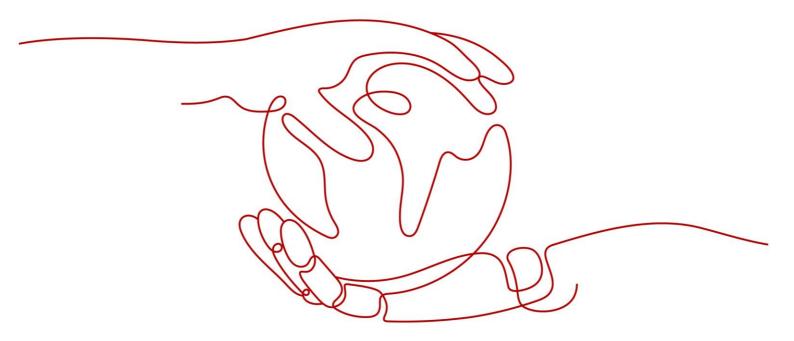
Partner Center

API Reference

Issue 1

Date 2024-03-14





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1 Change

Description	Released On
This issue is the seventh official release. This release incorporates the following change: Added the API in 7.1 Querying Consumption Quota for partners to query consumption quotas.	2024-11-26
This issue is the sixth official release. This release incorporates the following change: Creating an agency and granting permissions are not supported in Creating a Customer.	2024-10-14
This issue is the fifth official release. This release incorporates the following changes: Added the 8.2.1 Querying Coupons API for partners to query coupon- related information. Added the 8.5.1 Querying Resource Packages API for customers to query their resource packages in their partners' sales platforms. Added the 8.5.2 Viewing Resource Package Usage API for customers to check resource package usage in their partners' sales platforms. Added the 8.5.3 Querying Resource Package Usage Details API for customers to query details of their resource package usage in their partners' sales platforms. Added the 8.6.1 Querying Customer's Pay-Per-Use Resources API for partners to query their customers' pay-per-use resources.	2024-5-28
This issue is the fourth official release. This release incorporates the following change: Added the API for querying the renewal price of a yearly/monthly resource. Customers can set search options to query the renewal price of yearly/monthly resources on their partners' sales platform.	2024-3-18

Description	Released On
This issue is the third official release. This release incorporates the following change: Added the error code, CBC.99003647 (Unsubscription not supported for this pay-per-use package.), to the V2 API for renewing yearly/monthly subscriptions. "	2024-2-27
This issue is the second official release. This release incorporates the following change: Added the Action column in the API Access Permission (Partner) section.	2023-11-15
This issue is the first official release.	2022-12-29

Partner Operations Capability APIs (Reseller Model)

HUAWEI CLOUD provides the operation capabilities in the reseller model for partners to manage customers, transactions, cloud services, bills, service tickets, products, and on the partner sales platform.

Table 2-1 APIs and descriptions

Scenar io	Sub- Scenari o	API Name	Description
Product t informa tion	Querying Cloud Service Types	This API is used to query cloud service types on the partner sales platform.	
ement	query	Querying Resource Types	This API is used to query the resource types on the partner sales platform.
		Querying Resources by Cloud Service Type	This API is used to query the resource type code and name by associated cloud service on the partner sales platform and to query the price of a pay-per-use or yearly/monthly product.
		Querying Usage Types	This API is used to query resource usage types on the partner sales platform.
		Querying Measurement Units	This API is used to query the resource usage, measurement unit for the duration and amount of a yearly/monthly resource, as well as the measurement unit type on the partner sales platform.
		Querying the Measurement Unit Number System	This API is used to query the measurement unit number system on the partner sales platform.

Scenar io	Sub- Scenari o	API Name	Description
	Product price query	Querying the Price of a Pay-per-Use Product	Partners can query the price of a pay-per- use product by criteria on the sales platform.
		Querying the Price of a Yearly/ Monthly Product	Partners can use this API to query prices of yearly/monthly products for new subscriptions on their sales platforms.
Custo mer manag ement	Custom er registra tion	Verifying Customer Registration Information	This API is used to check whether the account name, and mobile number or email address entered by the customer can be used for registration.
		Sending a Verification Code	If a customer enters an email address during registration, the system sends a registration verification code to the email address to verify the information.
		Creating a Customer	This API is used to create a Huawei Cloud account for a customer when the customer creates an account on your sales platform, and bind the customer account on the partner sales platform to the HUAWEI CLOUD account. In addition, the Huawei Cloud account is bound to the partner account.
	Custom er	Querying Customers	This API is used to query your customers.
	manage ment	Freezing a Customer Account	A partner can freeze an account of a customer associated with the partner by reseller model.
		Unfreezing a Customer Account	A partner can unfreeze an account of a customer associated with the partner by reseller model.
Reselle r manag ement	Queryin g resellers	Querying Huawei Cloud Resellers	A Huawei Cloud distributor can query the list of its associated Huawei Cloud resellers.
Credit manag ement	Managi ng credits	Querying Consumption Quota	Partners can query their expenditure quotas.

Scenar io	Sub- Scenari o	API Name	Description
Transa ction manag	Custom er budget	Querying Customer Budgets	This API is used to query the budget of a customer for the partner to determine whether to adjust the budget.
ement	manage ment	Setting Customer Budgets	This API is used to set or adjust a customer's budget.
	Coupon manage ment	Querying Coupons	Partners can query information about their coupons.
	Yearly/ monthl y order manage ment	Querying Orders	After a customer purchases yearly/monthly resources, it can query the orders in different statuses, such as in the pending approval, processing, canceled, completed, and pending payment statuses.
		Querying Order Details	Customers can view order details on the partner sales platform.
		Paying Yearly/ Monthly Product Orders	A customer can invoke this API to pay yearly-monthly product orders in the pending payment status.
		Canceling Orders in the Pending Payment Status	A customer can invoke this API to cancel orders in the pending payment status.
		Querying the Amount of Unsubscriptio n Orders	A customer can query the resource type and order of the refund amount of an unsubscription or specification downgrade order on the partner sales platform.
	Yearly/ Monthl y resourc e	Querying Customer's Yearly/ Monthly Resources	A customer can query one or all yearly/monthly resources on the partner sales platform.
	manage ment	Renewing Yearly/ Monthly Resources	A customer can renew subscription to yearly/monthly resources on the partner sales platform.

Scenar io	Sub- Scenari o	API Name	Description
		Unsubscribin g Yearly/ Monthly Resources	If a customer has subscribed to a yearly/monthly resource, the customer can use this API to unsubscribe from the resource, including the renewed part and currently used part. The customer cannot use the resources after unsubscription.
		Configuring Automatic Renewal for Yearly/ Monthly Resources	A customer can use this API to enable automatic subscription renewal for its long-term yearly/monthly resources to prevent the resources from being deleted when they are expired.
		Canceling Automatic Renewal for Yearly/ Monthly Resources	A customer can disable automatic subscription renewal when needed. After disabling this function, the customer needs to manually renew the subscription to the resources before they expire.
		Enabling/ Canceling the Change from Yearly/ Monthly to Pay-per-Use upon Expiration	A customer can change the billing mode of resources from yearly/monthly to pay-peruse after the resources expire. The pay-peruse mode takes effect upon a yearly/monthly expiration.
	Resourc e packag	Querying Resource Packages	This API is used to query resource packages.
	e manage ment	8.5.2 Viewing Resource Package Usage	Partners can query the resource package usage of customers on the partner sales platform by resource.
		8.5.3 Querying Resource Package Usage Details	Customer can use this API to query details of resource package usage in their partners' sales platforms.
	Pay- per-use resourc e manage ment	Querying Customer's Pay-Per-Use Resources	A partner can query the pay-per-use resources that have been provisioned for customers associated with the partner in the Reseller model.

Scenar io	Sub- Scenari o	API Name	Description
Cloud service resour ce manag ement	Cloud service resourc e manage ment	Switching from the partner sales platform to the HUAWEI CLOUD portal	This API is used to switch from the partner sales platform to the HUAWEI CLOUD portal using a link to manage cloud service resources.
Bill manag ement	Custom er resourc e usage manage ment	Querying Customer Resource Usage	This API is used to query customer resource usage.
	Partner bill manage	9.2.1 Querying Monthly Bills	You can query your monthly bills that cover amount due, expenditures, refunds, and adjustments.
	ment	9.2.2 Querying Bill Details of Monthly Expenditures	A partner can subscribe to the partner bill (customer resource usage) in the HUAWEI CLOUD Partner Center. For details, see File Subscription. Your sales platform will calculate the customer expenditures and generate the customer bills based on this bill and then you can perform reconciliation with HUAWEI CLOUD.
Service ticket manag ement	Managi ng service tickets	Service Ticket Management APIs	Partners and customers can submit HUAWEI CLOUD service tickets on the partner sales platform. When receiving the service tickets, the HUAWEI CLOUD aftersales service team will assist the customers to handle the problems related to HUAWEI CLOUD usage.

3 API Invoking Methods

3.1 RESTful API

The partner sales platform can invoke RESTful APIs provided by HUAWEI CLOUD. Alternatively, customers can switch from the partner sales platform to HUAWEI CLOUD through the web UI to purchase cloud services and manage cloud service resources.

3.1.1 Constructing Requests

This section describes the structure of a RESTful API request, and uses the API for creating customers of HUAWEI CLOUD partners as an example to describe how to call an API.

Request URI

A request URI consists of the following:

{URI-scheme}://{Endpoint}/{resource-path}?{query-string}

Although the request URI is included in the request header, most languages or frameworks require that it be transmitted separately from the request message. Therefore, the request URI is listed independently.

Table 3-1 URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS .

Parameter	Description
Endpoint	Specifies the domain name or IP address of the server bearing the REST service endpoint.
	The endpoint of the partner operation capability API is bss.myhuaweicloud.eu.
	 NOTE This endpoint is a global endpoint and can be used for all regions in Huawei Cloud (European Website). TLS 1.2 supported.
resource-path	Resource path, that is, the API access path. Obtain the path from the URI of the API. For example, the resource-path of the API for creating a customer is /v2/partners/sub-customers.
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "Parameter name=Parameter value". For example, ?limit=10 indicates that a maximum of 10 data records will be displayed.

For example, to obtain the request URI for creating a customer, obtain the corresponding **resource-path** (/v2/partners/sub-customers). Then, construct the URI as follows:

https://bss.myhuaweicloud.eu/v2/partners/sub-customers

□ NOTE

To simplify URI display, each API is provided with only **resource-path** and the request method. This is because the **URI-scheme** value of all APIs is **HTTPS**, and the endpoints in a region are the same. Therefore, the two parts are omitted.

Request Method

The HTTP protocol defines the following request methods that can be used to send a request to the server:

Table 3-2 HTTP methods

Method	Description	
GET	Requests a server to return a specified resource.	
PUT	Requests a server to update a specified resource.	
POST	Requests a server to add a resource or perform a special operation.	

Method	Description
DELETE	Requests a server to delete a specified resource (for example, an object).
HEAD	Requests a server resource header.
PATCH	Requests a server to update partial content of a specified resource. If the resource does not exist, the PATCH method is used to create a new resource.

As shown in the URI for creating a customer, the request method is **POST**. The request URI is as follows:

POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers

Request Header

You can also add additional fields to the request header, for example, the fields required by a specified URI and an HTTP method. **Table 3-3** lists common request header fields.

Table 3-3 Common request header fields

Field	Description	Mandatory	Example
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. If the port number is not specified, the default port is used. The default port number for https is 443.	No This field is mandatory only when AK/SK is used for authenticatio n.	.myhuaweicloud.com bss.myhuaweicloud.eu or bss.myhuaweicloud.eu:44 3

Field	Description	Mandatory	Example
Content-Type	Specifies the request body MIME type. You are advised to use the default value application/json. For an object or image upload API, the value varies depending on the flow type.	Yes	application/json
Content- Length	Length of the request body. The unit is byte.	No	3495
X-Auth-Token	Specifies the user token. For details about how to obtain a token, see Token Authentication.	No This field is mandatory only when the token is used for authenticatio n.	The following is part of an example token: MIIPAgYJKoZIhvcNAQc- CoIIO8zCCDu8CAQExDTA LBglghkgBZQMEAgEwgg 1QBgkqhkiG9w0BBwGgg g1BBIINPXsidG9rZ

MOTE

In addition to supporting authentication using tokens, APIs support authentication using AK/SK, which uses SDK to sign a request. During the signature, the **Authorization** (signature authentication) and **X-Sdk-Date** (time when a request is sent) headers are automatically added to the request.

For more details, see **Authentication Using AK/SK** in **Authentication**.

The request of the interface for creating a customer is as follows after the request header is added:

POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

(Optional) Request Body

This part is optional. A request body is often sent in a structured format (for example, JSON or XML) as defined in the **Content-Type** header field. If the request body contains Chinese characters, these characters must be coded in UTF-8.

Request bodies vary with API. Some APIs do not require a request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to create a customer, you can obtain the required request parameters and parameter description from the API request. The following

is a request carrying the message body, where the request parameters vary with actual condition.

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "domain_name": "test",
    "email": "xxx@huawei.com",
    "verification_code": "253xxx",
    "domain_area": "IE",
    "xaccount_id": "35reyxxxx",
    "xaccount_type": "xxx_IDP",
    "password": "xxxxxxxx",
    "is_close_market_ms": "true",
    "cooperation_type": "1"
}
```

If all data required for the API request is available, you can send the request to call the API through **curl**, **Postman**, or coding.

3.1.2 Authentication

You can use either of the following authentication methods when invoking an API:

- Token authentication: Requests are authenticated using tokens. This method is relatively simple.
- AK/SK authentication: Requests are encrypted using the access key ID (AK) and secret access key (SK). AK/SK authentication is recommended because it provides higher security than token authentication.

When a partner invokes some APIs, the customer authentication information is required. The partner can obtain this information only using the method provided in Obtaining a User Token with the assume_role Method or Obtaining a Temporary Access Key and Security Token Through an Agencysecuritytoken. Therefore, using token authentication is recommended.

Token Authentication

M NOTE

The validity period of a token is 24 hours. If a token needs to be used, the system caches the token to avoid frequent calling. For details about token validity periods, see **Obtaining a User Token Through Password Authentication**

A token specifies certain permissions in a computer system. Authenticating using a token adds the token to the request header during API calling to obtain permissions to operate APIs through IAM.

In 3.1.1 Constructing Requests, the process of calling the API for obtaining a user token is described as an example. After obtaining the partner or customer token, add the X-Auth-Token header in a request to specify the token when calling other APIs. For example, if the token is ABCDEFJ...., add X-Auth-Token: ABCDEFJ.... in a request as follows:

Content-Type: application/json X-Auth-Token: ABCDEFJ....

 For details about how to obtain a partner token, see Obtaining a User Token. For details about how to obtain a customer token, see Obtaining a User
 Token with the assume role Method.

AK/SK Authentication

MOTE

AK/SK authentication supports API requests with a body size not larger than 12 MB. For API requests with a larger size, token authentication is recommended.

In AK/SK-based authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used together with an SK to sign requests cryptographically.
- SK: secret access key, which is used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

You can use AK/SK to sign requests based on the signature algorithm or use a dedicated signature SDK to sign the requests. For details about how to sign requests and use the signing SDK, see API Request Signing Guide.

MOTE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

3.1.3 Returned Values

Status Code

After sending a request, you will receive a response containing the status code, response header, and response body.

A status code, a group of digits ranging from 1xx to 5xx, indicates the status of a response. For more information, see **Status Code**.

If **204** is returned for calling the API used to create a customer, the request is successful.

Response Header

Similar to a request, a response also has a header, for example, **Content-Type**.

Figure 3-1 shows the response header for the API used to create a customer.

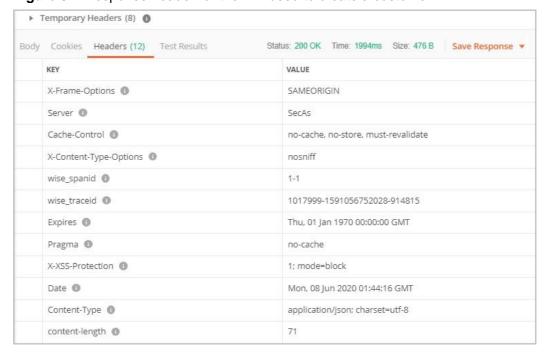


Figure 3-1 Response header for the API used to create a customer

(Optional) Response Body

The body of a response is often returned in structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following is part of the response body for the API used to create a customer:

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "domain_id": "08f25edee500d3e70f4ec007d082eb80",
    "domain_name": "testdomainnamexxx"
}
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{ "error_msg": "The name exists.cse://CBCCustomerRegService/rest/cbc/cbccustomerregservice/v1/customer/register[error_code]:CBC.7156[msg]:{\"error_code\":\"CBC.7156\",\"error_msg\\":\"domainName exist.\"} ",
    "error_code": "CBC.99000038"
}
```

In the preceding information, **error_code** is an error code, and **error_msg** describes the error.

3.2 Web UI Mode

After logging in to the partner sales platform, a customer can directly switch to HUAWEI CLOUD to purchase cloud services and manage cloud service resources.

The partner sales platform must complete SAML authentication to establish a trust relationship with HUAWEI CLOUD.

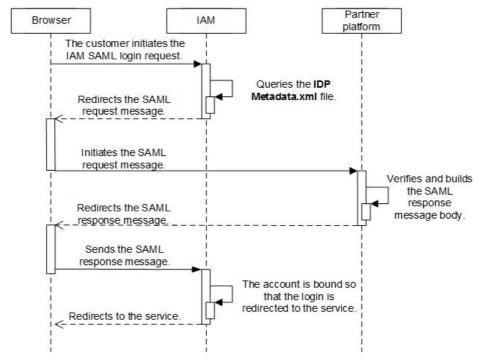
Prerequisites

The partner has performed steps in Access Configuration.

SAML Authentication

Figure 3-2 shows the SAML authentication process.

Figure 3-2 SAML authentication process



- A partner's customer uses a browser to call the HUAWEI CLOUD login link. IAM sends the SAML request.
 - a. The customer uses a browser to call the HUAWEI CLOUD login link. https://auth.eu.huaweicloud.com/authui/saml/login? xAccountType=ZXT&isFirstLogin=false&service=https%3a%2f %2fconsole.eu.huaweicloud.com%2fiam%2f

Parameter	Mand atory	Description	Example
xAccountTy pe	Yes	Indicates the identifier of the partner sales platform, which is globally unique. The value is provided by Huawei. After the partner configures the access parameters on the Partner Center page, the partner ID is generated. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?	ZXT
isFirstLogin			false
service	Yes	Indicates the redirection address after login. The encodeURIComponent function is used for coding.	https%3a%2f %2fconsole.eu.hua weicloud.com %2fiam%2f

b. IAM receives the login request of the partner's customer, locates the **SingleSignOnService** configuration item in the **IDP Metadata.xml** file based on the **xAccountType** value, and sends the **samlRequest** request to the required path.

**Quary String Parameters view Source view URL encoded

\$AMM.Request [Yulbsurd-wayper/95pv71wn/Q1bOnger/0587skx785p271/-yRstukkolun/22227f7xzg864AW7LIDShjg8xgissmw/]aTortsBurG11e7ytyVberfgLFXLQ8pj38NDSKG4YIIJOrhipf1sekopOffreq2xKggtD7

084gsffx7Zb32100g558VQTha2jee8KKfe7TWKKKyTqhfx8g8E7W3-yQc0290c6pVHS67KQD4hQQ2fcAbkpGNVM9SIIIabariGpIMileolulorun7Immg86m3HDF7MSATF7DMSATF7DMSATF7DMSATF7DMSATF9DMSATF7DMSATF9DMSATF7DMSATF9DMSATF

Parameter	Description
SAMLRequest	Indicates the response message body. The response message is in XML format. IAM then compresses the message, encodes the message using Base64, and URL encodes the message. If the partner uses the SAML toolkits, this parameter can be directly used. The partner does not need to parse the XML file. If the partner needs to parse the XML file, the partner needs to URL decode the message, decode the message using Base64, and decompress the message (zip.inflate). For details, see Sample Code for Parsing the SAMLRequest.
RelayState	Indicates the response parameters for SAML.
SigAlg	Indicates the signature algorithm. Huawei uses SHA256 for signatures by default. HTTP://WWW.W3.ORG/2001/04/XMLDSIG-MORE#RSA-SHA256
Signature	Indicates the signature. The signature is used to verify the initiator of a request. When initiating a request, HUAWEI CLOUD uses the private key to sign \$\textit{SAMLRequest} \{\textit{SAMLRequest}\} \{\textit{RelayState}=\} \{RelaySta

- 2. The partner sales platform generates the SAML response message and sends it to HUAWEI CLOUD IAM.
 - The partner sales platform obtains the HUAWEI CLOUD public key and the response message path of samlResponse from the SP Metadata.xml

- file. For details, see Example, Public Key, and Response Path in Obtaining the SP Metadata File.
- b. The partner sales platform generates the SAML response message. The response message body is in XML format. For the correct response message body and its parameter description, see the following displayed content.

