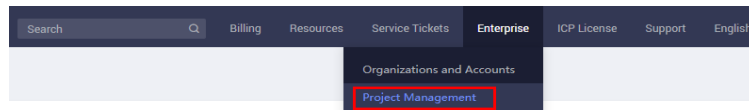
----End

## Using an Example Template to Create a Template

You can modify the example templates provided by the system to create your own templates.

- Step 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 2-103** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.

- Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

- Step 4** Click **Modify as My Template** in the **Operation** column of the row containing the desired example template.

The **Modify as My Template** page is displayed. Set the parameters by referring to the descriptions in [Table 2-12](#).

**Table 2-12** Template parameter configuration

Parameter	Description
Region	Select a region where the template to be created will be used. Up to 100 templates can be created in each region.
Template Name	Set a template name as required. The template name cannot be empty, can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter.
Template Type	<ul style="list-style-type: none"><li>• SAP</li><li>• Common</li></ul>
Template Description	Optional. The description can contain up to 256 characters.
Other parameters	You can configure the template parameters based on your requirements in the lower part of the page.

**Step 5** Click **Create Now**.

After the template is created, you can view it in the template list on the **My templates** tab.

----End

### 2.16.3.2 My Templates

**My templates** list custom resource template. You can view, create, replicate, update, and delete templates and create applications using the templates on the **My templates** tab.

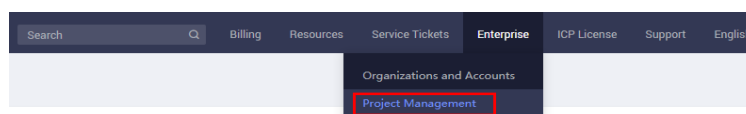
### Viewing Templates

The template details page contains the template name, type, status, source type, region, creation time, description, and content. You can perform the following steps to view the template details.

**Step 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 2-104** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

**Step 4** Click the **My templates** tab.

**Step 5** Select the region where the applications to be viewed are deployed.

The template list in the selected region is displayed in the lower part of the page.

**Step 6** Search for a template.

Enter the template name in the upper right corner of the list to search for the template to be viewed.

**Step 7** Click the template name. The template details page is displayed.

You can view the template details and template content on the details page. You can also click **Create Application** in the upper right corner to create an application using the template. For details about how to create an application, see [Creating an Application](#).

----End

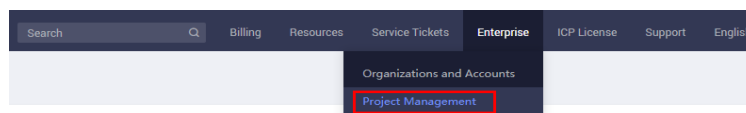
## Creating a Template

You can create a template directly or create one from an application backup. You can select the desirable method as required.

**Step 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 2-105** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

**Step 4** Click the **My templates** tab.

**Step 5** Click **Create Template** in the upper right corner of the page.

The **Create Template** page is displayed. Set the parameters based on the descriptions in [Table 2-13](#).

**Table 2-13** Template parameter configuration

Parameter		Description	
Region		Select a region to create the template. Up to 100 templates can be created in each region.	
Template Name		Set a template name as required. The template name cannot be empty, can contain only letters, digits, hyphens (-), and underscores (_), and must start with a letter.	
Template Description		Optional. The description can contain up to 256 characters.	
Source Type	Create directly	Templ ate Type	Select <b>SAP</b> or <b>Common</b> . Next, you can select <b>Enter Template Code</b> , <b>Example templates</b> , or <b>My templates</b> .
		Select Templ ate	When <b>Template Type</b> is set to <b>Example templates</b> or <b>My templates</b> , you need to select a template.
		Templ ate Conte nt	The template content is displayed in the text box and can be modified.
	Create from backup	Templ ate Data	1. Filter application backups using the following parameters: <ul style="list-style-type: none"> <li>- Enterprise Project</li> <li>- Application</li> <li>- Application Backup</li> </ul> 2. Configure the ECS. For details about parameter settings, see <a href="#">Elastic Cloud Server Getting Started</a> .
Set customized parameters, which are optional. You can add a parameter group, specify the name and type of each parameter in the group, and add parameter content. For the <b>Type</b> parameter, select either <b>Text</b> or <b>Numeral</b> as required. Up to 10 parameter groups and 100 parameters can be created. The parameter group names and parameter names must be unique.			

**Step 6** Click **Create Now**.

After the template is created, you can view it in the template list on the **My templates** tab.

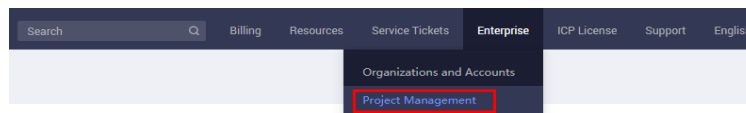
----End

## Creating an Application

You can create applications using templates under **My templates** and are in the **Creation succeeded** or **Update succeeded** state.