NOTICE

The following content is for reference only. The description in the comments must be modified. The time and ID defined by SAML vary depending on the message. Therefore, it is recommended that you should not directly modify the response message content. Instead, you shall use the SAML toolkits to generate the response message.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the SAML request message. -->
<!-- Parameter Destination needs to be the same as the Location value in the
AssertionConsumerService tag in the SP Metadata.xml file. -->
<saml2p:Response Consent="urn:oasis:names:tc:SAML:2.0:consent:unspecified"</p>
ID="_d794dc393ae6724e236003bf0b917cf0" Destination="https://auth.huaweicloud.com/authui/
saml/SAMLAssertionConsumer"
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5' IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
  xmlns:saml2p="urn:oasis:names:tc:SAML:2.0:protocol">
 <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
 <saml2:Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-format:entity"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion">https://www.test.com</saml2:Issuer>
 <saml2p:Status>
  <saml2p:StatusCode Value="urn:oasis:names:tc:SAML:2.0:status:Success" />
  <saml2p:StatusMessage>urn:oasis:names:tc:SAML:2.0:status:Success</saml2p:StatusMessage>
 </saml2p:Status>
 <saml2:Assertion ID="_2320c40ac7b5e857b2d0d4ea0c8758c3"</p>
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
 <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
  <saml2:lssuer>https://www.test.com</saml2:lssuer>
  <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
    <ds:SianedInfo>
     <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
     <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-</p>
sha256" />
<!-- The value after "URI #" must be the same as the ID in the Assertion tag. -->
     <ds:Reference URI="#_2320c40ac7b5e857b2d0d4ea0c8758c3">
      <ds:Transforms>
            <ds:Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
        <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
         <ec:InclusiveNamespaces PrefixList="xsd"
          xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#" />
        </ds:Transform>
      </ds:Transforms>
      <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
<!-- The value of DigestValue is the digest of the Assertion tag object. The digest
algorithm is the same as that of DigestMethod. -->
      <ds:DigestValue>rFxrycznfGNYOnprZIFJJou4ro0Mz65+43MIR5F0+H4=</ds:DigestValue>
     </ds:Reference>
    </ds:SignedInfo>
    <!-- Partner signature value. For details about how to obtain the value, see the
following description. -->
    <ds:SignatureValue>
```

```
YqTWQngAPfGqQmWa610PM7LeefqWdKuveUVINrqL67NoHJIDa2WxLwdVzoJIIJh64QiNPr6+ndm
L DCMglC5F/9ijuzhIICZcc6lHNljy6EsPkKRjfo9oeoVAqLgG/kmVQYeHLBlD0y11RNXXpAVY4nhJ
26KiIVGt7ywyKAmhichE+eW/UYAGiOl5vkfgD2gZUGV+yPkv64k7xK4yAH3mL2NaCPuw/90e4enm
iUx0YuazDwM5FiRUSMpcJs0rcNmS6clWAUcCzbOx+y2vJGtTjHb7k3UsmpnTop5eYNp94+sDPEat
8FaV4SgafMEL5z54gpe8+//9yOWEvIBs1b0RYg==
   </ds:SignatureValue>
   <ds:KeyInfo>
     <ds:X509Data>
     <!-- Partner public key certificate. The certificate must be the one specified in the IDP
Metadata.xml file. -->
      <ds:X509Certificate>
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAhK3L160NjP9EhBGQOC2s4r
+Wc62bkRkc nUxfhiZwCwJdQCykzuLOAoATnfoEamV5W25xtSS5kFs+4OC0mYVpKcl3SWoydX
+UE5Qik5UfJ8Dt G1AvSEKhSluy09axrV5Uv089jMxBnlm/R+xND73WcZM11ylbKJEZSTCEDfh
+KnFbMw108umFMden RZCrNWUJoSp/90XeG0V2Nmj7Fkq72skSifwIASLRq9KqLbmh1QwUX
+AoWpHK/jRUBustMBmG1n1i
       AqpD4EBjjBOB27k1wXZ30+loJt8lZmfSZRFoNn5VFWXNeEmZ1aQvGSvd3Tyyw2/Wr+w/
8Mags69C mpeX6QIDAQAB
      </ds:X509Certificate>
     </ds:X509Data>
   </ds:KeyInfo>
  </ds:Signature>
  <saml2:Subject>
  <!-- The value of NameQualifier must be the same as the entityID value in the SP
Metadata.xml file. -->
    <saml2:NameID Format="urn:oasis:names:tc:SAML:2.0:nameid-format:transient"</p>
NameQualifier="https://auth.huaweicloud.com/">Some NameID value</saml2:NameID>
    <saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:bearer">
     <!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the samlRequest message. -->
     <saml2:SubjectConfirmationData</p>
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
NotBefore="2018-10-28T08:21:41.740Z" NotOnOrAfter="2018-11-01T08:21:41.740Z"
Recipient="https://auth.huaweicloud.com/authui/saml/SAMLAssertionConsumer" />
   </saml2:SubjectConfirmation>
  </saml2:Subject>
  <saml2:Conditions NotBefore="2018-10-28T08:21:41.740Z"</p>
NotOnOrAfter="2018-11-01T08:21:41.740Z">
    <saml2:AudienceRestriction>
   <!-- Must be the same as the entityID value in the SP Metadata.xml file. -->
     <saml2:Audience>https://auth.huaweicloud.com/</saml2:Audience>
   </saml2:AudienceRestriction>
  </saml2:Conditions>
  <saml2:AttributeStatement>
    <!-- For values between<saml2:AttributeValue> and </saml2:AttributeValue>, see the
following table. -->
   <saml2:Attribute FriendlyName="xUserId" Name="xUserId"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">******</saml2:AttributeValue>
   </saml2:Attribute>
<!-- The values of xAccountId and xUserId must be the same. -->
    <saml2:Attribute FriendlyName="xAccountId" Name="xAccountId"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
xsi:type="xsd:string">*******</saml2:AttributeValue>
   </saml2:Attribute>
   <saml2:Attribute FriendlyName="bpld" Name="bpld"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">******</saml2:AttributeValue>
   </saml2:Attribute>
   <saml2:Attribute FriendlyName="email" Name="email"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string" />
   </saml2:Attribute>
   <saml2:Attribute FriendlyName="name" Name="name"</pre>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
```

```
<saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
xsi:type="xsd:string">******</saml2:AttributeValue>
   </saml2:Attribute>
   <saml2:Attribute FriendlyName="mobile" Name="mobile"</pre>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
    </saml2:Attribute>
  </saml2:AttributeStatement>
  <saml2:AuthnStatement AuthnInstant="2018-10-30T08:21:41.741Z">
   <!-- Must be the same as the entityID value in the SP Metadata.xml file. -->
   <saml2:SubjectLocality Address="https://auth.huaweicloud.com/" />
   <saml2:AuthnContext>
     <saml2:AuthnContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:unspecified
saml2:AuthnContextClassRef>
   </saml2:AuthnContext>
  </saml2:AuthnStatement>
 </saml2:Assertion>
</saml2p:Response>
```

The partner signature value is in standard XML format, and the signature type is **enveloped-signature**. You are advised to use the SAML library provided by a third party for signature.

The signature procedure is as follows.

Obtain the signature object (Assertion).

ii. Obtain the tag object (Signature).

```
<ds:Signature
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
  <ds:SignedInfo>
     <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#" />
     <ds:SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-</p>
sha256" />
     <ds:Reference URI="#_2320c40ac7b5e857b2d0d4ea0c8758c3">
       <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-</p>
signature" />
          <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
             <ec:InclusiveNamespaces
               xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#"
                         PrefixList="xs" />
             </ds:Transform>
          </ds:Transforms>
              <ds:DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha256" />
          <ds:DigestValue>.....</ds:DigestValue>
       </ds:Reference>
     </ds:SignedInfo>
    <!-- Third-party signature value -->
     <ds:SignatureValue>
    </ds:SignatureValue>
     <ds:KeyInfo>
       <ds:X509Data>
          <!-- Third-party public key certificate -->
          <ds:X509Certificate>
      </ds:X509Certificate>
       </ds:X509Data>
     </ds:KevInfo>
  </ds:Signature>
```

- iii. Generate the **DigestValue** value for the signature object **Assertion**.
 - Convert Assertion according to the algorithm defined in Transform of Signature.
 - 2) Generate a digest for the object obtained in 1) according to the algorithm specified in **DigestMethod**.
 - 3) Place the generated digest value in the **DigestValue** tag.
- iv. Use the private key in **Step 6** in **Generating a Certificate** to generate the **SignatureValue** value for the **SignedInfo** object signature.
 - Convert SignedInfo according to the algorithm defined in CanonicalizationMethod
 - Generate the signature value for the object obtained in 1) according to the signature algorithm defined in SignatureMethod. Place the obtained signature value in SignatureValue.
- Combine the values of **DigestValue** and **SignatureValue** to form the final **Signature** object. Place the value in **Assertion** as its subelement.

The signature is displayed as follows.

```
<saml2:Assertion ID="_2320c40ac7b5e857b2d0d4ea0c8758c3"</p>
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ds:Signature
    xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
   <!-- Third-party signature value -->
     <ds:SignatureValue>
   </ds:SignatureValue>
     <ds:KeyInfo>
       <ds:X509Data>
     <!-- Third-party public key certificate -->
          <ds:X509Certificate>
      </ds:X509Certificate>
       </ds:X509Data>
     </ds:KeyInfo>
  </ds:Signature>
</saml2:Assertion>
```

Table 3-4 Description of parameters between <saml2:AttributeValue> and </saml2:AttributeValue>

Parameter	Description
xUserId	Indicates the user ID of the partner's customer on the partner sales platform. This parameter value equals the value of xAccountId .
xAccountId	Indicates the account ID of the partner's customer on the partner sales platform.

Parameter	Description			
bpld	Indicates the partner ID.			
	For details, see How Do I Check the Partner ID?			
email	Indicates the email address.			
	This parameter is optional.			
	The parameter must meet the following requirements:			
	Must be unique for each customer.			
	A maximum of 64 characters			
	 Passes the verification using the following regular expression: ^[azA-Z0-9.!#\$%&'*+\V=?^_`{ }~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\\. [azA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)*\$ 			
name	Indicates the account name transferred on the partner sales platform.			
	This parameter is optional.			
	The account name must be the same as the value of domain_name in the request for API in 5.1.3 Creating a Customer.			

M NOTE

Table 3-4 involves the account ID and user ID because HUAWEI CLOUD IAM has the account and user concepts. For details about the two concepts, see "Account" and "IAM User" in **Basic Concepts**.

c. If the customer has logged in to the partner sales platform, the SAML response message is returned directly. Otherwise, the SAML response message is displayed after the login.

Send a POST request to the HUAWEI CLOUD response path **AssertionConsumerService** in **2.a**. The parameters must be in the Form Data format.

TQUq1IFJ7%2FFNMFHF1KQgbKijySZ1M8uQqb%2FKSFxN%289S6dvim%2BAatPgbxX9hj0pfR%2BHEXEPzRNndS
wX6LQaqPQ%2F%2Bc4IJufmvz7Rue%2FAA%3D%3D&RelayState=_lidh2rjxc81dnuc72qmpbs1f4bml6r9fgb
n8rNI5twTosXm0NhZDj%2BGnfVBfG9T4X5nisoK843vRqzY1JCPmb0swQWb%2FFHryetP9deoceEBkTgf81xM1
HCPUJ%2BNSZc5aUinPUDIn9gxGsEMosv8f%2FcYPe1GL%2F9iMS1ChGElk18Rmj6Y5F3SVrFEsVVYMckzPPAzh
L2Ts%2B4BW8YbdqeUyfIKJwruVfX8KoHdC8xCl8bRN5mOHqAjCMYTQAJrCm%2BBGJVxUXit0gYeqkYH6dYkVfh
BgDXY1GUe0QqdckhgT36Aiz2GCZwK7lpvhAEFi2xMZGZU4xlKVZNYY1yzfjMB164pMsyd3JDrzZfcbraPnTBa:
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko)
Form Data view source view URL encoded

SAMLResponse: PD94bWwgdmVyc2lvbj0iMS4wIiBlbmNvZGluZz0iVVRGLTgiPz4KPHNhbWwycDpSZXNwb25
MDAzYmYwYjkxN2NmMCIgSW55ZXNwb25zZVRvPSJfZGNrNG1tMDhxbWRoYzhrNG51aXIwN2hnaGV0ZHFxZzh1bW
1lczp0YzpTQU1MOjIuMDpwcm90b2NvbCI+PHNhbWwyOklzc3VlciBGb3JtYXQ9InVybjpvYXNpczpuYW1lczp0
Pmh0dHBz0i8vaWRwLm1zZXNvbC5jb20vaWRwL3NoaWJib2xldGg8L3NhbWwyOklzc3Vlcj48c2FtbDJwOlN0Y)
RhdHVzTWVzc2FnZT51cm46b2FzaXM6bmFtZXM6dGM6U0FNTDoyLjA6c3RhdHVzOlN1Y2Nlc3M8L3NhbWwycDp1
IElzc3VlSW5zdGFudD0iMjAxOC0xMC0zMFQwODoyMTo0MS43NDBaIiBWZXJzaW9uPSIyLjAiIHhtbG5zOnNhbW

Parameter	Description
SAMLResponse	Identifies the string obtained by encoding the SAML response message body in 2.b using Base64.
RelayState	The value of this parameter is the same as that in the SAML request message.

 IAM parses the SAMLResponse. When the customer account creation API is called to create an account, HUAWEI CLOUD CBC binds the customer account on the partner sales platform with the HUAWEI CLOUD account. Therefore, the customer can be redirected to the service page and purchase and manage the cloud services.

3.3 API Access Permission (Partner)

Related permissions are required for accessing the APIs. You can assign related roles to the personnel who need to access the APIs in Partner Center. Supported actions of APIs are listed in the following table. The API can be accessed as long as one of its actions is supported.

For more information, visit Partner Center API Reference (Europe)

◯ NOTE

For APIs not listed in the table, fine-grained permission verification is not required and all operator accounts can access them.

Table 3-5

Sc en ari o	Su b- Sce nar io	API Descrip tion	URL	Action	Path
Cu st o m er m an ag	Cus to me r regi stra tio n	Verifyin g custom er registra tion informa tion	POST /v2/partners/ sub-customers/users/ check-identity	BPC_ITEM_SUBCUSTSERV_0 10118	Customer Business > Customer Management > Customer List > Register APIs (newly added)
e m en t		Sending a verificat ion code	POST /v2/bases/ verificationcode/send	BPC_ITEM_SUBCUSTSERV_0 10118	Customer Business > Customer Management > Customer List > Register APIs (newly added)

Sc en ari o	Su b- Sce nar io	API Descrip tion	URL	Action	Path
		Creatin g a custom er	POST /v2/partners/ sub-customers	BPC_ITEM_SUBCUSTSERV_0 10118	Customer Business > Customer Management > Customer List > Register APIs (newly added)
	Cus to me r ma nag em ent	Queryin g custom ers	POST /v2/partners/ sub-customers/query	BPC_ITEM_SUBCUSTSERV_0 10100 BPC_ITEM_SUBCUSTSERV_0 10500	 Customer Business > Customer Management > Customer List > View Customer List Customer Business > Customer Management > Reseller Customers > View Customers
		Freezin g a custom er account	POST /v2/partners/ sub-customers/freeze	BPC_ITEM_SUBCUSTSERV_0 10501 BPC_ITEM_SUBCUSTSERV_0 10115	 Customer Business Customer Management > Reseller Customers > Freeze/Unfreeze Accounts Customer Business Customer Management > Customer List > Freeze/Unfreeze Account
		Unfreez ing a custom er account	POST /v2/partners/ sub-customers/ unfreeze	BPC_ITEM_SUBCUSTSERV_0 10501 BPC_ITEM_SUBCUSTSERV_0 10115	 Customer Business Customer Management > Reseller Customers Freeze/Unfreeze Accounts Customer Business Customer Management > Customer List > Freeze/Unfreeze Account

Sc en ari o	Su b- Sce nar io	API Descrip tion	URL	Action	Path
Re sel ler m an ag e m en t	Qu eryi ng res elle rs	Queryin g the list of reseller s	POST /v2/partners/ indirect-partners/ query	BPC_ITEM_SALES_020100	Sales Management > My Resellers > Query Resellers
Tr an sa cti on M an ag e	Yea rly/ mo nth ly ord er ma	Queryin g orders	GET /v2/orders/ customer-orders	BPC_ITEM_SUBCUSTSERV_0 60100 BPC_ITEM_SUBCUSTSERV_0 60200	 Customer Business Customer Orders View List Customer Business Customer Orders Reseller Customer Orders > View Orders
e m en t	em ent	Queryin g order details	GET /v2/orders/ customer-orders/ details/{order_id}	BPC_ITEM_SUBCUSTSERV_0 60100 BPC_ITEM_SUBCUSTSERV_0 60200	 Customer Business Customer Orders View List Customer Business Customer Orders Reseller Customer Orders > View Details
	Ma nag ing Cus to me rs' Bu dge ts	Queryin g custom er budgets	GET /v2/partners/ sub-customers/ budget	BPC_ITEM_SUBCUSTSERV_0 10111 BPC_ITEM_SUBCUSTSERV_0 10503 BPC_ITEM_SUBCUSTSERV_0 10107	 Customer Management > Customer List > Adjust Credit Limit Customer Management > Reseller Customers > Set Monthly Budgets

Sc en ari o	Su b- Sce nar io	API Descrip tion	URL	Action	Path
		Setting custom er budgets	POST /v2/partners/ sub-customers/ budget	BPC_ITEM_SUBCUSTSERV_0 10111 BPC_ITEM_SUBCUSTSERV_0 10503	 Customer Business Customer Management > Customer List > Adjust Credit Limit Customer Business Customer Business Reseller Customers Set Monthly Budgets
Bil I M an ag e m en t	Par tne r bill ma nag em ent	Queryin g monthl y bills	GET /v2/bills/partner-bills/postpaid-bill-summary	BPC_ITEM_FINANCE_09010 0	Financial Information > Partner Bills > View Partner Bill

4 Product Management

4.1 Querying Product Information

4.1.1 Querying Cloud Service Types

Function

This API is used to query cloud service types on the partner sales platform.

Constraints

This API can be invoked using the partner AK/SK or token.

KooGallery services are not included.

URI

GET /v2/products/service-types

Table 4-1 Header parameter

Paramete	Manda	Value	Description
r	tory	Range	
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 4-2 Query parameters

Paramete r	Manda tory	Туре	Value Range	Description
offset	No	Integer	0 to 100000	Offset, which starts from 0. The default value is 0 .
			0000	If this parameter is not included in the request, is left empty, or is set to null , the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will
				respectively have 10 records.
limit	No	Integer	[1-1000	Number of records queried each time. The default value is 10 . If this parameter is not included in the request, is left empty, or is set to null , the value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/products/service-types?offset=0&limit=10 HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ X-Language: zh_CN

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 characte rs	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 characte rs	Error description. This parameter is returned only when the query failed.
total_coun t	Integer	-	Total number.
service_typ es	List <ser e="" vicetyp=""></ser>	-	Cloud service type list. For details, see Table 4-3.

Table 4-3 ServiceType

Parameter	Туре	Value Range	Description
service_typ e_name	String	A maximu m of 200 charact ers	Cloud service type name.
service_typ e_code	String	A maximu m of 64 charact ers	Cloud service type code.
abbreviatio n	String	A maximu m of 200 charact ers	Abbreviation of the cloud service type.

Example Response

HTTP/1.1 200 OK Content-Type: application/json;charset=UTF-8

MOTE

4xx: This class of HTTP
 status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.

• 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Invalid parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

4.1.2 Querying Resource Types

Function

This API is used to query the resource types on the partner sales platform.

Constraints

This API can be invoked using the partner AK/SK or token.

URI

GET /v2/products/resource-types

Table 4-4 Header parameter

Paramete	Manda	Value	Description
r	tory	Range	
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 4-5 Query parameters

Paramete r	Manda tory	Туре	Value Range	Description
offset	No	Integer	0 to 100000	Offset, which starts from 0. The default value is 0 .
			0000	If this parameter is not included in the request, is left empty, or is set to null , the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-1000	Number of records queried each time. The default value is 10 . If this parameter is not included in the request, is left empty, or is set to null , the value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/products/resource-types?offset=0&limit=10 HTTP/1.1

Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

X-Language: zh_CN

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 characte rs	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 characte rs	Error description. This parameter is returned only when the query failed.
total_coun t	Integer	-	Total number.
resource_t ypes	List <res ourceTy pes></res 	-	Resource type list. For details, see Table 4-6 .

Table 4-6 ResourceTypes

Parameter	Туре	Value Range	Description
resource_t ype_code	String	A maximu m of 64 charact ers	Resource type code. For example, the resource type code of ECS is hws.resource.type.vm.

Parameter	Туре	Value Range	Description
resource_t ype_name	String	A maximu m of 200 charact ers	Resource type name.
resource_t ype_desc	String	A maximu m of 200 charact ers	Resource type description.
service_typ e_code	String	A maximu m of 64 charact ers	Code of the service type which a resource belongs to. Example: hws.service.type.offline.

Returned Values

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Invalid parameter.

HTTP Status Code	Error Code	Description
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

4.1.3 Querying Resources by Cloud Service Type

Function

This API is used to query the resource type code and name by associated cloud service on the partner sales platform and to query the price of a pay-per-use or yearly/monthly product.

Constraints

This API can be invoked using the partner AK/SK or token.

This API cannot be used to query the resources by KooGallery service type.

URI

GET /v2/products/service-resources

Table 4-7 Header parameter

Paramete	Manda	Value	Description
r	tory	Range	
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 4-8 Request parameters

Paramete r	Manda tory	Туре	Value Range	Description
service_ty pe_code	Yes	String	A maximu m of 64 charact ers	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.

Paramete r	Manda tory	Туре	Value Range	Description
offset	No	Integer	0 to 100000 00	Offset, which starts from 0. The default value is 0 . If this parameter is not included in the request, is left empty, or is set to null , the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-100]	Number of records queried each time. The default value is 10. If this parameter is not included in the request, the value 10 is used. This parameter cannot be set to "" or null and cannot be left empty.

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/products/service-resources? service_type_code=hws.service.type.obs&limit=5&offset=0 HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ X-Language: zh_CN

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 character s	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 character s	Error description. This parameter is returned only when the query failed.
total_count	Integer	-	Total number.
infos	List <servi ceResour ceInfo></servi 	A maximu m of 100 values	List of basic resource information. For details, see Table 4-9 .

Table 4-9 ServiceResourceInfo

Parameter	Туре	Value Range	Description
basic_info	BasicInfo Object	1	Basic resource information. For details, see Table 4-10 .

Table 4-10 ResourceBasicInfo

Parameter	Туре	Value Range	Description
resource_typ e_code	String	A maximu m of 64 character s	Resource type code. Example: hws.resource.type.general.
product_own er_service	String	A maximu m of 64 character s	Code of the service where a resource belongs. Example: hws.service.type.offline.

Parameter	Туре	Value Range	Description
name	String	A maximu m of 1024 character s	Resource type. Example: general specifications.
description	String	A maximu m of 1024 character s	Resource type description.

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
   "total_count": 5,
   "infos": [
         "basic_info": {
            "resource_type_code": "hws.resource.type.general",
            "product_owner_service": "hws.service.type.offline",
            "name": "general specifications",
            "description": "general specifications"
         "basic_info": {
            "resource\_type\_code": "hws.resource.type.bandwidth",\\
            "product_owner_service": "hws.service.type.vpc", "name": "fixed bandwidth",
            "description": "fixed bandwidth"
        }
     },
{
         "basic_info": {
            "resource_type_code": "hws.resource.type.ip",
            "product_owner_service": "hws.service.type.vpc",
            "name": "EIP",
"description": "EIP"
     },
{
         "basic_info": {
            "resource_type_code": "hws.resource.type.vm.image",
            "product_owner_service": "hws.service.type.ec2",
            "name": "ECS image",
"description": "ECS image"
     },
{
            "resource_type_code": "hws.resource.type.vm",
            "product_owner_service": "hws.service.type.ec2",
```

```
"name": "ECS",
    "description": "ECS"
}
}
```

◯ NOTE

• status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.

• 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Invalid parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

4.1.4 Querying Usage Types

Function

This API is used to query resource usage types on the partner sales platform.

Constraints

This API can be invoked using the partner AK/SK or token.

URI

GET /v2/products/usage-types

Table 4-11 Header parameter

Paramete r	Manda tory	Value Range	Description
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 4-12 Query parameters

Paramete r	Manda tory	Туре	Value Range	Description
resource_t ype_code	No	String	A maximu m of 64 charact ers	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types. If this parameter is not included or is left empty, it will not be used as a filter criterion. If this parameter is set to "" or null, it will be used as a filter criterion.
offset	No	Integer	0 to 100000 000	Offset, which starts from 0. The default value is 0. If this parameter is not included in the request, is left empty, or is set to null, the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	1 to 100	Number of records queried each time. The default value is 10 . If this parameter is not included in the request, is left empty, or is set to null , the value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/products/usage-types?offset=0&limit=3 HTTP/1.1 Content-Type: application/json X-Auth-Toke: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

X-Language: zh_CN

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 character s	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 character s	Error description. This parameter is returned only when the query failed.
total_count	Integer	-	Total number.
usage_types	List <usa geType></usa 	-	Usage type list. For details, see Table 4-13.

Table 4-13 UsageType

Parameter	Туре	Value Range	Description
code	String	A maximu m of 64 character s	Usage type code, for example, reqNumber.
name	String	A maximu m of 1024 character s	Usage type name, for example, the number of invoking times.

Parameter	Туре	Value Range	Description
resource_typ e_code	String	A maximu m of 64 character s	Resource type code. For example, the resource type code of VM is hws.resource.type.vm.
service_type _code	String	A maximu m of 64 character s	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
resource_typ e_name	String	A maximu m of 200 character s	Resource type. For example, the resource type of ECS is Cloud Host .
service_type _name	String	A maximu m of 200 character s	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .

]

Returned Values

◯ NOTE

4xx: This class of HTTP
 status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.

• 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.
400	CBC.0100	Parameter error.

4.1.5 Querying Measurement Units

Function

This API is used to query the resource usage, measurement unit for the duration and amount of a yearly/monthly resource, as well as the measurement unit type on the partner sales platform.

Constraints

This API can be invoked using the partner AK/SK or token.

URI

GET /v2/bases/measurements

Table 4-14 Header parameter

Paramete	Manda	Value	Description
r	tory	Range	
X- Language	No	A maximu m of 8 characte	Language. • zh_CN: Chinese • en_US: English Default value: zh CN

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/bases/measurements HTTP/1.1

Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

X-Language: zh_CN

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 characte rs	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 characte rs	Error description. This parameter is returned only when the query failed.
measure_u nits	List <me asureUn itRest></me 	-	Measurement unit information. For details, see Table 4-15 .

Table 4-15 MeasureUnitRest

Parameter	Туре	Value Range	Description
measure_i d	Integer	-	Measurement unit ID. For example, 10 indicates GB.
measure_n ame	String	A maximu m of 128 charact ers	Measurement unit name, which is returned based on the language type. Example: GB.
abbreviatio n	String	A maximu m of 64 charact ers	Abbreviation of a measurement unit name. For example, the abbreviation of GB is G .

Parameter	Туре	Value Range	Description
measure_t	Integer	-	Measurement type.
ype			• 1: Currency
			• 2: Duration
			• 3: Traffic
			• 4: Quantity
			6: length
			• 7: Capacity
			9: Number of lines
			• 10: Period
			• 11: Frequency
			• 12: Count
			15: Capacity x duration
			• 16: Bandwidth
			• 17: Capacity-duration
			18: Query rate
			• 19 : Bandwidth (1000)
			20: Performance test usage
			• 21: Area
			• 22: Video
			23: Throughput
			26: Deduction unit for a general resource
			package
			27: Number of cores x Duration
			• 28: Memory x Duration
			• 29: IOPS x Duration
			• 30: Throughput x Duration
			• 31: Number/Duration
			• 40 : Traffic (1000)
			• 41: 1K tokens
			103: Hong Kong dollar
			• 104: tokens

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "measure_units": [
    {
```

```
"measure_id": 0,
    "measure_name": "Day",
    "abbreviation": "d",
    "measure_type": 2
},

{
    "measure_id": 1,
    "measure_name": "USD",
    "abbreviation": "YDollar",
    "measure_type": 1
},

{
    "measure_id": 10,
    "measure_id": 10,
    "measure_name": "GB",
    "abbreviation": "G",
    "measure_type": 3
}

}
```

III NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

4.1.6 Querying the Measurement Unit Number System

Function

This API is used to query the measurement unit number system on the partner sales platform.

Constraints

This API can be invoked using the partner AK/SK or token.

URI

GET /v2/bases/conversions

Table 4-16 Request parameters

Paramete r	Manda tory	Туре	Value Range	Description
measure_t ype	No	Integer	1- 214748 3647	Measurement type. 1: Currency 2: Duration 3: Traffic 4: Quantity 6: length 7: Capacity 9: Number of lines 10: Period 11: Frequency 12: Count 15: Capacity x duration 16: Bandwidth 17: Capacity-duration 18: Query rate 19: Bandwidth (1000) 20: Performance test usage 21: Area 22: Video 23: Throughput 26: Deduction unit for a general resource package 27: Number of cores x Duration 28: Memory x Duration 29: IOPS x Duration 29: IOPS x Duration 30: Throughput x Duration 30: Throughput x Duration 40: Traffic (1000) 41: 1K tokens 103: Hong Kong dollar 104: tokens If this parameter is not included in the request parameters, is left empty, or is set to null, it cannot be used as a filter criterion. It cannot be set to "".

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/bases/conversions?measure_type=3 HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 characte rs	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 characte rs	Error description. This parameter is returned only when the query failed.
conversion s	List <co nversio n></co 	-	Measurement unit conversion information. For details, see Table 4-17 .

Table 4-17 Conversion

Parameter	Туре	Value Range	Description	
measure_i d	Integer	-	Measurement unit ID. For example, 10 indicates GB.	
ref_measur e_id	Integer	-	Measurement unit ID after conversion. For example, 11 indicates MB.	
conversion _ratio	Long	-	Conversion ratio. Example: If the measurement unit is GB and the target unit is MB, the conversion ratio is 1024 (1 GB = 1024 MB).	

Parameter	Туре	Value Range	Description																											
measure_t	Integer	1–	Measurement type.																											
ype		214748	• 1: Currency																											
		3647	• 2: Duration																											
			• 3: Traffic																											
			• 4: Quantity																											
			6: length																											
			• 7: Capacity																											
			9: Number of lines																											
			• 10: Period																											
			11: Frequency																											
			• 12: Count																											
							15: Capacity x duration																							
						• 16: Bandwidth																								
					• 17: Capacity-duration																									
						18: Query rate																								
								• 19 : Bandwidth (1000)																						
																20: Performance test usage														
			• 21: Area																											
			• 22: Video																											
																														• 23: Throughput
																														26: Deduction unit for a general resource package
																							27: Number of cores x Duration							
																28: Memory x Duration														
												• 29: IOPS x Duration																		
		30: Through31: Number					00 TI																							
					04 N																									
			• 40: Traffic (1000)																											
		• 41: 1K tokens																												
			103: Hong Kong dollar																											
			104: tokens																											

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "conversions": [
        {
```

```
"measure_id": 10,
    "ref_measure_id": 11,
    "conversion_ratio": 1024,
    "measure_type": 3
},
{
    "measure_id": 0,
    "ref_measure_id": 5,
    "conversion_ratio": 1440,
    "measure_type": 2
}
]
```

MOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Descrip Code	tion
403	CBC.0151 Access of	lenied.
500	CBC.0999 Other erro	ors.

4.2 Querying the Price of a Product

4.2.1 Querying the Price of a Pay-Per-Use Product

Function

Partners can query the price of a pay-per-use product by criteria on the sales platform.

If the tenant who purchases the product enjoys a discount, the discount amount and the final price can be obtained from the query result.

If the tenant has enjoyed multiple types discounts, the system will return the commercial discount amount and the final price preferentially.



- Ensure that you provide the correct service type, region, resource type, and resource specification. Otherwise, an error may be reported.
- You can use the to determine product prices.
- You can also use the price calculator to get the value of the product_infos
 request parameter when you call the API for querying product prices. For more
 details, see price inquiry examples.

Constraints

This API can be called using the partner token. Before using the partner token to call this API, the partner needs to request authorization from the customer or ask the customer to create an agency for them.

URI

POST /v2/bills/ratings/on-demand-resources

Request

Request Parameters

Parameter	Manda tory	Туре	Value Range	Description
project_id	Yes	String	A maximu m of 64 charact ers	Project ID. NOTE If the customer token is used, invoke the API for obtaining a user token with the assume_role method to obtain the project ID of the target region. For details, see Step 2 in How Can I Replace a Partner Token with a Customer Token. To call this API, an IAM member account must be authorized by the IAM master account. For details, see Creating a User Group and Assigning Permissions.
product_in fos	Yes	List <de mandPr oductIn fo></de 	A maximu m of 100 values	Indicates the product information list. For details, see Table 4-18 .

Parameter	Manda tory	Туре	Value Range	Description
inquiry_pr ecision	No	Integer	-	Precision of the price query result. The default value of this parameter is 0 (default precision of the price query result). • 0: The default precision of the query result. The result contains a maximum of six decimal places with the unit of USD, such as USD 0.000001. • 1: The result contains a maximum of 10 decimal places with the unit of USD, such as USD 1.0000000001. NOTE Value 0 and value 1 make differences only when the query result contains at least six decimal places.

Table 4-18 DemandProductInfo

Parameter	Manda tory	Туре	Value Range	Description
id	Yes	String	A maxim um of 64 charact ers	The ID is used to identify the mapping between the inquiry result and the request and must be unique in an inquiry.
cloud_servi ce_type	Yes	String	A maxim um of 400 charact ers	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.

Parameter	Manda tory	Туре	Value Range	Description
resource_ty pe	Yes	String	A maxim um of 400 charact ers	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types. The relationship between ResourceType and CloudServiceType is as follows: A resource type represents a resource contained in the cloud service type, and the cloud service type is a combination of multiple resource types.

Parameter	Manda tory	Туре	Value Range	Description
resource_s pec	Yes	String	A maxim um of 400 charact ers	Resource specifications. For details, see related cloud service documentation. The following provides examples of services and resource specifications: ECS Add .win or .linux to the end of the ECS flavor ID based on the OS type, for example, s2.small.1.linux. Call the API for querying details about flavors and extended flavor information to obtain the flavor IDs. Bandwidth 12_bgp: dynamic BGP bandwidth billed by traffic 12_sbgp: static BGP bandwidth billed by traffic 19_bgp: dynamic BGP bandwidth billed by bandwidth 19_sbgp: Static BGP bandwidth billed by bandwidth 19_share: Shared bandwidth billed by bandwidth 19_share: Shared bandwidth billed by bandwidth IP address: 5_bgp: dynamic BGP public IP address 5_sbgp: static BGP public IP address SAS: high I/O EVS disk SAS: high I/O EVS disk GPSSD: general-purpose SSD EVS disk SSD: ultra-high I/O EVS disk ESSD: Extreme SSD GPSSD2.storage: General-purpose SSD V2 storage GPSSD2.iops: General-purpose SSD V2 iops

Parameter	Manda tory	Туре	Value Range	Description
				 GPSSD2.throughput: General- purpose SSD V2 throughput
region	Yes	String	A maxim um of 64 charact ers	Cloud service region code, for example, eu_west_101.
usage_fact or	Yes	String	A maxim um of 64 charact ers	Usage factor. Usage factors are case-insensitive. The value is the same as the usage factor value in the SDR. The mapping between cloud services and usage factors is as follows:
				Cloud server: Duration
				Cloud disk: Duration
				EIP: Duration
				Bandwidth: Duration or upflow
				Marketplace image: Duration You can call the API in 4.1.4 Querying Usage Types to obtain the value of parameter code in Table 4-13. The value indicates the billing factor of each cloud service.
usage_valu e	Yes	BigDeci mal	-	Usage value. For example, if you want to inquire a product price by hour, set usageValue to 1 and usageMeasureID to 4 (hour).
usage_mea sure_id	Yes	Integer	A maxim um of 4 charact ers	Usage unit. You can call the API in 4.1.5 Querying Measurement Units to obtain the value. For example, if you want to inquire a product price by hour, set usageValue to 1 and usageMeasureID to 4 (hour).
subscriptio n_num	Yes	Integer	[1-1000 0]	Number of subscriptions.

Parameter	Manda tory	Туре	Value Range	Description
available_z one	No	String	A maxim um of 64 charact ers	Available zone ID. Available zone IDs are case-insensitive. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used
resource_si ze	No	Integer	[1-2147 83647]	as a filter criterion. Resource capacity. It can be the subscribed volume size or bandwidth size. This parameter is mandatory for a linear product. Linear products are those whose size must be specified during a subscription, such as hard disks and bandwidth. For example, you can select 10 GB or 20 GB during a disk subscription. For non-linear products, if this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
size_measu re_id	No	Integer	A maxim um of 4 charact ers	Resource capacity measurement ID. The options are: 15: Mbit/s (used when the bandwidth is subscribed) 17: GB (used when an EVS disk is subscribed to) 14: amount (times) This field should be filled together with resource_size or left blank. Linear products are those whose size must be specified during a subscription, such as hard disks and bandwidth. For example, you can select 10 GB or 20 GB during a disk subscription. For non-linear products, if this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.

Example Request

 $POST\ https://bss.myhuaweicloud.eu/v2/bills/ratings/on-demand-resources\ HTTP/1.1\ Content-Type:\ application/json$

```
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
    "project_id": "06488a*******832f55c016b0e337d7",
   "product_infos": [
       {
           "id": "1".
           "cloud_service_type": "hws.service.type.ec2",
           "resource_type": "hws.resource.type.vm", "resource_spec": "c3.3xlarge.2.linux",
           "region": "eu-west-101",
"usage_factor": "Duration",
           "usage_value": 2,
           "usage_measure_id": 4,
           "subscription_num": 1,
           "available_zone": null
           "id": "2",
          "cloud_service_type": "hws.service.type.ebs",
"resource_type": "hws.resource.type.volume",
"resource_spec": "SSD",
           "region": "eu-west-101",
           "usage_factor": "Duration",
           "usage_value": 2,
           "usage_measure_id": 4,
           "subscription_num": 1,
           "resource_size": 10,
           "size_measure_id": 17
       },
           "id": "3",
           "cloud_service_type": "hws.service.type.vpc",
"resource_type": "hws.resource.type.ip",
"resource_spec": "5_bgp",
"region": "eu-west-101",
"vesce_fectors": "District"
           "usage_factor": "Duration",
           "usage_value": 3,
           "usage_measure_id": 4,
           "subscription_num": 1,
           "available_zone": null
           "id": "4",
           "cloud_service_type": "hws.service.type.vpc",
           "resource_type": "hws.resource.type.bandwidth",
"resource_spec": "12_sbgp",
           "region": "eu-west-101",
"usage_factor": "upflow",
           "usage_value": 4,
           "usage_measure_id": 10,
           "subscription_num": 1,
           "available_zone": "cn-north-1a",
"resource_size": 1,
           "size_measure_id": 15
       }
    "inquiry_precision": 1
```

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 character s	Status code. For details, see Returned Values. This parameter is returned only when the query failed.
error_msg	String	A maximu m of 1000 character s	Error description. This parameter is returned only when the query failed.
amount	BigDecima I	-	Final price after discount
discount_am ount	BigDecima I	-	Discount amount (difference between the list price and the final price).
official_webs ite_amount	BigDecima I	-	List price of a pay-per-use product
measure_id	Integer	A maximu m of 4 character s	Measurement unit ID. 1: USD
currency	String	A maximu m of 20 character s	Currency. USD If the parameter is left blank, USD is used.
product_rati ng_results	List <dema ndProduct RatingRes ult></dema 	-	Product price query result. For details, see Table 4-19 .

Table 4-19 DemandProductRatingResult

Parameter	Туре	Value Range	Description
id	String	A maximum of 64 character s	The ID is used to identify the mapping between the inquiry result and the request and must be unique in an inquiry.

Parameter	Туре	Value Range	Description
product_id	String	A maximum of 64 character s	Product ID.
amount	BigDecim al	-	Final price after discount
discount_am ount	BigDecim al	-	Discount amount (difference between the list price and the final price).
official_webs ite_amount	BigDecim al	-	List price of a pay-per-use product
measure_id	Integer	A maximum of 4 character s	Measurement unit ID. 1: USD
discount_rati ng_results	List <dem andDiscou ntRatingR esult></dem 	-	Discount details, including the product promotion information and commercial or partner discount information. For details, see Table 4-20 .

Table 4-20 DemandDiscountRatingResult

Parameter	Туре	Value Range	Description
discount_id	String	A maximu m of 64 character s	Discount ID.
discount_typ e	Integer	A maximu m of 4 character s	Discount type. Commercial discounts: 605: Contract commercial discount in the HUAWEI CLOUD BE scenario 606: Contract commercial discount in the reseller BE scenario Partner discounts: 607: Partner authorized discount

Parameter	Туре	Value Range	Description
amount	BigDecim al	-	Discounted amount.
measure_id	Integer	A maximu m of 4 character s	Measurement unit ID. 1: USD
discount_na me	String	A maximu m of 256 character s	Discount name.

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
   "amount": 8.128,
  "discount_amount": 0.0,
   "official_website_amount": 8.128,
  "measure_id": 1,
"currency": "USD",
   "product_rating_results": [
        "id": "1",
         "product_id": "00301-243025-0--0_merge",
         "amount": 5.48,
         "discount_amount": 0.0,
         "official_website_amount": 5.48,
         "measure_id": 1,
         "discount_rating_results": []
         "id": "2",
        "product_id": "00301-290407774-0--1",
         "amount": 0.028,
         "discount_amount": 0.0,
         "official_website_amount": 0.028,
         "measure_id": 1,
         "discount_rating_results": []
     },
{
        "id": "3",
         "product_id": "00301-238601-0--0_merge",
         .
"amount": 0.06,
         "discount_amount": 0.0,
         "official_website_amount": 0.06,
         "measure_id": 1,
         "discount_rating_results": []
     },
{
        "id": "4",
        "product_id": "00301-290407706-0--1", 
"amount": 2.56,
```

```
"discount_amount": 0.0,
    "official_website_amount": 2.56,
    "measure_id": 1,
    "discount_rating_results": []
    }
]
```

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99006006	Product not found.
400	CBC.99006050	Incorrect usage unit.
400	CBC.99006055	The queried amount exceeds the upper limit.
400	CBC.99006074	The billing item does not exist.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

4.2.2 Querying the Price of a Yearly/Monthly Product

Function

Partners can use this API to query prices of yearly/monthly products for new subscriptions on their sales platforms.

If the tenant who purchases the product enjoys a discount, the discount amount and the final price can be obtained from the query result.

If the customer enjoys multiple discounts, the system returns the rating result for each discount. The system preferentially uses the rating result of the commercial discount if the customer selects automatic payment.



- Ensure that you provide the correct service type, region, resource type, region and resource specification. Otherwise, an error may be reported.
- You can use the to determine product prices.
- You can also use the price calculator to get the value of the product_infos
 request parameter when you call the API for querying product prices. For more
 details, see price inquiry examples.

Constraints

This API can be called using the partner token. Before using the partner token to call this API, the partner needs to request authorization from the customer or ask the customer to create an agency for them.

URI

POST /v2/bills/ratings/period-resources/subscribe-rate

Request

Request Parameters

Parameter	Manda tory	Туре	Value Range	Description
project_id	Yes	String	A maximu m of 64 charact ers	Project ID. NOTE If the customer token is used, invoke the API for obtaining a user token with the assume_role method to obtain the project ID of the target region. For details, see Step 2 in How Can I Replace a Partner Token with a Customer Token. To call this API, an IAM member account must be authorized by the IAM master account. For details, see Creating a User Group and Assigning Permissions.
product_in fos	Yes	List <per iodProd uctInfo ></per 	A maximu m of 100 values	Product information list. For details, see Table 4-21 .

Table 4-21 PeriodProductInfo

Parameter	Manda tory	Туре	Value Range	Description
id	Yes	String	A maxim um of 64 charact ers	The ID is used to identify the mapping between the inquiry result and the request and must be unique in an inquiry.
cloud_servi ce_type	Yes	String	A maxim um of 400 charact ers	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.
resource_ty pe	Yes	String	A maxim um of 400 charact ers	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types. The relationship between ResourceType and CloudServiceType is as follows: A resource type represents a resource contained in the cloud service type, and the cloud service type is a combination of multiple resource types.

Parameter	Manda tory	Туре	Value Range	Description
resource_s pec	Yes	String	A maxim um of 400 charact ers	Resource specifications. For details, see related cloud service documentation. The following provides examples of services and resource specifications: ECS Add .win or .linux to the end of the ECS flavor ID based on the OS type, for example, s2.small.1.linux. Call the API for querying details about flavors and extended flavor information to obtain the flavor IDs. Bandwidth 12_bgp: dynamic BGP bandwidth billed by traffic 12_sbgp: static BGP bandwidth billed by traffic 19_bgp: dynamic BGP bandwidth billed by bandwidth 19_sbgp: Static BGP bandwidth billed by bandwidth 19_share: Shared bandwidth billed by bandwidth IP address: 5_bgp: dynamic BGP public IP address RDS: You can call the API for querying database specifications to obtain the RDS specifications. DCS: You can call the API for querying service specifications to obtain the DCS specifications. EVS: SATA: Common I/O SAS: High I/O

Parameter	Manda tory	Туре	Value Range	Description
				 GPSSD: General-purpose SSD SSD: Ultra-high I/O ESSD: Extreme SSD GPSSD2.storage: General-purpose SSD V2 storage
region	Yes	String	A maxim um of 64 charact ers	Cloud service region code, for example, eu_west_101.
period_typ e	Yes	Integer	[0-4]	Period type of a yearly/monthly product order. • 0: Day • 2: Month • 3: Year • 4: Hour
period_nu m	Yes	Integer	[1-2147 83647]	Number of periods of a yearly/ monthly product order.
subscriptio n_num	Yes	Integer	[1-1000 0]	Number of subscriptions of a yearly/monthly product order.
available_z one	No	String	A maxim um of 64 charact ers	AZ identifier, for example, cn-north-1a . AZ identifiers are case-insensitive. If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.

Parameter	Manda tory	Туре	Value Range	Description
resource_si ze	No	Integer	[1-2147 83647]	Resource capacity. It can be the subscribed volume size or bandwidth size. This parameter is mandatory for a linear product. Linear products are those whose size must be specified during a subscription, such as hard disks and bandwidth. For example, you can select 10 GB or 20 GB during a disk subscription. For non-linear products, if this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
size_measu re_id	No	Integer	-	Resource capacity measurement ID. The options are as follows: 15: Mbit/s (used when the bandwidth is subscribed) 17: GB (used when a cloud disk is subscribed) 14: amount This parameter is mandatory for a linear product. Linear products are those whose size must be specified during a subscription, such as hard disks and bandwidth. For example, you can select 10 GB or 20 GB during a disk subscription. For non-linear products, if this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.

Example Request

```
"available_zone": "eu-west-101a",
"resource_size": null,
"size_measure_id": null,
"period_type": 2,
"period_num": 1,
"subscription_num": 1
"id": "2".
"cloud_service_type": "hws.service.type.vpc",
"resource_type": "hws.resource.type.ip",
"resource_spec": "5_bgp",
"resource_spec": "5_bgp",
"region": "eu-west-101"
"available_zone": null"eu-west-101a",
"resource_size": null,
"size_measure_id": 15,
"period_type": 2,
"period_num": 1,
"subscription_num": 1
 {
"id": "3",
"cloud_service_type": "hws.service.type.ebs",
"resource_type": "hws.resource.type.volume",
"resource_spec": "GPSSD",
"region": "eu-west-101",
"available_zone": "eu-west-101a",
"resource_size": 40,
"size_measure_id": 17,
"period_type": 2,
"period_num": 1,
"subscription_num": 1
 },
 {
"id": "4",
"cloud_service_type": "hws.service.type.vpc",
"resource_type": "hws.resource.type.bandwidth",
"resource_spec": "19_bgp",
"region": "eu-west-101",
"lowellable_tope=""".
"available_zone":"eu-west-101a",
"resource_size": 40,
"size_measure_id": 15,
"period_type": 2,
"period_num": 1,
"subscription_num": 1
```

Response

Parameter	Туре	Value Range	Description
error_code	String	A maximu m of 20 character s	Status code. For details, see Returned Values. This parameter is returned only when the query failed.

Parameter	Туре	Value Range	Description
error_msg	String	A maximu m of 1000 character s	Error description. This parameter is returned only when the query failed.
official_webs ite_rating_re sult	List <offici alWebsite RatingRes ult Object></offici 	-	The result for querying the list price of a yearly/monthly product. For details, see Table 4-22.
optional_disc ount_rating_ results	List <optio nalDiscou ntRatingR esult></optio 	-	Rating results by discount if optional discounts exist. Each optional discount has a rating result. For details, see Table 4-24.
currency	String	A maximu m of 20 character s	Currency. USD If the parameter is left blank, USD is used.

Table 4-22 OfficialWebsiteRatingResult

Parameter	Туре	Value Range	Description
official_webs ite_amount	BigDecim al	-	Price of a yearly/monthly product on the official website.
measure_id	Integer	A maximum of 4 character s	Measurement unit ID. 1: USD
product_rati ng_results	List <perio dProduct OfficialRa tingResult</perio 	-	Price query result. For details, see Table 4-23 .

Table 4-23 Price query result.

Parameter	Туре	Value Range	Description
id	String	A maximu m of 64 character s	ID, which comes from the ID in the request.
product_id	String	A maximu m of 64 character s	Yearly/monthly product ID.
official_webs ite_amount	BigDecim al	-	Price of a yearly/monthly product on the official website.
measure_id	Integer	A maximu m of 4 character s	Measurement unit ID. • 1: USD

Table 4-24 OptionalDiscountRatingResult

Parameter	Туре	Value Range	Description
discount_id	String	A maximu m of 64 character s	Discount ID.
amount	BigDecim al	-	Final price after the discount. Amount= official_website_amount - discountAmount
official_webs ite_amount	BigDecim al	-	Price of a yearly/monthly product on the official website.
discount_am ount	BigDecim al	-	Amount of an available discount, such as commercial discounts, partner discounts, promotion discounts, and coupons.

Parameter	Туре	Value Range	Description
measure_id	Integer	A maximu m of 4 character s	Measurement unit ID. 1: USD
discount_typ e	Integer	A maximu m of 32 character s	Discount type. Commercial discounts: - 605: Contract commercial discount in the HUAWEI CLOUD BE scenario - 606: Contract commercial discount in the reseller BE scenario Partner discounts: 607: Partner authorized discount
discount_na me	String	A maximu m of 256 character s	Discount name.
best_offer	Integer	-	Optimal discount. O: No (default value) 1: Yes Optimal discount: The system selects a discount from the commercial discount and partner discount. The discount with the maximum discount amount is the optimal discount. If the discount amounts are the same, the system uses the commercial discount first. The promotional discount and coupon are not in the calculation of the optimal discount.
product_rati ng_results	List <perio dProductR atingResul t></perio 	-	Product price query result. For details, see Table 4-25 .

Table 4-25 PeriodProductRatingResult

Parameter	Туре	Value Range	Description
id	String	A maximu m of 64 character s	ID, which comes from the ID in the request.
product_id	String	A maximu m of 64 character s	Yearly/monthly product ID.
amount	BigDecim al	-	Final price after the discount. Amount= official_website_amount - discountAmount
official_webs ite_amount	BigDecim al	-	Price of a yearly/monthly product on the official website.
discount_am ount	BigDecim al	-	Amount of an available discount, such as commercial discounts, partner discounts, promotion discounts, and coupons.
measure_id	Integer	A maximu m of 4 character s	Measurement unit ID. 1: USD

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "official_website_rating_result": {
        "official_website_amount": 529.67,
        "installment_official_website_amount": null,
        "installment_period_type": null,
        "measure_id": 1,
        "product_rating_results": [
        {
             "id": "1",
             "product_id": "OFFI777523764289028104,
             "official_website_amount": 182.07,
             "measure_id": 1,
             "installment_official_website_amount": null,
             "installment_period_type": null
        },
        {
             "id": "2",
        }
```

```
"product_id": "OFFI777346878061772800",
        "official_website_amount": 0.0,
        "measure_id": 1,
        "installment_official_website_amount": null,
        "installment_period_type": null
        "id": "3",
        "product_id": "OFFI776402238127517698",
        "official_website_amount": 5.6,
        "measure_id": 1,
        "installment_official_website_amount": null,
        "installment_period_type": null
        "id": "4",
        "product_id": "OFFI777135464818663425",
        "official_website_amount": 342.0,
        "measure_id": 1,
        "installment_official_website_amount": null,
        "installment_period_type": null
  ]
optional_discount_rating_results": [],
"currency": "USD"
```

Returned Values

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99006006	Product not found.
400	CBC.99006055	The queried amount exceeds the upper limit.
403	CBC.0151	Access denied.
429	CBC.0250	Connection request control triggered.
500	CBC.0999	Other errors.