- Step 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 2-106** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.

- Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

- Step 4** Click the **My templates** tab.

- Step 5** Click **Create Application** in the **Operation** column of the row containing the target template.

Create an application based on your requirements. For details, see [Creating an Application](#).

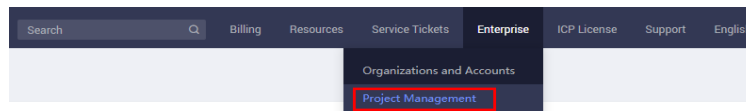
----End

## Replicating a Template

You can create templates by replicating the templates in the **Creation succeeded** or **Update succeeded** state. You can customize contents of the templates replicated.

- Step 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 2-107** Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.

- Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

- Step 4** Click the **My templates** tab.

- Step 5** Click **Replicate** in the **Operation** column of the row containing the template to be replicated.

The **Replicate Template** dialog box is displayed.

**Step 6** Enter the name and description.

The name must be unique and cannot be empty. It can contain only letters, digits, hyphens (-), and underscores (\_), and must start with a letter.

The description is optional. The description can contain up to 256 characters.

**Step 7** Click **OK**.

The template replicated is displayed in the template list on the **My templates** tab.

----End

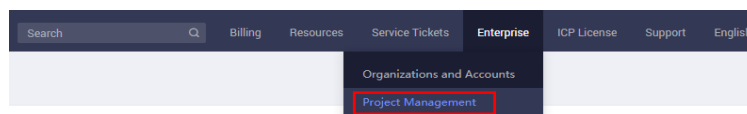
## Updating a Template

You can modify templates by updating the templates in the **Creation succeeded** or **Update succeeded** state.

**Step 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 2-108** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

**Step 4** Click the **My templates** tab.

**Step 5** Click **Update** in the **Operation** column of the row containing the template to be updated.

Update **Template Description** or **Template Content** based on your requirements.

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

The template is updated, and you can view the updated template information on the template details page.

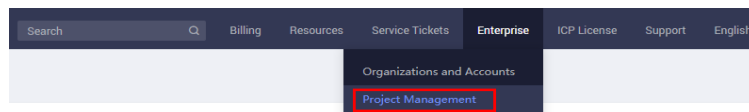
----End

## Deleting a Template

When some templates are no longer used, you can delete them.

**Step 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 2-109** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane on the left, Click **Template Management**.

The **Example templates** tab and the example template list are displayed by default.

**Step 4** Click the **My templates** tab.

**Step 5** Click **Delete** in the **Operation** column of the row containing the template to be deleted.

A dialog box is displayed.

**Step 6** Click **Yes**.

The deleted template is no longer displayed in the template list.

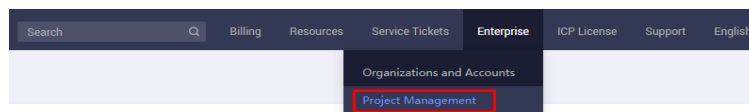
----End

## 2.16.4 O&M Management

### 2.16.4.1 Viewing O&M Tasks

**Step 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 2-110** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane, choose **Application Management > O&M Management**.

The **Tasks** tab and task list are displayed by default.

**Step 4** Filter tasks.

You can select the enterprise project that tasks belong to, task type, start time, and end time of the task above the list. You can also enter the task name to filter tasks.

----End

## 2.16.4.2 Expanding the Capacity of an EVS Disk

### Scenario

You can expand EVS disk capacity if the space of a disk in an application becomes insufficient.

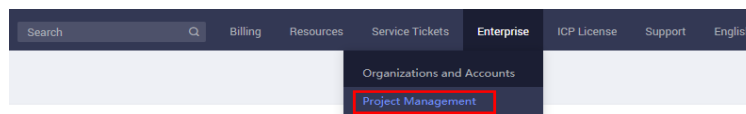
#### NOTICE

- Capacity expansion is a risky operation. Exercise caution when performing this operation.
- To prevent data loss, the disk capacity can only be expanded, but cannot be reduced.
- If the expanded disk has been attached, the capacity expansion takes effect after you restart the server attached with this disk. Some OSs do not need a restart. For details, see [Expanding Capacity for an In-use EVS Disk](#).
- When the MBR partition style is used, the maximum disk capacity supported is 2,048 GB, and the rest exceeding 2,048 GB cannot be allocated and used. If the disk has already been put to use, check the disk partition style before expanding its capacity.
- After the disk has been expanded, you need to log in to the server and manually modify the file system configuration to use the additional capacity. For details, see [Disk Capacity Expansion](#).

### Procedure

- Step 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 2-111 Project Management



- Step 2** In the navigation pane on the left, click **Application Management**.
- Step 3** In the navigation pane, choose **Application Management > O&M Management**. The **Tasks** tab and task list are displayed by default.
- Step 4** Click **Create Task** above the task list. The **Create Task** page is displayed. Configure task information based on [Table 2-14](#).