4.2.3 Querying the Renewal Price of a Yearly/Monthly Resource

Function

Customers can query the renewal price of a yearly/monthly resource by criteria on the partner sales platform.

◯ NOTE

- If a primary resource has resources attached, the renewal price will include the price of the primary resource and that of the attached. The information of the attached resources can also be accessed through 8.4.1 Querying Customer's Yearly/Monthly Resources.
- Note: When a newly purchased EVS disk is attached to an ECS, the EVS disk is not necessarily an attached resource of the ECS. The precise information of the attached resources can only be accessed through 8.4.1 Querying Customer's Yearly/Monthly Resources.

Constraints

Only customer AK/SK can be used to call the API. Since partners are not allowed to buy products with their own accounts, let alone yearly/monthly products.

URI

POST /v2/bills/ratings/period-resources/renew-rate

Request

Request parameters

Paramet er	Mand atory	Parame ter Type	Value Range	Description
resource _ids	Yes	List <stri ng></stri 	[1-10]	Primary resource IDs A maximum of 10 resource IDs are supported. Determine whether a resource is a primary resource or not by the is_main_resource, a response parameter described in 8.4.1 Querying Customer's Yearly/ Monthly Resources.
period_ty pe	Yes	Integer	[2 3]	Period type: • 2: Month • 3: Year

Paramet er	Mand atory	Parame ter Type	Value Range	Description
period_n um	Yes	Integer	[1-11]	Number of periods: • Month: 1 to 11 • Year: 1 to 3
include_r elative_r esources	No	Boolean	-	Specifies whether to include associated resources for renewal price querying. • false: Not included. • true: Included. If this parameter is not included in the request or is set to "", the default value false is used.

```
Request Sample
POST https://bss.myhuaweicloud.eu/v2/bills/ratings/period-resources/renew-rate HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
  "period_num": 1,
"include_relative_resources": false
```

Response

Parameter	Parameter Type	Value Range	Description
error_code	String	A maximu m of 20 character s	Status code For details, see Status Codes .
error_msg	String	A maximu m of 1,000 character s	Error description

Parameter	Parameter Type	Value Range	Description
currency	String	A maximu m of 20 character s	Currency USD If the parameter is left blank, USD is used.
renew_inqui ry_results	List <rene wInquiryRe sultInfo></rene 		Renew price inquiry result of the primary resources and their attached resources For details, see Table 4-26 .
official_web site_rating_ result	OfficialWe bsiteRating Result Object		For list price of a primary resource and its attached resources, see Table 4-27 .
optional_dis count_ratin g_results	List <optio nalDiscoun tRatingRes ult></optio 		Price inquiry result with an optional discount applied. If there are multiple optional discounts, different price inquiry results can be returned with a different discount applied each time. For details, see Table 3 OptionalDiscountRating-Result.
fail_resourc e_infos	List <failre sourceInfo ></failre 		Resource information for a failed query. For details, see resource information for a failed query.

Table 4-26 RenewInquiryResultInfo

Parameter	Parameter Type	Description
resource_id	String	Resource ID. NOTE If the request contains the include_relative_resources field, the ID of the associated primary resource will be returned.
amount	String	Renewal price of primary resources and their attached resources Unit: USD NOTE If the request contains the include_relative_resources field, the renewal amount of the associated primary resource is returned.

 Table 4-27 OfficialWebsiteRatingResult

Parameter	Paramete r Type	Value Range	Description
official_webs ite_amount	String	A maximum of 64 character s	List price Unit: USD

Table 4-28 OptionalDiscountRatingResult

Parameter	Paramete r Type	Value Range	Description
discount_id	String	A maximu m of 64 character s	Discount ID.
amount	String	A maximu m of 64 character s	Final price after the discount Unit: USD Amount= official_website_amount - discount_amount
official_webs ite_amount	String	A maximu m of 64 character s	List price Unit: USD
discount_am ount	String	A maximu m of 64 character s	Amount of an available discount, such as commercial discounts, partner discounts, promotion discounts, and coupons Unit: USD
discount_typ e	Integer	A maximu m of 32 character s	Discount type Commercial discounts: - 605: Contract commercial discount in the Huawei Cloud BE scenario - 606: Contract commercial discount in the reseller BE scenario Partner discounts: 607: Partner authorized discount - discount rate

Parameter	Paramete r Type	Value Range	Description
discount_na me	String	A maximu m of 256 character s	Discount name
best_offer	Integer	-	Optimal discount or not O: No (default value) 1: Yes Optimal discount is a discount selected from the commercial discount and partner discount. The discount with the maximum discount amount is the optimal discount. If the discount amounts are the same, the system uses the commercial discount first. The promotional discount and coupon are not in the calculation of the optimal discount.

Resource information for a failed query

Parameter	Parameter Type	Description
error_code	String	Status code For details, see Table Status Codes .
error_msg	String	Error description
resource_id	String	Resource ID.

Status code: 200

```
Response Sample
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time

{
    "currency": "CNY",
    "renew_inquiry_results": [{
        "resource_id": "230221_169ee********9d5b8af6a38f099abea",
        "amount": "800.0"

}],
    "official_website_rating_result": {
        "official_website_amount": "800.0",
        "installment_official_website_amount": null,
        "installment_period_type": null
},
    "optional_discount_rating_results": [],
```

"fail_resource_infos": []

Status Codes

◯ NOTE

- 4xx: indicates an error resulting from client, such as the request contains bad syntax or an invalid parameter. You need to check the statement and its format and make a request again.
- 5xx: indicates an error to the Huawei Cloud system, which prevented the system from fulfilling the request from client. You can contact Huawei Cloud customer service to handle the issue.

HTTP Status Code	Error Code	Description
200	CBC.300500 07	Renewal price inquiry is not applicable to non-primary resources.
200	CBC.300500 08	The period type or number of periods for the resource does not exist.
200	CBC.300500 09	The resources have expired and been deleted or do not exist.
200	CBC.300500 10	This operation is not allowed because some resources included in your orders are to be paid.
200	CBC.300500	Resources are being unsubscribed from or changed.
200	CBC.300500	Renewal not supported.
400	CBC.0100	Incorrect parameter
400	CBC.990060 06	The required product cannot be found.
400	CBC.990060 24	Failed to query product information.
400	CBC.990060 16	Failed to query coupon information.
400	CBC.990060 17	Failed to query customer information.
400	CBC.990060 50	Incorrect usage unit
400	CBC.990060 55	The queried amount exceeds the upper limit.
400	CBC.990060 66	Billing query failed

HTTP Status Code	Error Code	Description
400	CBC.990060 73	Project not found.
400	CBC.300500 12	There are duplicate resource IDs.
403	CBC.0151	Access denied
403	CBC.0154	Invalid or expired token
500	CBC.0999	Other errors

5 Customer Management

5.1 Customer Registration

5.1.1 Verifying Customer Registration Information

Function

This API is used to check whether the account name, and mobile number or email address entered by the customer can be used for registration.

◯ NOTE

For the registration with mobile numbers, whether the number of registered mobile numbers exceeds the upper limit will be checked.

Constraints

This API can be invoked using the partner AK/SK or token only.

URI

POST /v2/partners/sub-customers/users/check-identity

Request

Request parameters

Param eter	Mand atory	Туре	Value Range	Description
search_ type	Yes	String	[email mobile name]	The options are email, mobile, or name.

Param eter	Mand atory	Туре	Value Range	Description
search_ value	Yes	String	A maximu m of 64 character s	Mobile number, email address, or account name. • The mobile number must comply with the regular expression "^\\d{4}-\d+\$". The value contains the country code and starts with 00. The format is "00XX-XXXXXXXX". • The email address must consist of an email prefix and an email domain, as well as the (@) symbol. • name: The value must comply with the regular expression "^([a-zA-Z-]([a-zA-Z0-9]){4,31})\$" and contains 5 to 32 characters. The value cannot start with op_ or shadow_ and cannot contain only digits. It must start with a letter (case-insensitive) or a hyphen (-).

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers/users/check-identity HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "search_type": "name",
    "search_value": "ceshiyonghu001"
}
```

Response

Param eter	Туре	Value Range	Description
error_c ode	String	A maximu m of 16 character s	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_ msg	String	A maximu m of 1024 character s	Error description. This parameter is returned only when a failure occurs.

Param eter	Туре	Value Range	Description
check_ result	String	A maximu m of 32	 available: The account name, mobile number, or email address is valid.
		character s	 used_by_user: The account name, mobile number, or email address is in use.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "error_code": "CBC.0000",
    "error_msg": "success",
    "check_result": "available"
}
```

Returned Values

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description	
400	CBC.0100	Parameter error.	
403	CBC.0151	Access denied.	
500	CBC.0999 Other errors.		

5.1.2 Sending a Verification Code

Function

If a customer enters an email address during registration, the system sends a registration verification code to the email address to verify the information.

Constraints

This API can be invoked only by the partner AK/SK or token.

The verification codes are sent only during registration. After invoking this API, you need to invoke the API in **5.1.3 Creating a Customer** to create the registered customers.

URI

POST /v2/bases/verificationcode/send

Request

Request Parameters

Param eter	Man dator y	Туре	Value Range	Description	
receiv er_typ e	Yes	Integer	[2]	Verification code type. 2: Send an email verification code.	
timeo ut	No	Integer	[1-3000	Timeout of sending a verification code. If this parameter is not included in the request parameters or is set to null , the default timeout interval 10 minutes is used. If the value of this parameter is greater than 60 , the value is fixed to 5 minutes. Unit: minutes	
email	Yes	String	A maximu m of 64 charact ers	Email that receives the verification code.	
lang	No	String	A maximu m of 16 charact ers	Language in which the email verification code is sent. • zh-cn: Chinese • en-us: English If this parameter is not included in the request parameters, is set to "", or is set to null, the default value en-us is used.	

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/bases/verificationcode/send HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "receiver_type":2,
    "timeout": 5,
    "email":"***@163.com",
```

"lang":"en-us"

Response

Response Parameters

Param eter	Туре	Value Range	Description
error_c ode	String	A maximu m of 16 characte rs	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_ msg	String	A maximu m of 1024 characte rs	Error description. This parameter is returned only when a failure occurs.

Example Response

HTTP/1.1 204 No Content

Content-Type: application/json;charset=UTF-8

Content-Length: length Date: response time

Returned Values

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0 100	Parameter error.
400	CBC.9 9000 035	You are not a customer of a partner yet.
400	CBC.9 9004 002	Failed to generate the verification code.

HTTP Value	Error Code	Description
400	CBC.9 9004 003	The verification code is successfully generated but fails to be sent.
400	CBC.9 9004 004	Empty email address./Invalid format.
400	CBC.9 9004 015	The number of verification code sending times has reached the upper limit (15 times per hour, 60 times per day).
401	CBC.0 154	Invalid or expired token.
403	CBC.0 151	Access denied.
500	CBC.0 999	Other errors.

5.1.3 Creating a Customer

Function

This API is used to create a Huawei Cloud account for a customer when the customer creates an account on your sales platform, and bind the customer account on the partner sales platform to the HUAWEI CLOUD account. In addition, the Huawei Cloud account is bound to the partner account.



- After a HUAWEI CLOUD account is created for a customer, SAML authentication is required if the customer wants to switch from the partner sales platform to the Huawei Cloud official website. For details, see "SAML Authentication" in Web UI.
- If you do not enter the email address when creating a customer, the customer cannot receive any email notification from Huawei Cloud. The customer needs to log in to the Huawei Cloud to add the email address by themselves.
- When the API for creating a customer is invoked, Huawei Cloud will synchronously create a Huawei Cloud customer account and send the customer ID and account name to the partner platform. Then, Huawei Cloud associates the customer with the partner asynchronously. To query the association result, you can invoke the API described in 5.2.1 Querying Customers.
- Newly created customers are associated with their partners in the reseller model by default.

Constraints

- This API can be invoked using the partner AK/SK or token only.
- Huawei Cloud Customer Agreement and Privacy Statement must be displayed on the page for creating a customer on the partner sales platform.
- Obtain the verification code using the API in 5.1.2 Sending a Verification Code and then invoke this API if you enter the email address when creating a customer.
- The password must contain at least eight characters, which will take effect since August 1, 2022.

URI

POST /v2/partners/sub-customers

Request

Request Parameters

Parameter	Mandat ory	Туре	Value Range	Description
domain_are a	Yes	String	A maximum of 2 characters	Two-letter ID representing the country/region of the customer. The ID complies with the ISO 3166 standard. Example: Ireland (IE)
xaccount_id	Yes	String	A maximum of 128 characters	Unique user ID on the partner sales platform. The ID is allocated by the partner.
xaccount_ty pe	Yes	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?

Parameter	Mandat ory	Туре	Value Range	Description
domain_na me	No	String	[5-32]	HUAWEI CLOUD username of the customer. If this parameter is left blank, the value is generated randomly. The value cannot start with op_ or shadow_ and cannot contain only digits. The verification length is 5 to 32 digits and the verification rules are ^([a-zA-Z]([a-zA-Z0-9])*)\$.
				If this parameter is not included in the request parameters, is set to "", or is set to null , the value is randomly generated.
email	No	String	A maximum of 64 characters	Email address. Format: The value must contain @. If this parameter is not included in the request parameters or is set to null, no value is returned. If this parameter is set to "", "" is returned.
verification_ code	No	String	[6]	Verification code. Invoke the API described in 5.1.2 Sending a Verification Code to obtain the verification code. If no email address is available, you do not need to enter the verification code. If this parameter is not included in the request parameters or is set to null, this parameter will not be used. It cannot be set to "".

Parameter	Mandat ory	Туре	Value Range	Description
password	No	String	The value can be a string of 8 to 32 characters .	 The password must meet the following rules: Contains at least two of the following character types: uppercase letters, lowercase letters, digits, and special characters. Differs from the account name or the account name or the account name in reverse order. Does not contain the email address. If this parameter is left blank, a user does not have a password and cannot directly log in to HUAWEI CLOUD. In this case, the user can only switch to HUAWEI CLOUD from the partner system using SSO. If this parameter is not included in the request parameters or is set to null, the password is randomly generated. This parameter cannot be set to "".
is_close_ma rket_ms	No	String	A maximum of 10 characters	Whether to disable the marketing message sending function. • true: Disable this function. • false: Retain this function enabled (default). If this parameter is not included in the request parameters, is set to "", or is set to null, false is returned.

Parameter	Mandat ory	Туре	Value Range	Description
indirect_par tner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain such IDs, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory for creating a customer for a Huawei Cloud reseller. If this parameter is not included in the request parameters, is set to "", or is set to null, this parameter will not be used.
include_ass ociation_res ult	No	Boolean	-	Whether to return the result of associating a partner and sub-customer. • true: Returns the association result. • false: Does not return the association result. The default value is false. If this parameter is not included in the request parameters, is set to "", or is set to null, false is returned.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "domain_name": "test",
    "email": "***@163.com",
    "verification_code": "253***",
    "domain_area": "IE",
    "xaccount_id": "35rey****",
    "xaccount_tjpe": "***_IDP",
    "password": "*******",
    "is_close_market_ms": "true",
    "indirect_partner_id": "a0d736*******aab6502d1a828c1809",
    "include_association_result": "false"
}
```

Response

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
domain_id	String	A maximum of 64 characters	Customer ID. This parameter is returned only when the operation is successful or an error whose code is CBC.99000050 occurs.
domain_na me	String	A maximum of 64 characters	 HUAWEI CLOUD username of the customer. If the request contains this parameter, the response must contain the same parameter value as the request. If the request does not contain this parameter, the response contains a 32-bit character string randomly generated by the system. This parameter is returned only when the operation is successful or an error whose code is CBC.99000050 occurs.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "domain_id": "06a7969058802f0c0f01c00b91846780",
  "domain_name": "a0d736359ada40aab6502d1a828c1809"
}
```

Returned Values

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description	
400	CBC.0100	Parameter error. Check whether the input parameters meet the requirements according to the request parameter descriptions.	
400	CBC.0101	Invalid parameter.	
400	CBC.5001005 9	Customer association not supported for distributors.	
400	CBC.9900003	The account name already exists.	
400	CBC.9900002	The email address already exists.	
400	CBC.9900003	Invalid account name.	
400	CBC.5016	Invalid email address format.	
400	CBC.9900003	Duplicate xAccountId.	
400	CBC.9900000 4	An exception occurred when the customer authorized rights to the partner.	
400	CBC.9900003	Invalid password.	
400	CBC.9900003	Currently, registration with HUAWEI CLOUD is not available for users in this country.	
400	CBC.9900003	You do not have the permission to operate this Huawei Cloud reseller.	
500	CBC.9900005	Query for the result of associating partner and its sub-customer timed out. Refer to 5.2.1 Querying Customers to check the association result.	
400	CBC.9900005	Customer creation failed because this mobile number or email address has been preregistered by Huawei.	
400	CBC.9900400	Invalid email address.	
400	CBC.9900400	Invalid verification code.	
400	CBC.9900400 9	The verification code is available, but the number of verification failures is greater than 3.	

HTTP Value	Error Code	Description	
400	CBC.9900401	The verification code entered by the client is incorrect.	
400	CBC.9900503 5	This API cannot be used by a sandbox account.	
401	CBC.0154	Invalid or expired token.	
403	CBC.0151	Access denied.	
500	CBC.0999	Other errors.	
400	CBC.5001008 5	Customer association not allowed. The account of this partner has been restricted.	
400	CBC.5001008	Customer association not allowed. This partner is a Huawei Cloud reseller, and the account of its associated distributor has been restricted.	
400	CBC.5001012 0	Customer development not supported. There are no credits granted for the partner.	

5.2 Customer Management

5.2.1 Querying Customers

Function

This API is used to query your customers.

Visit **Querying Customers** to learn about how to query customers in Partner Center.

Constraints

This API can be invoked using the partner AK/SK or token only.

Debugging

URI

POST /v2/partners/sub-customers/query

Request

Request parameters

Paramete r	Manda tory	Туре	Value Range	Description
account_n ame	No	String	A maximum of 64 characters	Account name. If the customer has created an IAM user, enter the account name of the master account. For details about the two concepts, see "Account" and "IAM User" in Basic Concepts. Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
customer	No	String	A maximum of 64 characters	Name used by customer for real-name authentication, which can be queried using fuzzy search. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Paramete r	Manda tory	Туре	Value Range	Description
offset	No	Integer	0 to 40,000,000	Offset, which starts from 0. The default value is 0. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	Maximum value: 100	Number of customers queried each time. The default value is 10 .
label	No	String	A maximum of 64 characters	Tag. Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. The letters entered for search are casesensitive. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Paramete r	Manda tory	Туре	Value Range	Description
associatio n_type	No	String	A maximum of 2 characters	Association type. 1: Referral 3: Reseller If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
associated _on_begin	No	String	A maximum of 20 characters	Start time of the association time range (UTC time). Value format: YYYY-MM-DD'T'hh:mm:ss'Z', for example, 2019-05-06T08:05:01Z. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
associated _on_end	No	String	A maximum of 20 characters	End time of the association time range (UTC time). Value format: YYYY-MM-DD'T'hh:mm:ss'Z', for example, 2019-05-06T08:05:01Z. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
indirect_p artner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory for querying the list of customers of a Huawei Cloud reseller.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers/query HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ {
    "account_name": "betahc_kehu107",
    "customer": "sun***01",
```

Response

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. This parameter is returned only when a failure occurs. For details, see Returned Values .
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
customer_inf os	List <custo merInfo></custo 	-	Customer list. For details, see Table 5-1 .
count	Integer	-	Total number of records.

Table 5-1 Customer information

Parameter	Туре	Value Range	Description
customer	String	A maximum of 128 characters	Name that has passed the real- name authentication.
account_nam e	String	A maximum of 128 characters	Account name. If the customer has created an IAM user, the account name of the master account is returned.
customer_id	String	A maximum of 64 characters	Customer account ID.
associated_o n	String	A maximum of 20 characters	Time when a customer is associated with a partner. The value is UTC time in "yyyy-MM-dd 'T' HH:mm:ss 'Z'" format, such as 2019-05-06T08:05:01Z. HH ranges from 0 to 23, and mm and ss ranges from 0 to 59.

Parameter	Туре	Value Range	Description
association_t ype	String	A maximum of 2 characters	Association type. 1: Referral 3: Reseller.
label	String	A maximum of 64 characters	Tag.
telephone	String	A maximum of 20 characters	Customer phone number.
verified_statu s	String	A maximum of 5 characters	 Real-name authentication status. -1: The real name is not authenticated. 0: Real-name authentication is under review. 1: The real-name authentication is not passed. 2: The real name is authenticated.
country_code	String	A maximum of 10 characters	Country code, which is the country code prefix of a phone number. Example: 0086 for China
customer_typ e	Integer	-	Customer type. • -1: None • 0: Individual • 1: Enterprise When a customer is registered, customerType is -1. The customer can set customerType in the account center or select the enterprise or individual real-name authentication to determine the customer type.
is_frozen	Integer	-	Whether to freeze the account. 0: No 1: Only account 2: Account and resources
account_man agers	List <accou ntManager ></accou 	A maximum of 10 managers	Customer manager list. Only 1 account manager can be configured at present. For details, see Table 5-2.