**Table 2-14** Task information configuration

Parameter	Description
Task Name	Specifies the name of the task. The name cannot be empty. It can contain only letters, digits, underscores (_), and hyphens (-). It can contain 1 to 64 characters.
Task Type	Choose <b>EVS disk expansion</b> .
Select Disk	You need to select disks based on the following information: <ul style="list-style-type: none"><li>• Enterprise Project</li><li>• Application</li><li>• Server</li></ul>
New Capacity	Configure the disk capacity to be added.

**Step 5** Click **Create**.

The page for confirming the task details is displayed.

**Step 6** Click **Submit**.

After the capacity expansion task is created, you can view the task in the task list. If the task is in the **Succeeded** state, the EVS disk expansion is successful.

----End

### 2.16.4.3 Backing Up and Restoring an Application

You can use the application backup function to create backups for ECSs in an enterprise project. If an application is faulty, you can use backup data to restore the service data of the ECSs. This ensures security and correctness of user data and ensures service security.

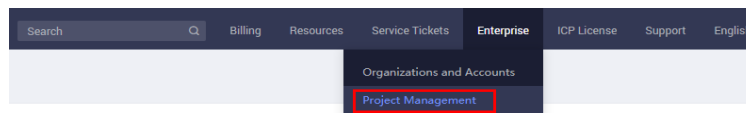
This section describes how to perform the following operations:

- [Backing Up an Application](#)
- [Restoring an Application](#)
- [Viewing Application Backups](#)
- [Deleting a Backup](#)

## Backing Up an Application

**Step 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 2-112** Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane, choose **Application Management > O&M Management**.  
The **Tasks** tab and task list are displayed by default.

**Step 4** Click **Create Task** above the task list.

The **Create Task** page is displayed. Configure task information based on [Table 2-15](#).

**Table 2-15** Task information configuration

Parameter	Description
Task Name	Specifies the name of the task. The name cannot be empty. It can contain only letters, digits, underscores (_), and hyphens (-). It can contain 1 to 64 characters.
Task Type	Choose <b>Application backup</b> .
Select Application	Filter applications based on enterprise projects.

**Step 5** Click **Create**.

The **Create Backup** page is displayed.

**Step 6** Set the backup.

This function invokes Cloud Server Backup Service (CSBS). For details about backup settings, see [Creating a CSBS Backup](#).

After the backup task is submitted, you can view the task status by going back to the task list on the **O&M Management** page. If the status is **Succeeded**, the application is backed up successfully.

----End

## Restoring an Application

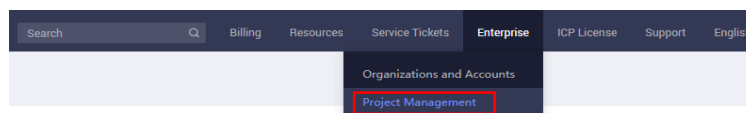
You can use either of the following methods to restore an application:

- **Creating a task:** Create an application restoration task.
- **Directly restoring the application:** Click **Restore** in the **Operation** column of the row containing the backup of the application to be restored.

### Creating a Task

**Step 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 2-113** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane, choose **Application Management > O&M Management**.  
The **Tasks** tab and task list are displayed by default.

**Step 4** Click **Create Task** above the task list.

The **Create Task** page is displayed. Configure task information based on [Table 2-16](#).

**Table 2-16** Task information configuration

Parameter	Description
Task Name	Specifies the name of the task. The name cannot be empty. It can contain only letters, digits, underscores (_), and hyphens (-). It can contain 1 to 64 characters.
Task Type	Choose <b>Application restoration</b> .
Select CSBS Backup	Filter the backup to be recovered by selecting the enterprise project, application, server, or entering the backup name.

**Step 5** Click **Create**.

The **Restore Data** dialog box is displayed.

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

After the backup is restored, the message **Application restoration task created successfully** is displayed.

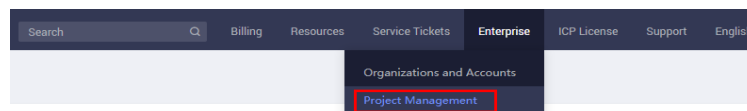
You can also view the task status by going back to the task list on the **O&M Management** page. If the status is **Succeeded**, the application is successfully restored.

----End

### Directly Restoring the Application

**Step 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 2-114** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane, choose **Application Management > O&M Management**.  
The **Tasks** tab and task list are displayed by default.

**Step 4** Click the **Backups** tab.

The backup list is displayed. You can filter backups by time, status, or enter a backup name in the upper right corner of the list.

**Step 5** Click **Restore** in the **Operation** column of the row containing the backup of the application to be restored.

The **Application Restoration** dialog box is displayed.

**NOTE**

Only the backups in **Available** state can be restored.

**Step 6** Enter the task name and confirm the enterprise project, application, server, and name of the backup.

The name cannot be empty. It can contain only letters, digits, hyphens (-), and underscores (\_).

**Step 7** Click **OK**.

The **Cloud Server Backup Service** page is displayed, and the **Restore Data** dialog box is displayed.

**Step 8** Confirm the server information and click **Yes**.

The message **Application restoration task created successfully** is displayed.

You can also view the task status by going back to the task list on the **O&M Management** page. If the status is **Succeeded**, the application is successfully restored.

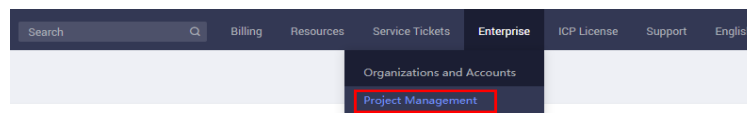
----End

## Viewing Application Backups

**Step 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 2-115 Project Management

**Step 2** In the navigation pane on the left, click **Application Management**.**Step 3** In the navigation pane, choose **Application Management > O&M Management**.

The **Tasks** tab and task list are displayed by default.

**Step 4** Click the **Backups** tab.

The backup list is displayed. You can view the status, application, enterprise project, and creation time of each backup.

----End

## Deleting a Backup

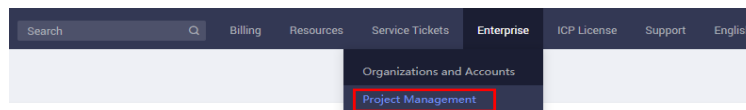
If some backup data is no longer used, perform the following steps to delete it:

Only the backups in **Available** or **Error** state can be deleted.

**Step 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 2-116** Project Management



**Step 2** In the navigation pane on the left, click **Application Management**.

**Step 3** In the navigation pane, choose **Application Management > O&M Management**.

The **Tasks** tab and task list are displayed by default.

**Step 4** Click the **Backups** tab.

The backup list is displayed. You can filter backups by time, status, or enter a backup name in the upper right corner of the list.

**Step 5** Click **Delete** in the **Operation** column of the row containing the backup to be deleted.

The **Cloud Server Backup Service** page is displayed.

**Step 6** Choose **More > Delete** in the **Operation** column of the row containing the backup to be deleted.

The **Delete Backup** dialog box is displayed.

**Step 7** Click **Yes**.

The backup is deleted.

Go back to the **O&M Management** page. When the backup is not displayed in the backup list, the backup has been deleted.

----End

## 2.17 FAQs

### 2.17.1 What Are the Differences Between IAM and Enterprise Management?

Enterprise Management enables enterprises to manage cloud resources at the organization and project levels. 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 users and access permissions. However, Enterprise Management also allows accounting and application management, and supports more fine-grained authorization for resource usage. It is recommended for medium- and large-sized enterprises.

For more information about IAM features, see [Identity and Access Management](#).

## Differences Between IAM and Enterprise Management

- Enabling method
  - IAM is free of charge and you can use it immediately after you register with the Huawei Cloud system.
  - Enterprise Management is a resource management service. You can apply for Enterprise Management from Huawei Cloud. For details, see [Enabling the Enterprise Center](#) and [Enabling the Enterprise Project Function](#).

### NOTE

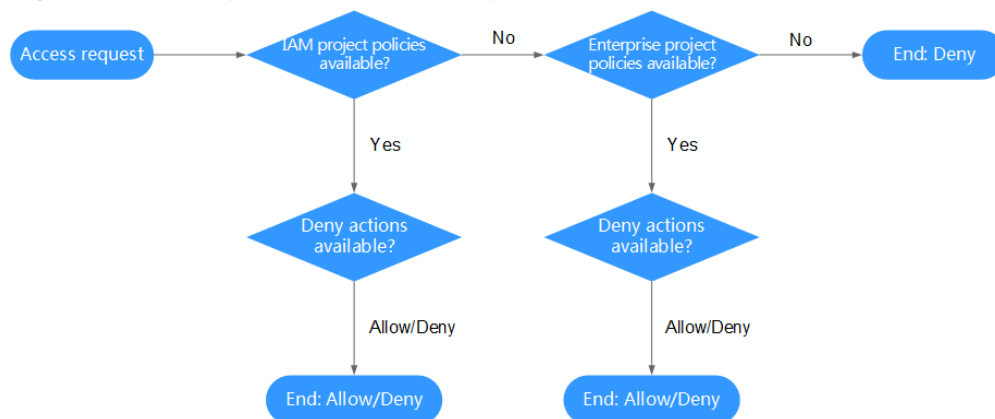
The Enterprise Management service is free of charge. You only need to pay for resources managed in enterprise projects.