Parameter	Туре	Value Range	Description
xaccount_id	String	A maximum of 128 characters	Unique user ID on the partner sales platform. The ID is allocated by the partner.
xaccount_typ e	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?
customer_lev el	String	A maximum of 64 characters	Customer tier. • V0 • V1 • V2 • V3 • V4 • V5

Table 5-2 AccountManager

Parameter	Туре	Value Range	Description
account_nam e	String	A maximum of 128 characters	Name of the account manager.

Example Response

Returned Values

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
401	CBC.0154	Invalid or expired token.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

5.2.2 Freezing a Customer Account

Function

A partner can freeze an account of a customer associated with the partner by reseller model.

Visit Freezing a Customer Account to learn about how to freeze a customer account.

Constraints

This API can be invoked using the partner AK/SK or token only.

URI

POST /v2/partners/sub-customers/freeze

Request

Request Parameters

Paramete r	Manda tory	Туре	Value Range	Description
customer_ ids	Yes	List <strin g></strin 	A maximum of 10 IDs	IDs of customers whose accounts are to be frozen. You can call the API in 5.2.1 Querying Customers to obtain the customer ID.
reason	Yes	String	A maximum of 256 characters	Account freezing reason.
indirect_p artner_id	No	String	Maximum length: 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory for freezing the customers of a reseller.
freeze_typ e	No	String	-	 Freezing type. ACCOUNT: The account will be frozen. ACCOUNT_AND_RESOURC E: Both the account and resources in the account will be frozen. Default value: ACCOUNT If this parameter is not included in the request or is set to null, the default value will be used. This parameter cannot be set to an empty string, and enumeration verification will be conducted.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers/freeze HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "customer_ids": [
        "0bb8e9******760f6fc010ebfd95e1"
    ],
    "reason": "Arrears",
    "indirect_partner_id": "0b5e9b*******0c0f0fc00874a9e000",
    "freeze_type": "ACCOUNT"
}
```

Response

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. This field is not returned when the operation is successful or partially failed. For details, see Returned Values.
error_msg	String	A maximum of 2,000 characters	Error description. This field is not returned when the operation is successful or partially failed.
error_details	List <errord etail></errord 	-	Error cause description. This field is returned only when the operation is partially failed. For details, see Table 5-3 .

Table 5-3 ErrorDetail

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Returned Values. The returned status code is 200.
error_msg	String	A maximum of 2,000 characters	Error message.
id	String	A maximum of 256 characters	ID. This parameter corresponds to customer_ids.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "error_details":[]
}
```

Returned Values

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99000000	You do not have the operation permission to this customer.
400	CBC.99000035	You are not a customer of a partner yet.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
200	CBC.99005024	This API cannot be invoked because the association type of the customer is incorrect.
403	CBC.0150	Invalid operation.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

5.2.3 Unfreezing a Customer Account

Function

A partner can unfreeze an account of a customer associated with the partner by reseller model.

Visit **Unfreezing a Customer Account** to lean about how to unfreeze a customer account.

M NOTE

To unfreeze an account, the unfreezing type must be consistent with the freezing type.

Constraints

This API can be invoked using the partner AK/SK or token only.

URI

POST /v2/partners/sub-customers/unfreeze

Request

Request Parameters

Paramete r	Manda tory	Туре	Value Range	Description
customer_ ids	Yes	List <strin g></strin 	A maximum of 10 IDs	IDs of customers whose accounts are to be unfrozen. You can call the API in 5.2.1 Querying Customers to obtain the customer ID.
reason	Yes	String	A maximum of 256 characters	Account unfreezing reason.
indirect_p artner_id	No	String	Maximum length: 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory for unfreezing the customers of a reseller.
unfreeze_t ype	No	String		 Unfreezing type ACCOUNT: The account will be unfrozen. ACCOUNT_AND_RESOURC E: Both the account and resources in the account will be unfrozen. Default value: ACCOUNT If this parameter is not included in the request or is set to null, the default value will be used. This parameter cannot be set to an empty string, and enumeration verification will be conducted.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers/unfreeze HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "customer_ids": [
        "065024********e90f44c01cbccfa280",
        "065faa******ce0fddc007a6cb6f40"
    ],
    "reason": "The customer has topped up its account.",
        "indirect_partner_id": "0b5e9b*******0c0f0fc00874a9e000",
        "unfreeze_type": "ACCOUNT"
}
```

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. This field is not returned when the operation is successful or partially failed. For details, see Returned Values .
error_msg	String	A maximum of 2,000 characters	Error description. This field is not returned when the operation is successful or partially failed.
error_details	List <errord etail></errord 	-	Error cause description. This field is returned only when the operation is partially failed. For details, see Table 5-4 .

Table 5-4 ErrorDetail

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 20	Error code. For details, see Returned Values.
		characters	The returned status code is 200.
error_msg	String	A maximum of 2,000 characters	Error message.
id	String	A maximum of 256 characters	ID. This parameter corresponds to customer_ids.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "error_details":[]
}
```

Returned Values

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99000000	You do not have the operation permission to this customer.
400	CBC.99000035	You are not a customer of a partner yet.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
200	CBC.99005024	API access failed. The association type of the customer is not supported.
200	CBC.50000053	Unfreeze customer account failed. Selected object and the frozen object do not match.
403	CBC.0150	Invalid operation.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

6 Managing Huawei Cloud Resellers

6.1 Querying Huawei Cloud Resellers

6.1.1 Querying the List of Huawei Cloud Resellers

Function

A Huawei Cloud distributor can query its associated Huawei Cloud resellers.

Constraints

This API can only be invoked using the AK/SK or token of Huawei Cloud distributors.

URI

POST /v2/partners/indirect-partners/query

Request

Request parameters

Paramete r	Mand atory	Туре	Maximu m Length of Characte rs/Value Range	Description
account_n ame	No	String	64 character s	Account name of a reseller. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Paramete r	Mand atory	Туре	Maximu m Length of Characte rs/Value Range	Description
associate d_on_begi n	No	String	20 character s	Start time of the association between a reseller and a distributor. The time is in the UTC format (time zone is required), for example, 2016-03-28T00:00:00Z. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
associate d_on_end	No	String	20 character s	End time of the association between a reseller and a distributor. The time is in the UTC format (time zone is required), for example, 2016-03-28T00:00:00Z. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
indirect_p artner_id	No	String	64 character s	Reseller ID. For details about how to obtain such IDs, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory if you want to query a specific reseller.

Paramete r	Mand atory	Туре	Maximu m Length of Characte rs/Value Range	Description
offset	No	Integer	0 to 40,000,00 0	Offset, starting from 0 . The default value is 0 . NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1, 100]	Maximum number of records in each query. The default value is 10 .

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/indirect-partners/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "account_name": "account_name",
    "associated_on_begin": "2017-12-17T10:32:02Z",
    "associated_on_end": "2017-12-17T10:32:02Z",
    "offset": 0,
    "limit": 10,
    "indirect_partner_id": "c9e731c4663646988ef4cdb3122837b6"
}
```

Response

Parameter	Туре	Maximu m Length of Characte rs/Value Range	Description
error_code	String	20 character s	Status code. For details, see Status Codes . This parameter is returned only when the query failed.
error_msg	String	1000 character s	Error description. This parameter is returned only when the query failed.
count	Integer	[0, Maximu m integer]	Number of records that meet the search conditions. This parameter is returned only when the operation is successful.
indirect_part ners	List <indire ctPartnerI nfo></indire 	-	Reseller list. For details, see Table 6-1 .

Table 6-1 IndirectPartnerInfo

Parameter	Туре	Maximu m Length of Characte rs/Value Range	Description
indirect_part ner_id	String	64 character s	Reseller ID.
mobile_phon e	String	20 character s	Mobile number of a reseller.
email	String	200 character s	Email address of a reseller.
account_na me	String	64 character s	Account name of a reseller.

Parameter	Туре	Maximu m Length of Characte rs/Value Range	Description
name	String	255 character s	Reseller name.
associated_o n	String	20 character s	Time when a reseller is associated with a Huawei Cloud distributor. The time is in the UTC format (time zone is required), for example, 2016-03-28 T 00:00:00 Z .
account_ma nager_id	String	64 character s	Account name of an account manager for login
account_ma nager_name	String	255 character s	Account manager name.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "count": 1,
    "indirect_partners": [
    {
        "indirect_partner_id": "c9e731c4663646988ef4cdb3122837b6",
        "mobile_phone": "186xxxxxxxxxx",
        "email": "xxx@huawei.com",
        "account_name": "account_name",
        "name": "account_name",
        "name": "account_name2",
        "associated_on": "2017-12-17T10:32:02Z",
        "account_manager_id": "manager_id",
        "account_manager_name": "manager_name"
}
}
```

Status Codes

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Incorrect parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

Managing Credits

7.1 Querying Consumption Quota

Function

Partners can use this API to query consumption quotas.

Constraints

This API can only be invoked with the AK/SK credentials or tokens of cloud solution providers or distributors.

URI

GET /v2/partners/credit/consumption-quota

Example request

GET https://bss.myhuaweicloud.eu/v2/partners/credit/consumption-quota HTTP/1.1 Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Parameter	Parameter Type	Value Length Limit	Description
error_code	String	20	Error code. For details, see Status Code . This parameter is returned only when the query fails.
error_msg	String	1,000	Error description. This parameter is returned only when the query fails.

Parameter	Parameter Type	Value Length Limit	Description
consumption _quota	String	64	Consumption quota.
amount	String	64	Account balance.
coupon_amo unt	String	64	Cash coupon balance.
due_amount	String	64	Amount due.
unbilled_am ount	String	64	Estimated expenditure amount (unbilled).
used_consu mption_quot a	String	64	Used consumption quota. used_consumption_quota = due_amount + unbilled_amount - amount - coupon_amount NOTE If the account balance or cash coupon balance is greater than the expenditure amount, a negative value will be returned for the used expenditure quota, indicating that the expenditure quota is not used.
currency	String	20	Currency type. USD: US dollar
measure_id	Integer	4	Measurement unit ID. 1: USD

Example Response

```
HTTP/1.1 200 OK

Content-Type: application/json;charset=UTF-8

Content-Length: length

Date: response time

{
    "consumption_quota": "10000",
    "amount": "10.18",
    "coupon_amount": "10.03",
    "due_amount": "500.28",
    "unbilled_amount": "100.01",
    "used_consumption_quota": "580.08",
    "measure_id": 1,
    "currency": "USD"
}
```

Status Code

◯ NOTE

- **4**xx: Indicates errors caused by the client side, for example, a request containing bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

Status Code	Error Code	Description
400	CBC.0100	Invalid parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8 Transaction Management

8.1 Managing Customers' Budgets

8.1.1 Querying Customer Budgets

Function

This API is used to query the budget of a customer for the partner to determine whether to adjust the budget.

Click here to learn about how to query the budget of a customer.

Constraints

This API can be invoked only by the partner account AK/SK or token.

URI

GET /v2/partners/sub-customers/budget

The following table describes the parameters.

Table 8-1 Query parameters

Param eter	Mandat ory	Туре	Value Limit	Description
custom er_id	Yes	String	64	Customer account ID. You can call the API in 5.2.1 Querying Customers to obtain the customer ID.

Param eter	Mandat ory	Туре	Value Limit	Description
indirect _partn er_id	No	String	64	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory for querying the list of customers of a Huawei Cloud reseller.

Request

Request Parameters

None

Request sample

GET https://bss.myhuaweicloud.eu/v2/partners/sub-customers/budget? customer_id=06ffbcd46880d3f30f62c001a49be460&indirect_partner_id=0b5e9bb21980d20c0f0fc00874a9e00 0 HTTP/1.1

Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Parameter	Туре	Value Limit	Description
error_code	String	20	Error code. For details, see Returned Values. This parameter is returned only when a failure occurs.
error_msg	String	2000	Error description. This parameter is returned only when a failure occurs.
budget_amount	BigDecimal	-	Initial budget.
used_amount	BigDecimal	-	Used budget. The data displayed in the system may have certain deviation and latency.
measure_id	Integer	-	Unit: 1: dollar
currency	String	4	Currency: USD

Parameter	Туре	Value Limit	Description
budget_type	String	-	Budget type
			MONTHLY: Monthly budget
			PACKAGE: One-time budget

Response sample

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "budget_amount": 50.0,
    "used_amount": 1.0,
    "measure_id": 1,
    "currency": "USD",
    "budget_type":"MONTHLY"
}
```

Returned Values

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
400	CBC.99005024	This API cannot be invoked because the association type of the customer is incorrect.
403	CBC.0151	Access denied.
403	CBC.0150	Invalid operation.
500	CBC.0999	Other errors.

8.1.2 Setting Customer Budgets

Function

This API is used to set or adjust a customer's budget.

Click **here** to learn about how to query the budget of a customer.

Constraints

This API can be invoked only by the partner account AK/SK or token.

URI

POST /v2/partners/sub-customers/budget

Request

Request Parameters

Para meter	Mand atory	Туре	Value Limit	Description
custo mer_i d	Yes	String	64	Customer account ID. You can call the API in 5.2.1 Querying Customers to obtain the customer ID.
budge t_amo unt	Yes	BigDecima I	(0-2147 483647]	Target amount, which can be accurate to two decimal places. Unit: USD
cancel _partn er_fro zen	No	String	-	Whether to unfreeze the account when setting the customer budget. • 0: No • 1: Yes The default value is 0. If this parameter is not included in the request parameters, is set to "", or is set to null, the default value 0 is used.
indirec t_part ner_id	No	String	64	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers. This parameter is mandatory for querying the list of customers of a Huawei Cloud reseller. If this parameter is not included in the request parameters, is set to "", or is set to null, this parameter will not be used.

Para meter	Mand atory	Туре	Value Limit	Description
budge t_type	No	String	-	Budget type MONTHLY: Monthly budget PACKAGE: One-time budget The default value is MONTHLY. If this parameter is not included in the request parameters or is set to null,
				the default value MONTHLY is used. The value of this parameter cannot be an empty string.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers/budget HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
    "customer_id": "053a48736500d5f40ffec01689b88480",
    "budget_amount": 100,
    "cancel_partner_frozen": 0,

    "budget_type":"MONTHLY"
    "indirect_partner_id": "0b5e9b**********0c0f0fc00874a9e000"
}
```

Response

Response Parameters

Parameter	Туре	Value Limit	Description
error_code	String	20	Error code. For details, see Returned Values. This parameter is returned only when a failure occurs.
error_msg	String	2000	Error description. This parameter is returned only when a failure occurs.

Example Response

HTTP/1.1 204 No Content Content-Type: application/json;charset=UTF-8 Content-Length: *length*

Date: response time

Returned Values

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.500000 30	Setting budgets not supported. This reseller's budget quota is insufficient.
400	CBC.500000 33	Budget setting permissions have been revoked. This reseller cannot set budgets.
400	CBC.990000 37	You do not have the permission to operate this Huawei Cloud reseller.
400	CBC.990050 24	This API cannot be invoked because the association type of the customer is incorrect.
403	CBC.0151	Access denied.
403	CBC.0150	Invalid operation.
500	CBC.0999	Other errors.

8.2 Coupons Management

8.2.1 Querying Coupons

Function

Partners can query information about their coupons.

You can follow the instructions described in **Viewing Cash Coupons** to view coupons.

□ NOTE

- Currently, flexi-purchase coupons and discount coupons are not available for the European website.
- Information about cash coupons or discount coupons that have expired for more than one year is not returned.
- If the expiration time of a coupon is earlier than the current time, the coupon is invalid.

Constraints

When this API is invoked using the AK/SK or token of a partner, coupons of this partner and of this partner's resellers will be returned. If you need to query the coupons of a customer, use the token of this customer. Before doing so, you need to request authorization from the customer or ask the customer to create an agency for you.

URI

GET /v2/promotions/benefits/coupons

The following table describes the parameters.

Table 8-2 Request parameters

Paramete r	Manda tory	Туре	Value Range	Description
coupon_id	No	String	A maximu m of 64 character s	Coupon ID. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
order_id	No	String	A maximu m of 64 character s	Order ID. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
promotion _plan_id	No	String	A maximu m of 64 character s	Promotion plan ID. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
coupon_ty pe	No	Integer	[1-4]	Coupon type. • 1: Cash coupon If this parameter is not included in the request parameters, is left empty, or is set to null , it cannot be used as a filter criterion. It cannot be set to "".

Paramete r	Manda tory	Туре	Value Range	Description
status	No	Integer	[1-5]	Customer coupon status. • 2: To be used • 3: Used • 4: Expired • 5: Withdrawn If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
active_star t_time	No	String	A maximu m of 64 character s	Activation start time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.
active_end _time	No	String	A maximu m of 64 character s	Activation end time. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.

Paramete r	Manda tory	Туре	Value Range	Description
offset	No	Integer	0 to maximu m integer	Offset, which starts from 0. The default value is 0 . NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-100]	Number of coupons queried each time. The default value is 10 .
source_id	No	String	A maximu m of 255 character s	Coupon source. If the coupon is sent by a partner, the parameter value is the partner ID. To query coupons issued by a partner, enter the partner ID. If this parameter is not included, is left empty, or is set to null , it cannot be used as a filter criterion. If it is set to "", it can be used as a filter criterion.

Request Message

Request Parameters

No.

Example Request

GET https://bss.myhuaweicloud.eu/v2/promotions/benefits/coupons HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response Message

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values .
error_msg	String	A maximum of 1024 characters	Error description.
count	Integer	-	Total number of records that meet the search criteria.
user_coupon s	List <iquer yUserCoup onsResult></iquer 	-	Coupon records. For details, see Table 8-3 .

Table 8-3 IQueryUserCouponsResult

Parameter	Туре	Description
coupon_id	String	Coupon ID.
coupon_code	String	Coupon code.
status	Integer	Coupon status • 2: To be used • 3: Used • 4: Expired • 5: Withdrawn
customer_id	String	Customer account ID.
coupon_type	Integer	Coupon type. • 1: Cash coupon
measure_id	Integer	Measurement unit. 1: Dollar
face_value	Double	Coupon amount.
valid_time	String	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
expire_time	String	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z

Parameter	Туре	Description
order_id	String	Order ID. NOTE If a coupon is used for multiple times, order IDs involved are separated by semicolons (;). If a coupon is used in a combined payment, order IDs involved are separated by commas (,). Example: CS1904011928GIBHC1,CS1904011928GIBHC2,CS1 904011928GIBHC3;CS1904011928GIBHCB. Not all returned orders used the coupon.
promotion_plan _id	String	Promotion plan ID.
plan_name	String	Promotion plan name.
plan_desc	String	Promotion plan description.
media_type	Integer	Medium type. • 1: E-coupon • 2: Paper coupon
fetch_method	Integer	Obtaining method. 1: Claimed online 2: Redeemed online 3: Issued online 4: Obtained offline 5: Rewarded based on events
use_limits	List <lcouponu selimitinfov2=""></lcouponu>	Coupon usage limits. For details, see Table 8-4 .
active_time	String	Activation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
reserve_time	String	Usage time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
promotion_id	String	Promotion ID.
create_time	String	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
coupon_version	Integer	Coupon version. • 2: Coupons can be used repeatedly.
balance	Double	Coupon balance. Unit: USD
lock_order_id	String	ID of the order for the coupon.

Parameter	Туре	Description
coupon_usage	String	Coupon usage.
is_frozen	String	Whether a coupon is frozen. • 0: No • 1: Yes
currency	String	Currency. The options are as follows: USD
extend_param1	String	Extended field.
source_id	String	 Coupon source. If the coupon is sent by a partner, the parameter value is the partner ID. If the coupon is issued for an activity, the parameter value is the activity ID. Coupons redeemed by cloud beans: Cloud bean ID Coupons issued as rewards of accumulated consumption: Consumption accumulation reward ID Coupons issued as rewards for lucky draw: Lucky draw ID Coupons issued based on events: Event ID Customized coupons: Creator ID

Table 8-4 ICouponUseLimitInfoV2

Parameter	Туре	Description
use_limiti_info_i d	String	Usage limit ID.
limit_key	String	Usage limit. For details about the value, see Table 8-5 .
value1	String	Value 1.
value2	String	Value 2.
value_unit	String	Value unit.
limit_type	String	Limit type.
promotion_plan _id	String	Promotion plan ID.

Table 8-5 limit_key requirements for ICouponUseLimitInfo

Key	Meaning	Description	Remarks
baseValue	Order amount.	value1 specifies the lower limit of the order amount, and value2 specifies the upper limit of the order amount.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
serviceType	Cloud service type.	Only value1 is valid. To obtain a specific cloud service type, call the API in 4.1.1 Querying Cloud Service Types .	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
regionCode	Region code.	value1 specifies the region code, and value2 specifies the region name.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
productId	Product ID	You can configure multiple product IDs. Separate them using commas (,).	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
subscribeTyp e	Order type.	Only value1 is valid. The value can be: • new: Order placement • renew: Order renewal • change: Order change	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
firstOrderInS ervice	Restriction for the first-time purchase.	Only value1 is valid.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
cycleNum	Number of periods.	Only value1 is valid.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.

Key	Meaning	Description	Remarks
cycleType	Trial use period type.	 0: Yearly/monthly (unlimited) 1. Yearly/monthly (yearly) 2: Yearly/monthly (monthly) 3: Yearly/monthly (daily) 4: Yearly/monthly (hourly) 5: Pay-per-use 6: General purpose 7: One-off payment 8: Reserved instance 11: Savings plan 	Cash coupons, flexi-purchase coupons, and discount coupons are supported. Discount coupons support only the yearly/ monthly mode.
simultaneou sUseWithEm powerDiscou nt	Whether cash coupons can be used together with authorized discounts.	Whether cash coupons can be used with authorized discounts (including commercial discounts and discounts authorized by partners). • 0: No • 1: Yes	Cash coupons, flexi-purchase coupons, and discount coupons are supported. The value for discount coupons can only be 0 .

Key	Meaning	Description	Remarks
usageTimes	Whether coupons can be used for multiple times.	The value is specified in value1. The value can be: • 0: Used for unlimited times • 1: Used for only once • N: Used for N times. (For cash coupons of the old version, N is fixed at 1.)	 When CouponType is set to 2 (discount coupons), this parameter can only be set to 1, and if this parameter is not specified or is set to a non-1 value, the parameter value is 1. When CouponType is set to 1 (cash coupons) or 4 (flexi- purchase coupons), if this parameter is not specified or is set to a value other than 0 or 1, the parameter value is 0.
isOnlyForStri ctSelected	Whether the coupons can only be used for Featured Products on KooGallery	The value is specified in value1. The value can be: • 0: No • 1: Yes If there is no such restriction, the value is 0. This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.

Key	Meaning	Description	Remarks
isRebate	Whether coupons are counted in to the partner incentive rebates.	The value is specified in value1. The value can be: • 0: No • 1: Yes This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.
serviceTypeB lackList	Service type blacklist.	Service type blacklist. The service type code is specified in value1 . This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.
minConsume Discount	Minimum customer consumpti on discount.	The value is specified in value1 . The value ranges from 0 to 1 (excluding 0 and 1).	Cash coupons and flexi- purchase coupons are supported.
isForAnnualC ontracts	Whether coupons can only be used for yearly/ monthly (one-year) orders.	The value can be: • 0: No • 1: Yes	Cash coupons and discount coupons are supported.
simultaneou sUseWithPro motionProdu ct	Whether cash coupons can be used together with promotion al products.	The value is specified in value1. The value can be: 0: No 1: Yes	Cash coupons and discount coupons are supported.
simultaneou sUseWithPro motionDisco unt	Whether cash coupons can be used together with promotion discounts.	The value is specified in value1. The value can be: • 0: No • 1: Yes	Cash coupons are supported.

Key	Meaning	Description	Remarks
simultaneou sUseWithDis countCoupo n	Whether cash coupons can be used together with discount coupons.	The value is specified in value1. The value can be: 0: No 1: Yes	Cash coupons are supported.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
  "count": "1",
  "user_coupons": [
   {
    "coupon_id": "CP19092406014086E3",
    " "CP19092406014086E3",
     "coupon_code": "CP19092406014086E3",
      "customer id": "c9e731c4663646988ef4cdb3122837b6",
     "coupon_type": "1",
"measure_id": "1",
     "face_value": "100",
     "valid_time": "2019-09-16T16:00:00Z",
"expire_time": "2019-09-16T16:00:00Z",
     "order_id": "CS1904011928GIBHC",
     "promotion_plan_id": "promotionPlanId5322584",
"plan_name": "532 USDCoupon name",
"plan_desc": "532 USDCoupon desc",
     "media_type": "1",
"fetch_method": "1",
      "use_limits": [
         "use_limiti_info_id": "CP19092406014086E3",
         "limit_key": "simultaneousUseWithDiscountCoupon", "value1": "1", "value2": "",
         "value_unit": "",
"limit_type": "="
         "promotion_plan_id": "promotionPlanId5322584"
     "active_time": "2019-09-16T16:00:00Z",
"reserve_time": "2019-09-16T16:00:00Z",
"promotion_id": "promotionPlanId5322584",
"create_time": "2019-09-16T16:00:00Z",
      "coupon_version": "2",
     "balance": "100",
      "lock_order_id": "CS1904011928GIBHC",
      "coupon_usage": "170719190603338056FEH60VIRWEP",
     "is_frozen": "0",
     "currency": "USD",
"extend_param1": "2019091702368200",
      "source_id": "c9e731c4663646988ef4cdb3122837b6"
```

Returned Values

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors

8.3 Managing Yearly/Monthly Orders

8.3.1 Querying Orders

Function

After a customer purchases yearly/monthly resources, it can query the orders in different statuses, such as in the pending approval, processing, canceled, completed, and pending payment statuses.

A partner can log in to Partner Center and follow the instructions described in **here** to view orders of a customer.

M NOTE

If you want to query the resource information of a specified order, invoke this API to obtain the order ID and then invoke the API described in **8.4.1 Querying Customer's Yearly/Monthly Resources**. Enter the order ID in the request to query the resource information.

Constraints

This API can be invoked using the AK/SK or token of the partner or of the partner's customer. If partner's AK/SK or token is used, the orders of all customers of the partner can be queried.

URI

GET /v2/orders/customer-orders

Table 8-6 Query parameters

Param eter	Manda tory	Туре	Maximu m Length/ Value Range	Description
order_ id	No	String	A maximu m of 64 characte rs	Order ID. Order IDs are case insensitive. If this parameter is not included or is left empty, it will not be used as a filter criterion. If it is set to null , it can be used as a filter criterion. This parameter cannot be set to "". NOTE When special characters are used for query, perform the URL code conversion. For example, % should be converted to %25.
custo mer_i d	No	String	A maximu m of 64 characte rs	Customer account ID. To obtain the customer ID, call the API in 5.2.1 Querying Customers. If this parameter is not included, it will not be used as a filter criterion. If it is set to null, it can be used as a filter criterion. This parameter cannot be set to "" or left empty.
create _time_ begin	No	String	A maximu m of 20 characte rs	Start time of order creation. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59. The span between the order creation time and end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.

Param eter	Manda tory	Туре	Maximu m Length/ Value Range	Description
create _time_ end	No	String	A maximu m of 20 characte rs	End time of order creation. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59. The span between the order creation time and the end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.
service _type_ code	No	String	A maximu m of 64 characte rs	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. Cloud service type code is case insensitive. You can call 4.1.1 Querying Cloud Service Types to obtain a specific service type. If this parameter is not included or is left empty, it will not be used as a filter criterion. If this parameter is set to "" or null, it will be used as a filter criterion.
status	No	Integer	-	Order status. The value can be: 1: Pending approval 3: Processing 4: Canceled 5: Completed 6: Pending payment 9: To be confirmed If this parameter is not included, is left empty, or is set to null , it will not be used as a filter criterion. It cannot be set to "".

Param eter	Manda tory	Туре	Maximu m Length/ Value Range	Description
order_ type	No	String	A maximu m of 64 characte rs	Order type. The value can be: 1: New purchase 2: Renewal 3: Change 4: Unsubscription 10: Yearly/monthly to pay-per-use 11: Pay-per-use to yearly/monthly 13: Trial 14: Commercial use 15: Price adjustment If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.
limit	No	Integer	1 to 100	Number of orders queried each time. The default value is 10 . If this parameter is not included, is left empty, or is set to null , the value 10 is used. This parameter cannot be set to "".
offset	No	Integer	0 to a maximu m integer	Offset, which starts from 0. The default value is 0 . If this parameter is not included, is left empty, or is set to null , the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.

Param eter	Manda tory	Туре	Maximu m Length/ Value Range	Description
order_ by	No	String	A maximu m of 36 characte rs	Sorting order of the orders. This parameter is case insensitive. You can sort the orders by creation time. If you set the value to createTime , the system sorts orders by creation time in ascending order. If you set the value to -createTime , the system sorts orders by creation time in descending order. If this parameter is not included, is left empty, or is set to "" or null , orders will be sorted by creation time in descending orders.
payme nt_tim e_begi n	No	String	A maximu m of 20 characte rs	Start time of order payment. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59. The span between the order payment start time and end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.
payme nt_tim e_end	No	String	A maximu m of 20 characte rs	End time of order payment. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59. The span between the order payment start time and end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.

Param eter	Manda tory	Туре	Maximu m Length/ Value Range	Description
indirec t_part ner_id	No	String	A maximu m of 64 characte rs	Reseller ID. For details about how to obtain such IDs, see Query Huawei Cloud Resellers. If a distributor needs to query orders of their resellers' customers, this parameter must be included. If it is not included, orders of the distributor's customers will be returned. If this parameter is not included or is left empty, it will not be used as a filter criterion. If this parameter is set to "" or null, it will be used as a filter criterion.
metho d	No	String	A maximu m of 64 characte rs	 Query method. oneself: Query your own orders. sub_customer: Query customer orders that are paid for by you. If this parameter is not included in the request parameters, is set to "", or is set to null, the default value oneself is used.

Request

Request Parameters

None

Example Request

07T08:05:01Z&service_type_code=hws.service.type.obs&status

=5&order_type=1&limit=10&offset=0&order_by=-

createTime&payment_time_begin=2020-05-06T08:05:01Z&payment_time_end=2020-05-07T08:05:01Z&indirect_partner_id=646988ef4cdb3122834feswrygfd HTTP/1.1

Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Parameter	Туре	Maximum Length/ Value Range	Description
error_code	String	A maximum of 20 characters	Status code. For details, see Returned Values.
error_msg	String	A maximum of 2,000 characters	Error description.
total_count	Integer	An integer greater than or equal to 0	An integer greater than or equal to 0. Number of records that match the query conditions.
order_infos	List <custo merOrder V2></custo 	-	Order details. For details, see Table 8-7 .

Table 8-7 CustomerOrderV2

Parameter	Туре	Maximu m Length	Description
order_id	String	A maximu m of 64 character s	Order ID
customer_id	String	A maximu m of 64 character s	Customer account ID.
service_type _code	String	A maximu m of 64 character s	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
service_type _name	String	A maximu m of 200 character s	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .

Parameter	Туре	Maximu m Length	Description
source_type	Integer	-	Customer order source type. The value can be: 1. Customer 2. Agent 3: Contract 4: Distributor
status	Integer	-	Order status. The value can be: 1: Pending approval 2: Pending refund 3: Processing 4: Canceled 5: Completed 6: Pending payment 9: To be confirmed 10: To be shipped 11: To be received 12: Pending pick-up 13: Exchange in progress
order_type	Integer	-	Order type. The value can be: 1: New purchase 2: Renewal 3: Change 4: Unsubscription 10: Yearly/monthly to pay-per-use 11: Pay-per-use to yearly/monthly 13: Trial 14: Commercial use 15: Price adjustment
official_am ount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount.
amount_aft er_discount	Double	-	Order amount after a discount (excluding the vouchers or cards).
measure_id	Integer	-	Order amount unit. • 1: 1 Yuan/Dollar

Parameter	Туре	Maximu m Length	Description
create_time	String	A maximu m of 20 character s	Creation time. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59.
payment_ti me	String	A maximu m of 20 character s	Payment time. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59.
currency	String	A maximu m of 4 character s	Currency code.
contract_id	String	A maximu m of 64 character s	Contract ID.
amount_inf o	AmountInf oV2 Object	-	Order details For details, see Table 8-8 .
enterprise_ projects	List <enter priseProjec t></enter 	-	Enterprise project details of a customer order. For details, see Table 8-10. NOTE You can query enterprise project information for each order in batch unsubscription and renewal scenarios by order ID.

Table 8-8 AmountInfoV2

Parameter	Туре	Maximu m Length	Description
discounts	List <disco untItemV2 ></disco 	-	Item For details, see Table 8-9 .

Parameter	Туре	Maximu m Length	Description
flexipurchas e_coupon_a mount	Double	-	Flexi-purchase coupon amount (reserved).
coupon_am ount	Double	-	Cash coupon amount.
stored_card _amount	Double	-	Stored-value card amount (reserved).
commission _amount	Double	-	Handling fee (only for unsubscription orders).
consumed_ amount	Double	-	Consumptions (only for unsubscription orders).

Table 8-9 DiscountItemV2

Parameter	Туре	Ma xim um Len gth	Description
discount_ty pe	String	A ma xim um of 8 cha ract ers	 200: Promotion product discount 300: Promotion discount coupon 301: Promotion coupon 302: Promotion flexi-purchase coupon 500: Specified discount for agent subscription 501: Specified exemption for agent subscription 502: Specified buy-it-now price for agent subscription 600: Discount specified in the discount and rebate contract 601: Discount specified in the channel frame contract 602: Discount specified in the designated-purpose fund contract 603: Discount specified in the directly signed offline contract 604: Discount specified in the authorized telemarketing contract 605: Discount specified in the commercial contract 606: Discount specified in the channel commercial contract 607: Partner authorized discount 609: Discount for order price adjusting 610: Discount amount 700: Promotion discount 800: Top-up account discount
discount_a mount	Double	-	Discounted amount.

Table 8-10 EnterpriseProject

Parameter	Туре	Maximu m Length	Description
id	String	A maximu m of 256 character s	Enterprise project ID.
name	String	A maximu m of 256 character s	Enterprise project name.

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
   "total_count": 1,
   "order_infos": [
         "order_id": "CS2405161952CE7IU5QmodifyJobAndPartFailJob",
         "customer_id": "0c7fd9bdfb80d4170fb1c0056128d420",
         "service_type_code": "hws.service.type.ec2", 
"service_type_name": "Elastic Cloud Server"
         "source_type": 1,
"status": 5,
         "order_type": 1,
         "amount_after_discount": 274.6,
         "official_amount": 349.5,
         "measure_id": 1,
"create_time": "2024-05-16T11:52:10Z",
         "payment_time": "2024-05-16T12:18:35Z",
         "currency": "USD",
"contract_id": null,
         "amount_info": {
            "discounts": [
                   "discount_type": "700",
                   "discount_amount": 69.9
                  "discount_type": "301",
                  "discount_amount": 5.0
            ],
"flexipurchase_coupon_amount": 0.0,
            "coupon_amount": 5.0,
            "stored_card_amount": 0.0,
            "commission_amount": null,
            "consumed_amount": null
         },
"enterprise_projects": [
            {
               "id": "0",
                "name": "default"
```

```
1
1
```

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.0101	Invalid parameter.
400	CBC.990000 37	You do not have the permission to operate this reseller.
403	CBC.0155	Request denied. The possible causes are as follows: The account authentication information is incorrect. The account or member account does not have the permission to call the API.
500	CBC.0999	Other errors.

8.3.2 Querying Order Details

Function

Customers can view order details on the partner sales platform.

For details about how to view order details in Billing Center, see **Viewing Order Details**.

MOTE

If you want to query the resource information of a specified order, invoke the API described in **8.4.1 Querying Customer's Yearly/Monthly Resources** and enter the order ID in the request to query the resource information.

Constraints

This API can be invoked using the AK/SK or token of the partner or of the partner's customer.

URI

GET /v2/orders/customer-orders/details/{order_id}

The following table describes the parameters.

Table 8-11 Path parameters

Param eter	Mand atory	Value Range	Description
order_i d	Yes	A maximu m of 64 characte rs	Order ID. The system will return the orders if the orders are queried.

Table 8-12 Query parameters

Parameter	Mandatory	Value Range	Description
offset	No	0 to a maximum integer	Offset, which starts from 0. The default value is 0. If this parameter is not included in the request parameters, is set to "", or is set to null, the default value 0 is used. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	1 to 100	Number of records displayed per page. The default value is 10 . If this parameter is not included in the request parameters, is set to "", or is set to null , the default value 10 is used.

Parameter	Mandatory	Value Range	Description
indirect_par tner_id	No	A maximum of 64	Reseller ID. For details about how to obtain such IDs, see Query Huawei Cloud Resellers.
		characters	This parameter is mandatory only when a distributor queries order details of customers associated with its resellers. Otherwise, the order details of the distributor's own customers will be queried.

Table 8-13 Message header parameter

Parameter	Manda tory	Туре	Value Range	Description
X-Language	No	String	A maximu m of 10 character s	Language. • zh_CN: Chinese • en_US: English Default value: zh CN

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/orders/customer-orders/details/CS19040119281JMYC? limit=10&offset=0&indirect_partner_id=c9e731c4663646988ef4cdb3122837b6 HTTP/1.1 Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 20 characters	Status code. For details, see Returned Values.

Parameter	Туре	Value Range	Description
error_msg	String	A maximum of 2,000 characters	Error description.
order_info	Customer OrderEntit yV2 Object	-	Order details. For details, see Table 8-14 .
total_count	Integer	-	Order item ID array.
order_line_i tems	List <order LineItemE ntityV2></order 	-	ID of the primary order item mapping the order item. For details, see Table 8-15 .

Table 8-14 CustomerOrderEntityV2

Parameter	Туре	Maximum Length	Description
order_id	String	64	Order ID.
customer_i d	String	A maximum of 64 characters	Customer account ID.
service_typ e_code	String	-	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
service_typ e_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
source_type	Integer	-	Customer order source type. The value can be: 1. Customer 2. Agent 3: Contract 4: Distributor

Parameter	Туре	Maximum Length	Description
status	Integer	-	Order status. The value can be: 1: Pending approval 2: Pending refund 3: Processing 4: Canceled 5: Completed 6: Pending payment 9: To be confirmed 10: To be shipped 11: To be received 12: Pending pick-up
order_type	Integer	-	 13: Exchange in progress Order type. The value can be: 1: New purchase 2: Renewal 3: Change 4: Unsubscription 10: Yearly/monthly to pay-per-use 11: Pay-per-use to yearly/monthly 13: Trial 14: Commercial use 15: Price adjustment
official_am ount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount.
amount_aft er_discount	Double	-	Order amount after a discount (excluding the vouchers or cards). In the unsubscription order, the amount is the refund amount after the handling fee is deducted.
measure_id	Integer	-	Order amount unit. • 1: 1 Yuan/Dollar

Parameter	Туре	Maximum Length	Description
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59.
payment_ti me	String	A maximum of 20 characters	Payment time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59.
amount_inf o	AmountInf oV2 Object	-	Order deduction details. For details, see Table 8-17 .
currency	String	A maximum of 4 characters	Currency code.
contract_id	String	A maximum of 64 characters	Contract ID.
user_name	String	A maximum of 64 characters	 Order creator name If the order is placed by the customer, the login name of the operator who places the order is returned. If the order is placed by the operation personnel at the background, Operation personnel is returned. If the order is automatically placed by the operation system, Operation system is returned.

Parameter	Туре	Maximum Length	Description
pending_pa yment_end _time	String	A maximum of 20 characters	Payment end time of an unpaid order. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0–23, and the range of mm and ss is 0–59. NOTE A specific value is returned only when the order is in the pending payment state. For other order statuses, the value is null.

Table 8-15 OrderLineItemEntityV2

Parameter	Туре	Value Range	Description
order_line_i tem_id	String	A maximum of 64 characters	Order ID.
service_typ e_code	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
service_typ e_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
product_id	String	A maximum of 64 characters	Product ID.
product_spe c_desc	String	A maximum of 512 characters	Product specification description.

Parameter	Туре	Value Range	Description
period_type	Integer	-	Period type. The options are as follows: • 0: Day • 1: Week • 2: Month • 3: Year • 4: Hour • 5: One-off • 6: Pay-per-use (reserved) • 7: By usage report (reserved)
period_num	Integer	-	Number of periods. NOTE The value of this parameter is null for an unsubscription order.
effective_ti me	String	A maximum of 20 characters	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59.
expire_time	String	A maximum of 20 characters	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of HH is 0-23, and the range of mm and ss is 0-59.
subscription _num	Integer	-	Number of subscriptions.
amount_aft er_discount	Double	-	Order amount after a discount (excluding the vouchers or cards). In the unsubscription order, the amount is the refund amount after the handling fee is deducted.
official_am ount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount.
amount_inf o	AmountInf oV2 Object	-	Order deduction details. For details, see Table 8-17 .

Parameter	Туре	Value Range	Description
currency	String	A maximum of 4 characters	Currency code.
category_co de	String	A maximum of 64 characters	Product catalog code.
product_ow ner_service	String	A maximum of 64 characters	Type code of a cloud service. Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.
commercial _resource	string	A maximum of 64 characters	Type code of a commercial resource. Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types.
base_produ ct_info	BaseProdu ctInfo Object		Product information in the order line before the change. For details, see Table 8-16. NOTE A specific value is returned only when the order_type is set to Change. For other order types, the value is null.

Table 8-16 BaseProductInfo

Parameter	Туре	Maximum Length	Description
product_id	String	A maximum of 64 characters	Product ID.
product_spe c_desc	String	A maximum of 512 characters	Product specification description.

Parameter	Туре	Maximum Length	Description
category_co de	String	A maximum of 64 characters	Product catalog code.
product_ow ner_service	String	A maximum of 64 characters	Type code of a cloud service. Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.
commercial _resource	string	A maximum of 64 characters	Type code of a commercial resource. Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types.

Table 8-17 AmountInfoV2

Parameter	Туре	Value Range	Description
discounts	List <disco untItemV2 ></disco 	-	Fee item. For details, see Table 8-18 .
flexipurchas e_coupon_a mount	Double	-	Flexi-purchase coupon amount (reserved).
coupon_am ount	Double	-	Cash coupon amount.
stored_card _amount	Double	-	Stored-value card amount (reserved).
commission _amount	Double	-	Handling fee (only for unsubscription orders).
consumed_ amount	Double	-	Consumption amount (only for unsubscription orders).

Table 8-18 DiscountItemV2

Parameter	Туре	Ma xim um Len gth	Description
discount_ty pe	String	A ma xim um of 8 cha ract ers	 200: Promotion product discount 300: Promotion discount coupon 301: Promotion coupon 302: Promotion flexi-purchase coupon 500: Specified discount for agent subscription 501: Specified exemption for agent subscription 502: Specified buy-it-now price for agent subscription 600: Discount specified in the discount and rebate contract 601: Discount specified in the channel frame contract 602: Discount specified in the designated-purpose fund contract 603: Discount specified in the directly signed offline contract 604: Discount specified in the authorized telemarketing contract 605: Discount specified in the commercial contract 606: Discount specified in the channel commercial contract 607: Partner authorized discount 609: Discount for order price adjusting 610: Discount amount 700: Promotion discount 800: Top-up account discount
discount_a mount	Double	-	Discounted amount.

HTTP/1.1 200 OK Content-Type: application/json;charset=UTF-8 Content-Length: *length*

```
Date: response time
   "total_count": 2,
  "order_info": {
    "order_id": "CS18122203217MRPB",
      "customer_id": "982f05775ec94da390c3f174b058fb46",
      "service_type_code": "hws.service.type.obs",
      "source_type": 1,
      "status": 5.
      "order_type": 4,
      "amount_after_discount": -277.92,
      "official_amount": -277.92,
     "measure_id": 1,
"create_time": "2018-12-21T19:21:03Z",
      "payment_time": null,
      "currency": "USD",
"contract_id": null,
      "amount_info": {
         "discounts": [],
         "flexipurchase_coupon_amount": null,
         "coupon_amount": null,
         "stored_card_amount": null, "commission_amount": 30.88,
         "consumed_amount": 0.0
      "user_name": "h*****55",
      "pending_payment_end_time": "2024-11-14T15:59:59Z"
  },
"order_line_items": [
         "order_line_item_id": "CS18122203217MRPB-000001", "service_type_code": "hws.service.type.ebs",
         "product_id": "00301-01026-0--1",
         "product_spec_desc": "High I/OHigh I/O|40.0GB",
         "period_type": 3,
         "period_num": null,
         "effective_time": "2018-12-21T19:21:03Z",
         "expire_time": "2019-12-22T15:59:59Z",
         "subscription_num": 1,
         "amount_after_discount": -33.12,
         "official_amount": -33.12,
         "amount_info": {
            "discounts": [],
            "flexipurchase_coupon_amount": null,
            "coupon_amount": null,
            "stored_card_amount": null,
            "commission_amount": 3.68,
            "consumed_amount": 0.0
        },
"currency": "USD",
         "category_code": "hws.resource.storage1.evs",
         "product_owner_service": null,
         "commercial_resource": null,
         "base_product_info": null
         "order_line_item_id": "CS18122203217MRPB-000002",
         "service_type_code": "hws.service.type.ec2",
         "product_id": "00301-02019-0--1",
         "product_spec_desc": "General ComputingGeneral Computing|s2.medium.4|1vCPUs|4GB|linux",
         "period_type": 3,
         "period_num": null,
         "effective_time": "2018-12-21T19:21:03Z", "expire_time": "2019-12-22T15:59:59Z",
         "subscription_num": 1,
         "amount_after_discount": -244.8,
         "official_amount": -244.8,
         "amount_info": {
```

```
"discounts": [],
    "flexipurchase_coupon_amount": null,
    "coupon_amount": null,
    "stored_card_amount": 27.2,
    "consumed_amount": 0.0
},
    "currency": "USD",
    "category_code": "hws.resource.computing.ecs",
    "product_owner_service": null,
    "commercial_resource": null,
    "base_product_info": {
        "product_id": "00301-238595-0--0",
        "product_spec_desc": "General computing | s3.small.1 | 1 vCPU| 1 GB | Linux",
        "category_code": "hws.resource.computing.ecs",
        "product_owner_service": "hws.service.type.ec2",
        "commercial_resource": null
}
}
```

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Incorrect parameter.
400	CBC.0101	Invalid parameter.
400	CBC.99000037	You do not have the permission to operate this reseller.
400	CBC.30000010	Operation not supported because the order is invalid or does not exist.
403	CBC.0155	Request denied. The possible causes are as follows: The account authentication information is incorrect. The account or member account does not have the permission to call the API.
500	CBC.0999	Other errors.

8.3.3 Paying Yearly/Monthly Product Orders

Function

A customer can invoke this API to pay yearly-monthly product orders in the pending payment status.

Customers can follow the instructions described in **Payment** to pay yearly/monthly product orders in the pending payment status in Billing Center.