- Resource isolation
  - Using IAM, you can create multiple projects in a region to isolate resources, and authorize users to access resources in specific projects.
  - Using Enterprise Management, you can create enterprise projects to isolate resources across regions. Enterprise Management makes it easy for you to assign permissions for specific cloud resources. 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. The user then can manage only this ECS.
- 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 2-117 Request authentication process



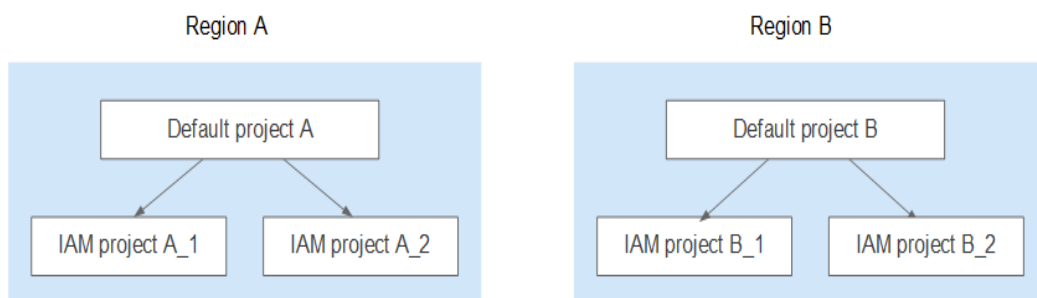
1. A user initiates an access request.
2. The system looks for IAM project policies and then looks for matched actions in the policies.
3. If a matched Allow or Deny action is found, the system returns an authentication result (Allow or Deny). Then the authentication is finished.
4. If no matched actions are found in IAM project policies, the system continues to look for enterprise project policies and matched actions.
5. If a matched Allow or Deny action is found, the system returns an authentication result (Allow or Deny). Then the authentication is finished.
6. If no matched actions are found, the system returns a Deny. Then the authentication is finished.

## 2.17.2 What Are the Differences Between IAM Projects and Enterprise Projects?

### IAM Projects

IAM projects group and physically isolate resources in the same region.

Resources cannot be transferred between IAM projects, but can only be deleted and then created or purchased again.

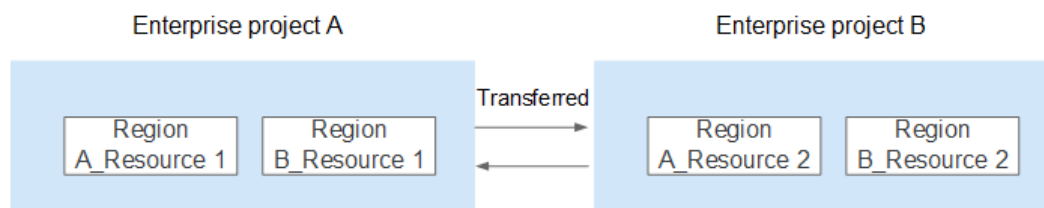


### Enterprise Projects

Enterprise projects group, manage, and logically isolate resources of an enterprise in all regions.

An enterprise project can contain resources in multiple regions, and resources can be transferred between enterprise projects.

You cannot create projects in IAM after enabling Enterprise Management.



## 2.17.3 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

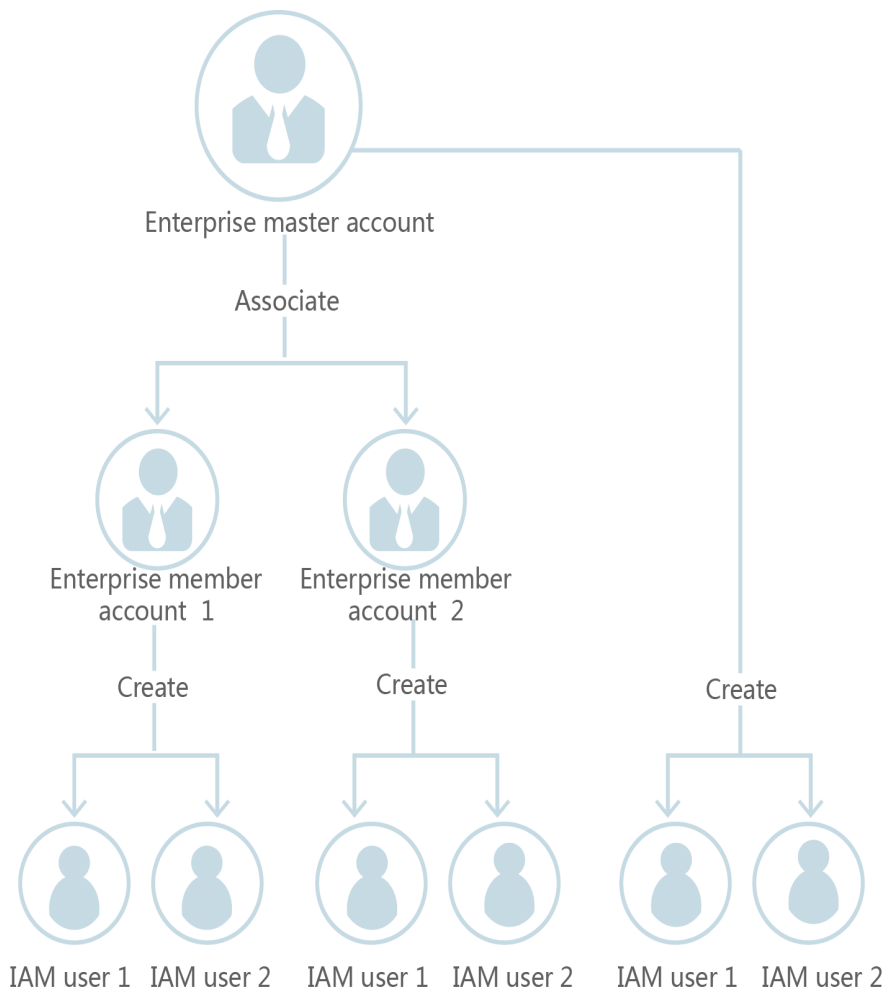
Both enterprise master accounts and member accounts are generated upon successful registration with Huawei Cloud. **Accounting Management** of Enterprise Management allows multiple Huawei Cloud accounts to be associated with each other for accounting purposes. You can create a hierarchical organization 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](#).