MOTE

- This API supports both monthly settlement and balance payment. Monthly settlement is preferred.
- Balance payment includes cash account payment and credit account payment. If both accounts have balance, the cash account payment is preferred.
- Restrictions for using a discount and coupon at the same time:
 - If the restriction attribute of a coupon contains field simultaneousUseWithEmpowerDiscount with a value of 0, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field simultaneousUseWithContractDiscount with a value of 0, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field minConsumeDiscount and
 the values of discount_ratio for all the order items are less than the value of
 minConsumeDiscount, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field simultaneousUseWithPromotionDiscount with a value of 0, the discount and coupon cannot be used at the same time.
- When this API is invoked by a unified accounting member, if their enterprise master
 account has coupons available for the orders, the coupons are automatically applied
 without the need to include coupon IDs in a request.
- If a unified accounting member calls this API for manual payment, an order will be generated. The enterprise master account can access Billing Center, find this order in Orders, and pay for the order.

If a unified accounting member calls this API for auto payment, the order will be automatically paid by the enterprise master account. If the API fails to be called due to reasons such as insufficient balance in the master account, an order will be generated. The enterprise master account can then access Billing Center, find this order in **Orders**, and pay for the order again.

Constraints

This API can be invoked only by the customer AK/SK or token.

URI

POST /v3/orders/customer-orders/pay

Request

Request Parameters

Paramete r	Mand atory	Туре	Maxim um Length of Charac ters	Description
order_id	Yes	String	A maxim um of 64 charact ers	Order ID. The value is the same as the order_id value in the response message of invoking the API described in 8.3.1 Querying Orders or the order_ids value in the response message of API described in 8.4.2 Renewing Subscription to Yearly/Monthly Resources.
use_coupo n	Yes	String	[YES NO]	Whether coupons are used for order payment. If this parameter is set to YES, the coupon_infos field is mandatory. If this parameter is set to NO, the value of coupon_infos is ignored. • YES: indicates that the coupons are used for payment. • NO: indicates that the coupons are not used for payment.
use_disco unt	Yes	String	[YES NO]	Whether a discount is used for the order payment. If this parameter is set to YES, the discount_infos field is mandatory. If this parameter is set to NO, the value of discount_infos is ignored. • YES: indicates that the discount is used for payment. • NO: indicates that the discount is not used for payment.

Paramete r	Mand atory	Туре	Maxim um Length of Charac ters	Description
coupon_in fos	No	List <cou ponSimpl eInfo></cou 	A maxim um of 3 IDs are support ed.	For details, see Table 8-19. This parameter is reserved. If use_coupon is set to YES, this parameter is mandatory. If use_coupon is set to NO, this parameter can be left empty. Otherwise, a message indicating parameter error is displayed. CAUTION When this API is invoked by a unified accounting member, if their enterprise master account has coupons available for the orders, the coupons are automatically applied without the need to include coupon IDs in a request.
discount_i nfos	No	List <disc ountSim pleInfo></disc 	Only one discoun t ID is allowed	For details, see Table 8-20. Discount ID list. If use_discount is set to YES, this parameter is mandatory. If use_discount is set to NO, this parameter can be left empty. Otherwise, a message indicating parameter error is displayed.

Table 8-19 CouponSimpleInfo

	Manda tory	Туре	Maxim um Length of Charac ters	Description
id	Yes	String	A maxim um of 64 charact ers	Coupon ID.

Paramet er	Manda tory	Туре	Maxim um Length of Charac ters	Description
type	Yes	Integer	[300-3 03]	 Coupon type. 300: Discount coupon (reserved) 301: Promotion coupon 302: Promotion flexi-purchase coupon (reserved) 303: Promotion stored-value card (reserved)

Table 8-20 DiscountSimpleInfo

Paramet er	Manda tory	Туре	Maxim um Length of Charac ters	Description
id	Yes	String	A maxim um of 64 charact ers	Discount ID.
type	Yes	Integer	[0,2,3]	Discount type. • 0: promotion discount • 2: commercial discount • 3: discount granted by a partner

Example Request

Response

Response Parameters

Status code: 204

Success is returned by default.

Status code: 400

Parameter	Туре	Maximu m Length of Charact ers	Description
error_code	String	A maximu m 10 character s	Error code. For details, see Returned Values.
error_msg	String	A maximu m of 256 character s	Error description.
quota_info s	List <quotal nfo></quotal 	-	List of the resources whose quota or capacity is insufficient. For details, see Table 8-21. This parameter is valid only when error_code is set to CBC.99003141. If the quota is insufficient, notify the customer to submit a service ticket on the HUAWEI CLOUD official website to increase the quota and then pay the order. If the capacity is insufficient, notify the customer to place an order again. If the specifications have changed, notify the customer to place an order again.

Parameter	Туре	Maximu m Length of Charact ers	Description
enterprise_ project_aut h_result	List <enterp riseProject></enterp 	-	Information about the enterprise project whose fund is insufficient. For details, see Table 8-22. This parameter is valid only when error_code is set to CBC.99003155.

Table 8-21 QuotaInfo

Parameter	Туре	Description
region	String	Cloud service region code, for example, eu_west_101.
service_typ e_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
resource_ty pe_code	String	Resource type code. For example, the resource type code of VM is hws.resource.type.vm. The relationship between ResourceType and CloudServiceType is as follows: A resource type represents a resource contained in the cloud service type, and the cloud service type is a combination of multiple resource types.
resource_sp ec_code	String	Resource specifications of the subscribed cloud service products. For example, the resource specification of a small-scale VM is s2.small.1.linux.
service_typ e_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
resource_ty pe_name	String	Resource type. For example, the resource type of ECS is Cloud Host .

Parameter	Туре	Description
auth_result	Integer	 Verification result of the change of the cloud service quota, capacity, or specifications. 1: The quota is insufficient. 2: The capacity is insufficient. 3: The resource specifications are incorrect. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order. 4: The associated resource information is incorrect. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order. 99: Other errors. This value is valid only when the resource specifications change between the time when a customer places an order and the time when a customer places an order and the time when the customer pays the order.
available_z one	String	AZ ID.

Table 8-22 EnterpriseProject

Parameter	Туре	Description
enterprise_ project_id	String	 ID of the enterprise project where an order belongs. 0: ID of a default project -1 or null: Non-project ID
enterprise_ project_na me	String	Enterprise project name.
auth_statu s	Integer	Verification result of the enterprise project's fund quota. 10: Insufficient fund quota/Invalid project 11: The organization budget quota is insufficient.

HTTP/1.1 204 No Content

Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.99000046	Insufficient budget.
400	CBC.30000010	Operation not allowed because the order is invalid or does not exist.
400	CBC.99003106	The order status has changed and no payment can be made.
400	CBC.99003108	This discount cannot be used for this order.
400	CBC.99003110	The order has not been paid before the expiration time. Please re-submit the order.
400	CBC.99003112	The coupon or stored-value card has been used.
400	CBC.99003116	The restriction to selected coupon regulates that the coupon cannot be used with the discount at the same time.
400	CBC.99003117	The selected discount is less than the minimum discount rate configured for the selected coupon. Note: For example, if the minimum discount rate configured for a coupon is 90% and the selected discount is less than 90% in all order lines, the discount cannot be used.
400	CBC.99003141	The cloud service quota or capacity is insufficient, or the resource specifications have changed.
400	CBC.99003147	Discounts and cash coupons cannot be both used.
400	CBC.99003155	The enterprise project's fund quota is insufficient, or the project is invalid.
400	CBC.99003156	Coupons applicable to KooGallery products cannot be used together with dedicated coupons.
400	CBC.99003162	The payment time must be earlier than the specified effective time.
400	CBC.99003198	Insufficient budget of the organization.
400	CBC.99005003	Insufficient balance.

HTTP Status Code	Error Code	Description
400	CBC.99006093	Failed to obtain the tax rate.
400	CBC.7281	Renewal, unsubscription, or payment not supported. Your account has been frozen.
400	CBC.99008040	Too many attempts.
500	CBC.0999	Other errors.
400	CBC.99000088	Your payment is being processed.
400	CBC.99000089	Operation failed. Sub-orders of a combine order cannot be processed independently.
400	CBC.99008056	The maximum number of transactions allowed today has been reached.

8.3.4 Canceling Orders in the Pending Payment Status

Function

A customer can invoke this API to cancel orders in the pending payment status.

Customers can follow the instructions described in **Cancellation** to cancel yearly/monthly product orders in the pending payment status in Billing Center.

M NOTE

Only the orders in the pending payment status can be canceled.

Constraints

This API can be invoked only by the customer AK/SK or token.

URI

PUT /v2/orders/customer-orders/cancel

Request

Request Parameters

Param eter	Manda tory	Туре	Value Range	Description
order_i d	Yes	String	A maximu m of 64 characte rs	Order ID. The value is the same as the value of order_id in the response of the API described in 8.3.1 Querying Orders.

Example Request

```
PUT https://bss.myhuaweicloud.eu/v2/orders/customer-orders/cancel HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "order_id": "CS170926155954NO7"
}
```

Response

Response Parameters

Table 8-23 Response parameters

Para mete r	Туре	Value Range	Description
error_ code	String	A maximum of 10 characters	Status code. For details, see Returned Values.
error_ msg	String	A maximum of 256 characters	Error description.

Example Response

HTTP/1.1 204 No Content

Content-Type: application/json;charset=UTF-8

Content-Length: *length* Date: *response time*

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.9900501	Orders in this state cannot be canceled.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.
400	CBC.9900008	Operation failed. Sub-orders of a combine order cannot be processed independently.

8.3.5 Querying the Amount of Unsubscription Orders

Function

A customer can query the resource type and order of the refund amount of an unsubscription or specification downgrade order on the partner sales platform.

MOTE

- After the API described in 8.4.3 Unsubscribing from Yearly/Monthly Resources is called to generate an unsubscription order ID, this API can be called to query the resource type and order to which the amount of the unsubscription order belongs. For example, after you invoke the API in 8.4.3 Unsubscribing from Yearly/Monthly Resources, you can invoke this API to query the original order ID and original subscription renewal order ID.
- You can query original order IDs for only unsubscription orders generated after May 2018.

Constraints

This API can be invoked using the partner token. Before using the partner token to call this API, the partner needs to request authorization from the customer or ask the customer to create an agency for them.

URI

GET /v2/orders/customer-orders/refund-orders

Table 8-24 Query parameters

Paramet er	Mandat ory	Туре	Value Range	Description
order_id	Yes	String	A maximum of 64 characters	ID of an unsubscription or degrade order.

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/orders/customer-orders/refund-orders?order_id=CS1904190917GIBHC HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Parameter	Туре	Description
error_code	String	Status code. For details, see Status Code .
error_msg	String	Error description.
total_coun t	Integer	Total queries.
refund_inf os	List <orderref undinfov2=""></orderref>	Resource list. For details, see Table 8-25 .

Table 8-25 OrderRefundInfoV2

Parameter	Туре	Description	
id	String	Record ID.	
amount	BigDecimal	 Amount. A negative number indicates the unsubscription amount. A positive number indicates the handling fee for unsubscription. 	

Parameter	Туре	Description	
measure_id	String	Fee unit. • 1: 1 Yuan/Dollar	
customer_i	String	Customer account ID.	
resource_ty pe_code	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm.	
service_typ e_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.	
resource_ty pe_name	String	Resource type. For example, the resource type of ECS is Cloud Host .	
service_typ e_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .	
region_cod e	String	Cloud service region code, for example, eu_west_101.	
base_order _id	String	ID of the original order corresponding to the unsubscription amount, consumption amount, or unsubscription handling fee.	

Status Code

MOTE

4xx: This class of HTTP
 status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.

• 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.9900502 6	The order is not a degrade or unsubscription order.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.4 Managing Yearly/Monthly Resources

8.4.1 Querying Customer's Yearly/Monthly Resources

Function

A customer can query one or all yearly/monthly resources on the partner sales platform.

M NOTE

If you need to renew resources that already take effect after you successfully invoke this API, you can invoke the API described in **4.2.2 Querying the Price of a Yearly/Monthly Product** to query the price for the yearly/monthly resources and then invoke the API described in **8.4.2 Renewing Subscription to Yearly/Monthly Resources** to renew the subscription.

Constraints

- This API can be invoked using the customer AK/SK or token only.
- This API queries resources successfully provisioned only.
- If a parameter is set to null, is set to an empty JSON array, or is set to "", the specified number of resources of the current account will be returned. The number of resources is specified by the limit parameter, and the default value is 10.

URI

POST /v2/orders/suscriptions/resources/query

Request

Request Parameters

Table 8-26 Request parameters

Para mete r	Manda tory	Туре	Value Range	Description
resou rce_id s	No	list <stri ng></stri 	[0-50]	Resource IDs. Queries resources with the specified resource IDs. When only_main_resource is 0, the system queries the specified resources and their auxiliary resources. A maximum of 50 IDs can be used at the same time. If this parameter is not included in the request parameters, is left empty, or is set to null, it cannot be used as a filter criterion. Records that meet other search criteria are returned. NOTE A resource ID is allocated by a cloud service after the resource is provisioned, such as server_id for ECS.
order _id	No	String	A maxim um of 64 charact ers	Order ID. This parameter can be used for querying the resources in a specified order. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion. Records that meet other search criteria are returned. NOTE When special characters are used for query, perform the URL code conversion. For example, % should be converted to %25.

Para mete r	Manda tory	Туре	Value Range	Description
only_ main _reso urce	No	Integer	0, 1	Whether to query only the primary resources. This parameter is invalid when resource_ids are IDs of attached resources. In this case, the system queries the attached resources. • 0: Queries both the primary resources and attached resources. • 1: Queries only the primary resources. The default value is 0. If this parameter is not included in the request parameters or is set to null, the default value 0 is used. NOTE A primary resource takes the primary position in the associated resources. • For ECS, ECS is the primary resource, and EVS is the attached resource. • For VPC, if the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource. If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.
statu s_list	No	list <int eger></int 	[0-10]	Resource status. Queries resources in a specified status. If there are multiple statuses, separate them using commas (,). • 2: Provisioned • 3: Closed • 4: Frozen • 5: Expired If this parameter is not included in the request parameters, is left empty, or is set to null, it cannot be used as a filter criterion. Resources in all statuses are returned.

Para mete r	Manda tory	Туре	Value Range	Description
offset	No	Integer	0 to 214748 3646	Offset, starting from 0 . The default value is 0 . NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	1 to 500	Number of records queried each time. The default value is 10 .
expir e_tim e_beg in	No	String	20	Start time of a period during which there are expired resources. The time is in the UTC format <i>yyyy-MM-dd'T'HH:mm:ss'Z'</i> , for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59. If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion. Records that meet other search criteria are returned.
expir e_tim e_end	No	String	20	End time of a period during which there are expired resources. The time is in the UTC format <i>yyyy-MM-dd'T'HH:mm:ss'Z'</i> , for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59. If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion. Records that meet other search criteria are returned.

Para mete r	Manda tory	Туре	Value Range	Description
servic e_typ e_cod e	No	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. You can call the 4.1.1 Querying Cloud Service Types API to query the type of a cloud service. If this parameter is not included or is set to null, it will not be used as a filter criterion. This parameter cannot be set to an empty string. There will be parameter verification.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/orders/suscriptions/resources/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "resource_ids":[
        "0A063A**********BC8548E65D0089A905"
    ],
    "order_id":"CS1905251035OA****",
    "only_main_resource":1,
    "status_list":[
        2
    ],
    "offset":0,
    "limit":10,
    "expire_time_begin":"2021-09-01T08:05:01Z",
    "expire_time_end":"2021-09-03T08:05:01Z",
    "service_type_code": "hws.service.type.obs"
}
```

Response

Response Parameters

Para meter	Туре	Description
error_ code	String	Error code. For details, see Returned Values .
error_ msg	String	Error description.
data	List <orderinstan cev2=""></orderinstan>	Resource list.
	CC V2/	For details, see Table 8-27 .
total_c ount	Integer	Total number of records

Table 8-27 OrderInstanceV2

Table 8-27 Orderinstance V2			
Para mete r	Туре	Description	
id	String	Internal ID of the resource to be provisioned. The ID generated after the resource is provisioned is resource_id.	
resou rce_id	String	Resource ID.	
resou rce_n ame	String	Resource instance name.	
regio n_cod e	String	Cloud service region code, for example, eu_west_101.	
servic e_typ e_cod e	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.	
resou rce_ty pe_co de	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm .	
resou rce_s pec_c ode	String	Specification of a cloud service resource. For example, a VM resource specification is s2.small.1.linux (.win or .linux should be added at the end of the specification).	
servic e_typ e_na me	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .	
resou rce_ty pe_na me	String	Resource type. For example, the resource type of ECS is Cloud Host .	
projec t_id	String	Resource project ID.	
produ ct_id	String	Product ID.	
paren t_reso urce_i d	String	Parent resource ID	

Para mete r	Туре	Description
is_ma in_res ource	Integer	Primary resource or not.0: Attached resource1: Primary resource
status	Integer	Resource status. • 2: Provisioned • 3: Closed (not visible to customers) • 4: Frozen • 5: Expired
effect ive_ti me	String	Effective time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
expire _time	String	Expiration time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
expire _polic y	Integer	 Billing policy after a resource expires. 0: Entering the grace period upon expiration 1: Yearly/monthly to pay-per-use 2: Automatically deleted upon expiration (directly deleted from resources that take effect) 3: Automatically renewed upon expiration 4: Automatically frozen upon expiration 5: Automatically deleted upon expiration (deleted from resources in the retention period) NOTE Only 3 indicates that the resource is automatically renewed. In other cases, the expiration policy for non-automatic renewal is used.
produ ct_sp ec_de sc	String	A maximum of 512 characters allowed. Product specification description.
spec_ size	BigDecimal	Product size, which is available only for linear products. NOTE Linear products are those whose size must be specified during a subscription. For example, you can select 10 GB or 20 GB during a disk subscription.

Para mete r	Туре	Description
spec_ size_ meas ure_i d	Integer	Product size unit, which is available only for linear products. Call the API in 4.1.5 Querying Measurement Units to obtain the value.
updat e_tim e	String	Time when the resource was updated. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z NOTE In transaction scenarios, for example, provisioning, unsubscription, and change, resources are updated, and the update time changes. In other non-transaction scenarios, such as starting and stopping a machine, the update time does not change.
enter prise_ projec t	EnterpriseProject	Enterprise project details of a customer resource. For details, see Table 8-28 .

Table 8-28 EnterpriseProject

Parameter	Туре	Maximu m Length	Description
id	String	A maximu m of 256 character s	Enterprise project ID.
name	String	A maximu m of 256 character s	Enterprise project name.

Example Response

```
"resource_id": "fb8bb160-a8eb-46a7-9a01-82479c4342a8",
     "resource_name": "bandwidth-48d0",
     "region_code": "eu-west-101",
     "service_type_code": "hws.service.type.vpc",
     "resource_type_code": "hws.resource.type.bandwidth",
"resource_type_name": "fixed bandwidth",
     "service_type_name": "VPC"
     "resource_spec_code": "19_share",
     "project id": "0bce3f009100d2852fd6c009e942d2ef".
     "product_id": "OFFI771277187766575104",
     ...
"parent_resource_id": "fb8bb160-a8eb-46a7-9a01-82479c4342a8",
     "is_main_resource": 1,
     "status": 3,
     "effective_time": "2024-10-10T07:45:56Z",
     "expire_time": "2024-11-22T09:01:54Z",
     "expire_policy": 0,
"product_spec_desc": " shared bandwidth | 5.0 Mbps",
     "spec_size": 5.0,
     "spec_size_measure_id": 15,
     "update_time": "2024-11-22T09:01:55Z",
     "enterprise_project": {
        "id": "0",
        "name": "default"
total_count": 1
```

Returned Values

MOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.4.2 Renewing Subscription to Yearly/Monthly Resources

Function

A customer can renew subscription to yearly/monthly resources on the partner sales platform.

When subscription to yearly/monthly resources of a customer is about to expire, the customer can renew the subscription to the resources.

Customers can follow the instructions described in **Manually Renewing a Resource** to renew the subscription to the yearly/monthly resources in Billing Center.

M NOTE

- If a primary resource has resources attached, the system renews the subscription to both
 the primary resource and its attached ones after this API is invoked. You can invoke
 8.4.1 Querying Customer's Yearly/Monthly Resources to obtain the details of the
 attached resources.
- If a newly purchased EVS disk is attached to an ECS, but this disk is not the attached to
 any of the ECS primary resources, you must invoke 8.4.1 Querying Customer's Yearly/
 Monthly Resources to obtain the details of the ECS primary resources and its attached
 ones.
- This API supports automatic payment. For details about how to use discounts or coupons during payment, see 11.7 Support for Discounts or Coupons.

Constraints

This API can be invoked only by the customer AK/SK or token. This is because that partners cannot buy products by themselves.

URI

POST /v2/orders/subscriptions/resources/renew

Request

Request Parameters

Para mete r	Manda tory	Туре	Value Range	Description
resou rce_id s	Yes	List <str ing></str 	[1-10]	Resource IDs. Only the primary resource ID is supported. A maximum of 10 resource IDs can be configured. To determine the primary resources, query is_main_resource in the response of the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources.
perio d_typ e	Yes	Integer	2, 3	Period type. The value can be: • 2: month • 3: year
perio d_nu m	Yes	Integer	1 to 11	Number of periods. • Month: 1 to 11 • Year: 1 to 3

Para mete r	Manda tory	Туре	Value Range	Description
expire _polic y	No	Integer	0 to 3	Expiration policy. This field has been discarded. Do not use this field. This parameter will not take effect. • 0: Entering a grace or retention period • 1: Yearly/monthly to pay-per-use • 2: Automatic unsubscription • 3: Automatic renewal
is_aut o_pay	No	Integer	0, 1	Whether enable automatic payment. • 0: No • 1: Yes If this parameter is not included or is set to null , the default value 0 is used, indicating not to enable the automatic payment.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/orders/subscriptions/resources/renew HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "resource_ids": [
        "96308d5efd7841b9a4dac673d84d0e14"
    ],
        "period_type": 2,
        "period_num": 1,
        "expire_policy": 1,
        "is_auto_pay": 0
}
```

Response

Response Parameters

Status code: 200

Table 8-29 Response body parameters

Parameter	Туре	Description
order_ids	List <string></string>	List of order IDs generated when resource subscription is renewed.
fail_resource _infos	List <failresou rceInfo></failresou 	List of resources that failed to be renewed. This parameter has a value only when there are resources that fail to be renewed. For details, see Table 8-30 . This parameter is reserved.

Table 8-30 FailResourceInfo

Parameter	Туре	Description
error_code	String	Error code. For details, see Error Codes. This parameter is reserved.
error_msg	String	Error description. This parameter is reserved.
resource_id	String	Resource ID. This parameter is reserved.

Status code: 400

Table 8-31 Response body parameters

Parameter	Туре	Description		
error_code	String	Status code. For details, see Returned Values.		
error_msg	String	Error description.		
order_ids	List <string></string>	List of order IDs generated when resource subscription is renewed.		
expiredReso urcelds	List <string></string>	List of expired or non-existent resources. This parameter has a value only when the error code is CBC.99003016.		

```
Example Response
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
   "order_ids": [
     "CS19040119281JMYC"
  ],
"fail_resource_infos":[]
```

Returned Values

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.300100 36	Renewal is only supported for primary resources.
400	CBC.300100 69	The renewal period does not exist.
400	CBC.300500 06	Automatic order payment failed.
400	CBC.990000 92	Incorrect subscription period.
400	CBC.990031	This operation is not allowed because some resources are included in your orders to be paid.
400	CBC.7281	Renewal, payment, or unsubscription not supported. Your account has been frozen.
400	CBC.990030 16	The resources have expired and been deleted or do not exist.
400	CBC.990031 44	You have orders in progress and cannot perform the current operation.
400	CBC.990031 54	The sum of the existing and renewal durations has exceeded the maximum allowed. Select another renewal duration.
400	CBC.990036 34	Resources in discount packages must be renewed as a whole and cannot be renewed together with other resources.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.4.3 Unsubscribing from Yearly/Monthly Resources

Function

If a customer has subscribed to a yearly/monthly resource, the customer can use this API to unsubscribe from the resource, including the renewed part and currently used part. The customer cannot use the resources after unsubscription.