## 2.17.4 How Can I View All Enterprise Projects?

- When logging in to the **Enterprise Management** console as an enterprise administrator, you can view information about all enterprise projects.
- When logging in to the **Enterprise Management** console as an IAM user with the global authorization policy granted by an administrator user, the IAM user can view information about all enterprise projects.

## 2.17.5 How Do I Obtain an Enterprise Project ID?

- By calling an API  
Cloud services can be authorized by IAM to call the API that is used to query a list of enterprise projects. The returned project list contains the ID of each enterprise project. For details about the API, see [Enterprise Management API Reference](#).
- From the enterprise project details page. The procedure is as follows:
  - a. Log in to the Huawei Cloud 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.

## 2.17.6 Why Is No Data Available After I Configured Application Monitoring on the SAP Full Screen Monitoring Page?

Rectify the fault based on the causes listed in the following table.

**Table 2-17** Troubleshooting

Possible Causes	Solution
The SAP full screen configuration is incorrect or the configured application has been deleted.	In the <b>SAP Full Screen Monitoring</b> area, check whether the application, application SID, database, and database SID are configured as required. If they are incorrect, correct them and update the configuration.
The Agent and SAP plug-ins are not installed on the cloud server in the application.	Install the Agent and SAP plug-ins, and wait for several minutes.
The Agent data is still within the reporting cycle.	The reporting cycle from Cloud Eye to EPS is once every three minutes. Wait for three minutes and then refresh the Agent data.
The cloud server meta information is incorrectly modified.	Update the monitoring configuration in the <b>SAP Full Screen Monitoring</b> area, and wait for several minutes.
The parameters in the <b>metrics.ini</b> configuration file are incorrect.	Check whether the configuration file is consistent with the actual application parameters.
The Agent and daemon processes are abnormal.	Check whether the Agent and Telescope processes are normal.
The Agent has not obtained data.	Run the <b>./sapmon -v</b> command in <b>/usr/local/telescope/plugins/sapmon</b> to check whether an error is reported when obtaining metrics.

## 2.17.7 How Do I Add a Dedicated Account for the SAP Large Screen Monitoring?

The system will be disconnected automatically if no operation is performed within 30 minutes as an administrator account. You are advised to use a dedicated account.

To add a dedicated display account for the SAP full screen monitoring, perform the following steps:

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

**Step 2** Point to the account name in the upper right corner, and choose **Identity and Access Management** from the drop-down list.

The IAM console is displayed.

**Step 3** Create a user group.

1. In the navigation pane, choose **User Groups**.
2. Click **Create User Group** in the upper right corner of the page.
3. Set the user group name and other information.
4. Click **OK**.

**Step 4** Create a dedicated display account for the SAP full screen monitoring.

1. In the left navigation, choose **Users**.
2. Click **Create User** in the upper right corner of the page.
3. On the **Create User** page, set user information.  
Add the user to the user group created in **Step 3**. For details, see **Step 2: Create IAM Users and Log In**.
4. Click **Create**.

**Step 5** Assign policies to the user group.

1. In the navigation pane, choose **User Groups**.
2. In the user group list, click **Manage Permissions** in the **Operation** column of the row containing the user group that the created user belongs to.
3. Click **Assign Permission** to set policies for the global project.
  - a. Select **Global service project** for **Scope** and select **Tenant Guest for Permissions**.
  - b. Click **OK**.
4. Configure policies for all region-level projects supported by the application management.
  - a. Select **Region-specific project** for **Scope** and select the corresponding projects.
  - b. Select **Tenant Guest** for **Permissions**.
  - c. Click **OK**.

 **NOTE**

The enterprise project is a global service, but the SAP full screen monitoring invokes the region-level Cloud Eye service. Therefore, you need to set policies for the current supported region.

----End

## 2.17.8 How Do 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, perform the following operations:

- 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 = "yyyyyyyyyyyy";
```

```
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

## 2.17.9 How Many Enterprise Projects Can I Create?

By default, you can create up to 100 enterprise projects.

If you need more enterprise projects to manage resources, [create a member account](#), and create multiple enterprise projects for the member account.

If the quota still cannot meet your requirements, [How Do I Apply for a Higher Quota?](#)

## 2.17.10 Will Adding or Removing a Resource from Enterprise Projects Change Its VPC and CIDR Block?

No.

Migrating a resource between enterprise projects only affects permissions of users associated with the projects.

Migrating a resource from one enterprise project to another does not affect the resource itself. For example, the resource instance will not be restarted, the network configuration will not be changed, and the ownership of the resource will not be changed.

However, the access to the resources of an enterprise project may be affected if resource permissions are configured based on the project and the project is adjusted. For example, if you only grant a member the permissions to access resources of project A, the member may be rejected to access the resources when project A is migrated to another project, such as project B.

## 2.17.11 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.

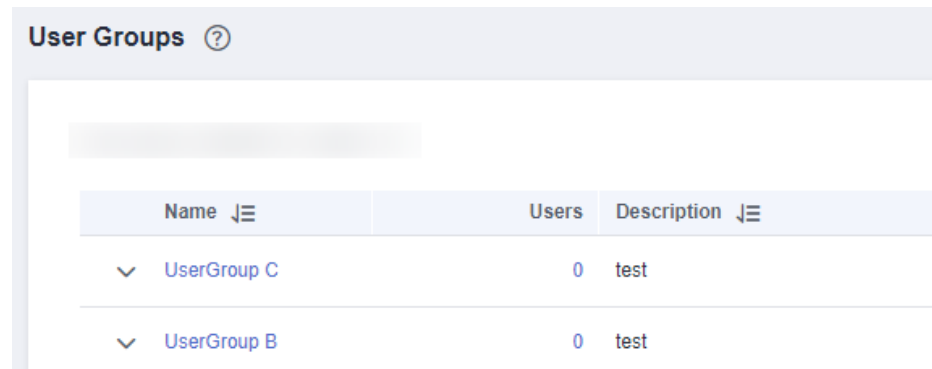
## Procedure

### 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 2-118 Created user groups



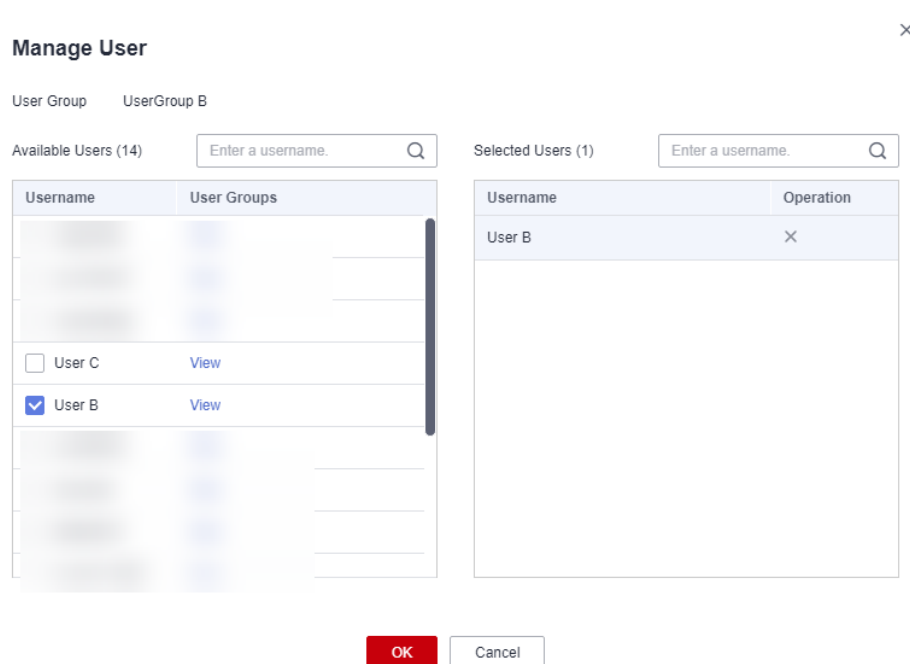
Name	Users	Description
UserGroup C	0	test
UserGroup B	0	test

### 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 2-119 Adding a user to a user group



Manage User

User Group: UserGroup B

Available Users (14) | Selected Users (1)

Username	User Groups
User C	View
<input checked="" type="checkbox"/> User B	View

Username	Operation
User B	X

OK Cancel

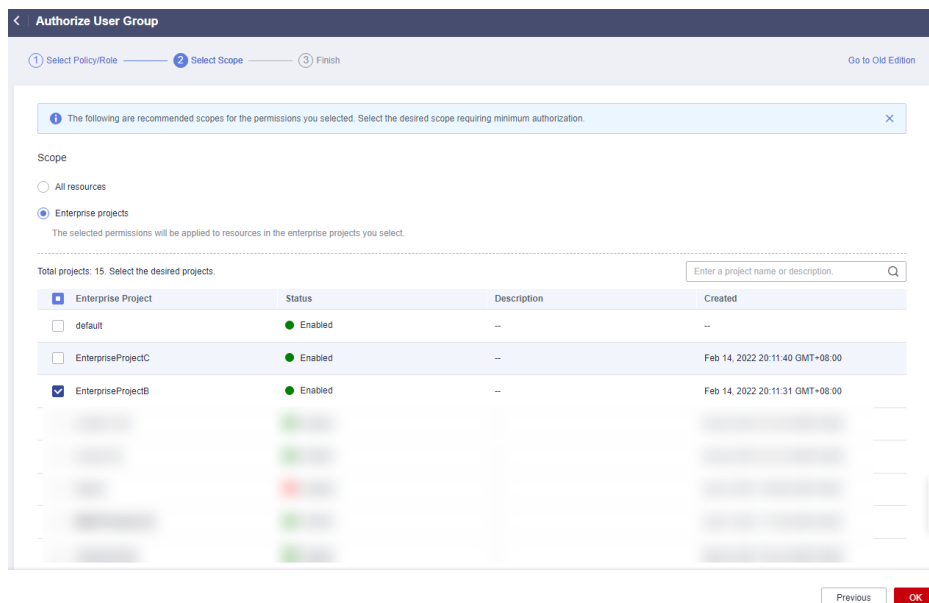
### Step 3 Assign permissions to user groups.

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 2-120 Selecting a scope



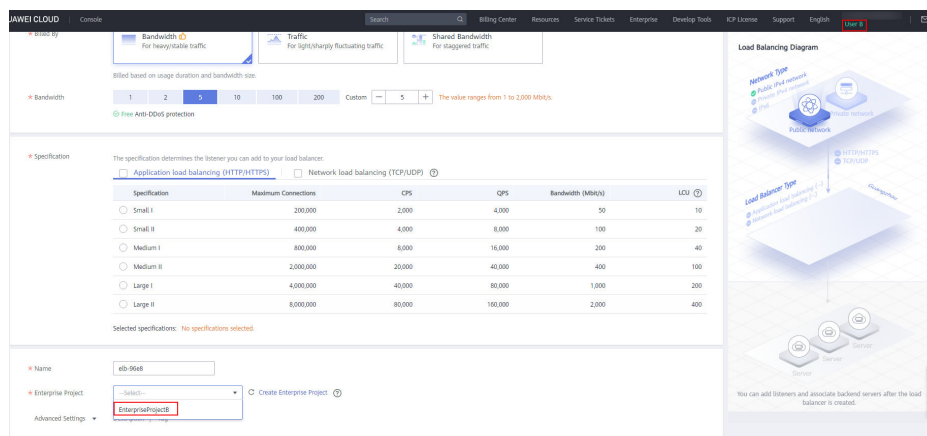
4. Click **Finish**.
5. Repeat steps 3.1 to 3.4 to assign the ELB FullAccess policy to user group C.

----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.

Figure 2-121 Selecting an enterprise project when creating a resource



## 2.18 Change History

Released On	Description
2024-03-29	This issue incorporates the following change: Updated <a href="#">Supported Cloud Services</a> .
2023-07-31	This issue incorporates the following change: Added <a href="#">Restrictions and Limitations</a> .
2023-06-15	This issue incorporates the following change: Added <a href="#">Managing Resource Tags</a> .
2022-11-25	This issue incorporates the following changes: <ul style="list-style-type: none"><li>• Added <a href="#">How Many Enterprise Projects Can I Create?</a></li><li>• Added <a href="#">Will Adding or Removing a Resource from Enterprise Projects Change Its VPC and CIDR Block?</a></li><li>• Added <a href="#">How Do I Limit Specific Enterprise Projects to Different IAM Users?</a></li></ul>
2022-10-30	This issue incorporates the following changes: Added <a href="#">Security</a> .
2021-07-16	This issue incorporates the following change: Changed <b>Management &amp; Deployment</b> to <b>Management &amp; Governance</b> and <b>Computing</b> to <b>Compute</b> based on changes in the console product catalog.
2021-04-30	This issue incorporates the following change: Added <a href="#">Quotas</a> .
2021-03-30	Optimized the document.
2021-01-21	This issue incorporates the following change: <ul style="list-style-type: none"><li>• Updated <a href="#">Enabling the Enterprise Project Function</a>. The entry of enabling the enterprise project function was deleted from the <b>Basic Information</b> page.</li></ul>
2021-01-11	This issue incorporates the following changes: <ul style="list-style-type: none"><li>• Added <a href="#">Multi-project Management Cases</a>.</li><li>• Added <a href="#">What Are the Differences Between IAM Users and Enterprise Member Accounts?</a></li></ul>



Released On	Description
2020-10-30	This issue incorporates the following change: Added the feature of test projects. For details, see <a href="#">Changing a Test Project to a Commercial Project</a> .