Customers can follow the instructions described in **Unsubscription** to unsubscribe from the yearly/monthly resources in Billing Center.

◯ NOTE

- A yearly/monthly resource can be unsubscribed from only after it has been successfully paid and provisioned.
- If a primary resource has resources attached, the system cancels the subscription to both
 the primary resource and its attached ones after this API is invoked. You can invoke
 8.4.1 Querying Customer's Yearly/Monthly Resources to obtain the details of the
 attached resources.
- If a newly purchased EVS disk is attached to an ECS, but this disk is not the attached to
 any of the ECS primary resources, you must invoke 8.4.1 Querying Customer's Yearly/
 Monthly Resources to obtain the details of the ECS primary resources and its attached
 ones.
- After invoking this API, you can also invoke the API described in 8.3.5 Querying the Amount of Unsubscription Orders to query the orders corresponding to the unsubscription order amounts.
- Confirm the resource information and the refund before unsubscribing from in-use resources. After being unsubscribed from, the resources not in the recycle bin cannot be restored. If you wan to continue using these resources, unsubscribe from the subscription term renewed but not used yet.

Constraints

This API can be invoked only by the customer AK/SK or token. This is because that partners cannot buy products by themselves.

URI

POST /v2/orders/subscriptions/resources/unsubscribe

Request

Request Parameters

Param eter	Manda tory	Туре	Value Range	Description
resour ce_ids	Yes	List <str ing></str 	A maxi mum 10 IDs	Resource IDs. Up to 10 resource IDs can be entered at a time. Only IDs of primary resources and child resources that are attached to primary resources are supported. The parent resource ID is required in whole-set sales scenarios. Determine whether a resource is a primary resource based on is_main_resource in the response of the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources.
unsub scribe_ type	Yes	Integer	1, 2	 Unsubscription type. The value can be: 1: Unsubscribe from the resource and its renewal periods. 2: Unsubscribe from only the resource renewal periods.
unsub scribe_ reason _type	No	Integer	1 to 5	 Unsubscription cause. The value can be: 1: The product is of poor usability. 2: The product functions cannot meet the requirements. 3: Customers do not know how to use the product, or the product operations are complex. 4: Customers are not satisfied with the service. 5: Others
unsub scribe_ reason	No	String	A maxi mum of 512 charac ters	Unsubscription reason, which is generally specified by the customer.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/orders/subscriptions/resources/unsubscribe HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
    "resource_ids": [
        "21e09f37c5c9420c8746ad5c71fb3aab"
    ],
    "unsubscribe_type": 1,
    "unsubscribe_reason_type": 5,
```

```
"unsubscribe_reason": "test"
```

Response

Response Parameters

Param eter	Туре	Description		
error_c ode	String	Status code. For details, see Returned Values .		
error_ msg	String	Error description.		
order_i ds	List <string></string>	Unsubscription order IDs.		
fail_re source _infos	List <failresourcel nfo=""></failresourcel>	List of resources that failed to be unsubscribed from. This parameter has a value only when there are resources that fail to be unsubscribed from. For details, see #api_order_00019/table173001375312. This parameter is reserved.		

Table FailResourceInfo

Parameter	Туре	Description	
error_code	String	Status code. For details, see Returned Values . This parameter is reserved.	
error_msg	String	Error description. This parameter is reserved.	
resource_id	String	Resource ID. This parameter is reserved.	

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "order_ids": [
    "CS19040119281JMYC"
    ],
    "fail_resource_infos":[]
}
```

Returned Values

□ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description		
400	CBC.0100	Parameter error.		
400	CBC.300000 53	Unsubscription not supported. The billing mode of the resource is Savings Plans.		
400	CBC.300000 67	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.		
400	CBC.990030 12	The resource ID does not exist.		
400	CBC.990031	This operation is not allowed because some resources are included in your orders to be paid.		
400	CBC.990031 28	The resource does not have renewed periods or the renewed periods have taken effect, and the renewal periods cannot be unsubscribed.		
400	CBC.990031 85	The associated resources of a cloud service cannot be operated independently.		
400	CBC.990036 43	For cloud services for which invoices have been issued, unsubscription is not supported.		
400	CBC.990036 47	Unsubscription not supported for this pay-per-use package.		
400	CBC.990036 49	Unsubscription not supported for cloud services in trial use.		
400	CBC.990036 50	Unsubscription not supported for this cloud service in KooGallery.		
400	CBC.990036 52	Unsubscription is not supported for DevCloud packages.		
400	CBC.990036 54	If there is a bandwidth add-on package, you cannot unsubscribe from the renewal period.		
400	CBC.990036 56	Operation not allowed. Your resource has been frozen.		

HTTP Value	Error Code	Description
400	CBC.990060 66	An error occurred during the query of the fee information.
403	CBC.0151	Access denied.
400	CBC.990036 51	Unsubscription not supported. An operation associated with this instance is in progress.
500	CBC.0999	Other errors.

8.4.4 Enabling Automatic Subscription Renewal for Yearly/ Monthly Resources

Function

A customer can use this API to enable automatic subscription renewal for its long-term yearly/monthly resources to prevent the resources from being deleted when they are expired.

Customers can follow the instructions described in **Enabling Auto-Renewal** to enable automatic subscription renewal for yearly/monthly resources in Billing Center.

□ NOTE

- The customer can enable automatic subscription renewal only after the customer successfully pays its yearly/monthly resource order.
- For details about the yearly/monthly products supporting automatic subscription renewal, see <u>Auto-Renewal Rules</u>.
- Before invoking this API, you can invoke the API described in 8.4.1 Querying
 Customer's Yearly/Monthly Resources to query the resource ID, resource expiration
 date, and deduction policy after the resource is expired.
- After you enable automatic subscription renewal, the fee will be deducted at 03:00 7 days before the product expiration date. Ensure that you have enough budget. If the first attempt to deduct the fee fails due to the insufficient budget, the system will continue the attempts at 03:00 every day until the fee is deducted successfully, or will retain the product resources till the last allowed day.
- The renewed period is the same as the original resource subscription period.

Constraints

This API can be invoked only by the customer AK/SK or token.

URI

POST /v2/orders/subscriptions/resources/autorenew/{resource_id}

The following table describes the parameters.

Table 8-32 Path parameters

Param eter	Manda tory	Value Range	Description	
resourc	Yes	А	Resource ID.	
e_id		maxim um of 64	um of	You can obtain the resource ID by invoking the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources.
		ers	The attached resource IDs will be configured	
			together when you configure primary resource IDs.	
				 For example, ECS is the primary resource, and EVS is the attached resource.
			 If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource. 	
			 If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource. 	
			If automatic renewal is enabled for the secondary resource, the primary resource will also be renewed.	

Request

Request Parameters

None

Example Request

POST https://bss.myhuaweicloud.eu/v2/orders/subscriptions/resources/autorenew/ eb1cac79-773b-414b-8915-6c3eed8ddf24 HTTP/1.1 Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Param eter	Туре	Description	
error_c ode	String	Status code. For details, see Returned Values.	
error_ msg	String	Error description.	

Example Response

HTTP/1.1 204 No Content Content-Type: application/json;charset=UTF-8

Content-Length: length Date: response time

Returned Values

MOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description		
400	CBC.0100	Parameter error.		
400	CBC.99003012	The resource ID does not exist.		
400	CBC.99003602	Automatic renewal is not supported for expired or frozen resources.		
403	CBC.0151	Access denied.		
500	CBC.0999	Other errors.		

8.4.5 Disabling Automatic Subscription Renewal for Yearly/ Monthly Resources

Function

A customer can disable automatic subscription renewal when needed. After disabling this function, the customer needs to manually renew the subscription to the resources before they expire.

Customers can follow the instructions described in **Disabling Auto-Renewal** to disable automatic subscription renewal for yearly/monthly resources in Billing Center.

◯ NOTE

- The prerequisite is that you have invoked the API described in 8.4.4 Enabling
 Automatic Subscription Renewal for Yearly/Monthly Resources to enable automatic
 subscription renewal, or have configured the expiration policy to automatic renewal
 when you invoke the API described in 8.4.2 Renewing Subscription to Yearly/Monthly
 Resources.
- Yearly/monthly resources supporting the disabling of automatic subscription renewal are same as those supporting the enabling of automatic subscription renewal.
- Before invoking this API, you can invoke the API described in 8.4.1 Querying
 Customer's Yearly/Monthly Resources to query the resource ID, resource expiration
 date, and deduction policy after the resource is expired.

Constraints

This API can be invoked only by the customer AK/SK or token.

URI

DELETE /v2/orders/subscriptions/resources/autorenew/{resource_id}

The following table describes the parameters.

Table 8-33 Path parameters

Para met er	Manda tory	Value Range	Description
reso urce _id	Yes	A maxim um of 64 charact ers	Resource ID. You can obtain the resource ID by invoking the API described in 8.4.1 Querying Customer's Yearly/ Monthly Resources. The attached resource IDs will be configured together when you configure primary resource IDs. • For example, ECS is the primary resource, and EVS is the attached resource. • If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource. • If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.

Request

Request Parameters

None

Example Request

DELETE https://bss.myhuaweicloud.eu/v2/orders/subscriptions/resources/autorenew/eb1cac79-773b-414b-8915-6c3eed8ddf24 HTTP/1.1

Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Para met er	Туре	Description
error _cod e	String	Status code. For details, see Returned Values .
error _msg	String	Error description.

Example Response

HTTP/1.1 204 No Content

Content-Type: application/json;charset=UTF-8

Content-Length: length
Date: response time

Returned Values

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description		
400	CBC.0100	Parameter error.		
400	CBC.990030 12	The resource ID does not exist.		
400	CBC.990036 05	Automatic renewal has been canceled and you cannot perform the current operation.		
403	CBC.0151	Access denied.		
500	CBC.0999	Other errors.		

8.4.6 Enabling/Canceling the Change from Yearly/Monthly to Pay-per-Use upon Expiration

Function

A customer can change the billing mode of resources from yearly/monthly to payper-use after the resources expire. The pay-per-use mode takes effect upon a yearly/monthly expiration. Customers can follow the instructions described in From Yearly/Monthly to Payper-Use to enable the change from yearly/monthly to pay-per-use upon expiration in Billing Center.

M NOTE

- The customer can enable the change from yearly/monthly to pay-per-use only after it has paid the yearly/monthly subscription.
- The billing mode of solution portfolio products cannot be changed from yearly/monthly to pay-per-use.
- Before invoking this API, you can invoke the API described in 8.4.1 Querying
 Customer's Yearly/Monthly Resources to query the resource ID, resource expiration
 date, and deduction policy after the resource is expired.
- With the change from yearly/monthly to pay-per-use enabled, after a yearly/monthly package expires, you will be billed for subsequently used resources on a pay-per-use basis.
- To cancel the change from yearly/monthly to pay-per-use, you must enable the change by calling the API described in 8.4.6 Enabling/Canceling the Change from Yearly/ Monthly to Pay-per-Use upon Expiration or set the expiration policy to Pay-per-Use After Expiration by calling the API described in 8.4.2 Renewing Subscription to Yearly/ Monthly Resources.

REST API

This API can be invoked only by the customer AK/SK or token.

URI

POST /v2/orders/subscriptions/resources/to-on-demand

The following table describes the parameters.

Request

Request Parameters

Paramete r	Mand atory	Туре	Value Range	Description
operation	Yes	String	A maxim um of 64 charact ers	Used to enable or cancel the change from yearly/monthly to pay-per-use. • SET_UP: Enable • CANCEL: Cancel

Paramete r	Mand atory	Туре	Value Range	Description
resource_i ds	Yes	list <strin g></strin 	[1-100]	Resource ID. You can obtain the resource ID by invoking the API described in 8.4.1 Querying Customer's Yearly/ Monthly Resources. A maximum of 100 IDs of only primary resources can be set. After this parameter is set, both the primary resource and its attached resources are changed to pay-peruse resources. This field is mandatory. You can refer to parameter is_main_resource in the response of the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources to check whether the resource is primary.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/orders/subscriptions/resources/to-on-demand HTTP/1.1 Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
    "operation":"SET_UP",
    "resource_ids":["0c3248018ed54b1e8e3ecbab1b0989ce"]
}
```

Response

Response Parameters

Paramete r	Туре	Value Range	Description
error_code	String	A maximu m of 20 characte rs	Error code. For details, see Returned Values.
error_msg	String	A maximu m of 1,000 characte rs	Error description.

Paramete r	Туре	Value Range	Description
error_deta ils	List <error Detail></error 	A maximu m of 100 records	This parameter is returned when HTTP 200 is displayed. If some operations fail, only failure records are returned. If all the operations succeed, the record is empty. For details, see Table 8-34 .

Table 8-34 ErrorDetail

Paramete r	Туре	Value Range	Description
id	String	A maximu m of 128 characte rs	ID of a batch processing message.
error_code	String	A maximu m of 20 characte rs	Error code. For details, see Returned Values.
error_msg	String	A maximu m of 1,000 characte rs	Error description.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "error_details": []
}
```

Returned Values

◯ NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99003609	The billing mode of this product type cannot be changed to pay-per-use.
200	CBC.99003610	The billing mode of resources in the grace or retention period cannot be changed to pay-per-use.
400	CBC.99003611	The billing mode of pay-per-usage packages cannot be changed to pay-per-use.
400	CBC.99003012	The resource ID does not exist.
400	CBC.99003622	The billing mode of solutions cannot be changed to pay-per-use.
400	CBC.99003623	Cannot be changed to the pay-per-use billing mode because there are transactions being processed.
400	CBC.99003624	Cannot be changed to the pay-per-use billing mode because the resource has been frozen due to security reasons.
400	CBC.99003626	Cannot be changed to the pay-per-use billing mode because this account has been frozen.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.5 Managing Resource Packages

8.5.1 Querying Resource Packages

Function

This API is used to query resource packages.

Constraints

This API can be invoked only by the customer AK/SK or token.



If a resource package has expired for more than 18 months, its information cannot be queried.

URI

POST /v3/payments/free-resources/query

Table 8-35 Header parameter

Paramete	Manda	Value	Description
r	tory	Range	
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

Paramete r	Manda tory	Туре	Value Range	Description
region_co de	No	String	A maximu m of 64 characte rs	Cloud service region code. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
order_id	No	String	A maximu m of 64 characte rs	Order ID. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
product_id	No	String	A maximu m of 64 characte rs	Resource package ID. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
product_n ame	No	String	A maximu m of 256 characte rs	Resource package name. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Paramete r	Manda tory	Туре	Value Range	Description
enterprise _project_id	No	String	A maximu m of 64 characte rs	Enterprise project ID. This parameter is mandatory if you want to query the resources of an enterprise project. If this parameter is not included in the request parameters, is set to "", or is set to null, the resources not included in the enterprise project are queried.
status	No	Integer	(0, 4)	Status: • 0: Not effective • 1: In effect • 2: Used up • 3: Expired • 4: Unsubscribed If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
offset	No	Integer	(0, 999999)	Offset, starting from 0. The default value is 0. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	(1, 1000)	Number of records queried each time. The default value is 10 .

Paramete r	Manda tory	Туре	Value Range	Description
service_ty pe_code_li	No	List <stri ng></stri 	[0-10]	The ID of the cloud service type. The value is case-insensitive.
st				For example, the cloud service type code of OBS is hws.service.type.obs. You can call the 4.1.1 Querying Cloud Service Types API to query the type of a cloud service. If this parameter is not included in the request, is left empty, or is set to null, it cannot be used as a filter criterion, and records that meet other search criteria are returned.

Example Request

```
POST https://bss.myhuaweicloud.eu/v3/payments/free-resources/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "region_code": "cn-north-7",
    "order_id": "CS21043011259RWXXTA",
    "product_id": "90301-296014-0--0",
    "product_name": "HUAWEI CLOUD WeLink",
    "enterprise_project_id": null,
    "status": 1,
    "offset": 0,
    "limit": 10,
    "service_type_code_list": [
        "hws.service.type.obs",
        "hws.service.type.vpc"
    ]
}
```

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	20	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	1000	Error description. This parameter is returned only when the query failed.

Parameter	Туре	Value Range	Description
free_resourc e_packages	List <freer esourcePac kage></freer 	-	Resource package list. For details, see Table 8-36.
total_count	Integer	-	Total number of records

Table 8-36 FreeResourcePackage

Parameter	Туре	Value Range	Description
order_instan ce_id	String	A maxim um of 64 charact ers	Identifier of a subscribed resource package.
order_id	String	A maxim um of 64 charact ers	Order ID. If the value of source_type is 1 , this parameter is left empty.
product_id	String	A maxim um of 64 charact ers	Resource package ID.
product_na me	String	A maxim um of 256 charact ers	Resource package name.
enterprise_pr oject_id	String	A maxim um of 64 charact ers	Enterprise project ID.

Parameter	Туре	Value Range	Description
enterprise_pr oject_scope	Integer	(0, 1)	 Enterprise projects for which resource packages are used: 0: All enterprise projects 1: Specific enterprise projects
effective_tim e	String	A maxim um of 20 charact ers	Time when a resource package is purchased. The value is in UTC format.
expire_time	String	A maxim um of 20 charact ers	Expiration time of a resource package. The value is in UTC format.
status	Integer	(0, 4)	Status: • 0: Not effective • 1: In effect • 2: Used up • 3: Expired • 4: Unsubscribed
service_type_ code	String	A maxim um of 64 charact ers	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
service_type_ name	String	A maxim um of 200 charact ers	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
region_code	String	A maxim um of 64 charact ers	Cloud service region code.

Parameter	Туре	Value Range	Description
source_type	Integer	(0, 1)	Source of a resource package. The options are as follows: • 0: Order • 1: Gifted by DevCloud
bundle_type	String	[ATOMI C_PKG BUNDL E_PKG]	Bundle binding type. The options are as follows: • ATOMIC_PKG: Atomic package • BUNDLE_PKG: Combined package
quota_reuse _mode	Integer	(1,2)	 Use model. The options are as follows: 1: Resettable Indicates that the purchased pay-peruse resource package can be reset at a specified period. For example, if you purchase a 1-year 40 GB pay-per-use resource package with quota_reuse_mode set to 1 and quota_reuse_cycle to 4, then the resource package will be reset each month (you will get 40 GB resource each month) within the year. 2: Not resettable Indicates that the purchased resource package will not be reset. For example, if you purchase a 1-year 40 GB pay-per-use resource package with quota_reuse_mode set to 2, the resource package will not be reset, and you will get 40 GB resource within the year.
free_resourc es	List <freer esource=""></freer>	-	For details about resource items (ID-specific) in a resource package, see Table 8-37 .

Table 8-37 FreeResource

Parameter	Туре	Value Range	Description
free_resourc e_id	String	A maximu m of 64 charact ers	Resource ID. A resource package contains multiple resources, and each resource has a usage type.

Parameter	Туре	Value Range	Description
usage_type_ name	String	A maximu m of 1,024 charact ers	Usage type name.
amount	String	A maximu m of 32 charact ers	Remaining resource quota of a package whose quota_reuse_mode is Resettable , that is, the remaining resource quota in the current reset period.
original_amo unt	String	A maximu m of 32 charact ers	Original resource quota of a package whose quota_reuse_mode is Resettable , that is, the total resource quota in each reset period.
measure_id	Integer	-	Measurement unit of the quota of a free resource package. You call the API in 4.1.5 Querying Measurement Units to obtain the value.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
   "total_count": 1,
   "free_resource_packages": [
          "order_instance_id": "01154-228300268-0",
          "order_id": "CS21043011259RWXXTA", 
"product_id": "90301-296014-0--0",
          "product_name": "HUAWEI CLOUD WeLink",
          "enterprise_project_id": null,
          "enterprise_project_scope": 0,
"effective_time": "2021-04-30T03:30:56Z",
"expire_time": "2021-05-31T15:59:59Z",
          "status": 1,
          "service_type_code": "hws.service.type.cpts", 
"region_code": "cn-north-7",
          "source_type": 0,
"bundle_type": "ATOMIC_PKG",
"quota_reuse_mode": 2,
          "free_resources": [
              {
                 "free_resource_id": "d4463497-991b-439d-9ab6-23f9ed197fe9",
                 "usage_type_name": "Duration", "amount": 100,
                 "original_amount": 100,
                  "measure_id": 34
          ]
```

]

Returned Values

M NOTE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Incorrect parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.5.2 Viewing Resource Package Usage

Function

Partners can query the resource package usage of customers on the partner sales platform by resource.

Constraints

This API can be invoked only by the customer AK/SK or token.



If a resource package has expired for more than 18 months, its information cannot be queried.

URI

POST /v2/payments/free-resources/usages/details/query

Table 8-38 Header parameter

Paramete r	Manda tory	Value Range	Description
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

Paramete r	Manda tory	Туре	Value Range	Description
free_resou rce_ids	Yes	List <stri ng></stri 	A maximu m of 100 records	List of resource item IDs. Each ID contains a maximum of 64 bytes. Resource ID. A resource package contains multiple resources, and a resource has a usage type. The resource ID is obtained from the response of the API in 8.5.1 Querying Resource Packages.

Example Request

```
POST https://bss.myhuaweicloud.eu/v2/payments/free-resources/usages/details/query HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
    "free_resource_ids": [
        "d4463497-991b-439d-9ab6-23f9ed197fe9"
    ]
}
```

Response

Response Parameters

Parameter	Туре	Maxim um Length of Charac ters	Description
error_code	String	20	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	1000	Error description. This parameter is returned only when the query failed.
free_resourc es	List <freer esourceDe tail></freer 	-	Resource information (resource details) in a resource package. For details, see Table 8-39 .

Table 8-39 FreeResourceDetail

Parameter	Туре	Maxim um Length of Charact ers	Description
free_resourc e_id	String	A maxim um of 64 charact ers	Resource ID. A resource package contains multiple resources, and a resource has a usage type.
free_resourc e_type_nam e	String	-	Resource type name.
quota_reuse _cycle	Integer	-	Reset period. This parameter is valid only when quota_reuse_mode is set to 1 (Resettable). 1: Hour 2: Day 3: Week 4: Month 5: Year

Parameter	Туре	Maxim um Length of Charact ers	Description
quota_reuse _cycle_type	Integer	-	Reset period type. This field is valid only when quota_reuse_mode is set to 1 (Resettable). 1: Reset by calendar period Indicates that the resource package is reset by calendar month or calendar year. For example, if you set quota_reuse_cycle to 4 (month) and quota_reuse_cycle_type to 1, the resource package is reset on the first day of each month. 2: Reset by order period Indicates that the resource package is reset by order period. For example, if you set quota_reuse_cycle to 4 (month), quota_reuse_cycle_type to 2, and you purchase this resource package on the 15th day of the month, then the resource package will be reset on the 15th day of each month.
usage_type_ name	String	-	Usage type name.
start_time	String	-	Start time. The value is in UTC format. If quota_reuse_mode is set to 1, the value is the start time of the reset period for the current time. If quota_reuse_mode is set to 2, the value is the time when the purchased instance takes effect.
end_time	String	-	 If quota_reuse_mode is set to 1, the value is the end time of the reset period for the current time. If quota_reuse_mode is set to 2, the value is the time when the purchased instance becomes invalid.
amount	BigDecima I	-	Remaining resource quota of a package whose quota_reuse_mode is Resettable , that is, the remaining resource quota in the current reset period.

Parameter	Туре	Maxim um Length of Charact ers	Description
original_amo unt	BigDecima I	-	Original resource quota of a package whose quota_reuse_mode is Resettable , that is, the total resource quota in each reset period.
measure_id	Integer	-	Measurement unit of the quota of a free resource package. Call the API in 4.1.5 Querying Measurement Units to obtain the value.

Example Response

Returned Values

◯ NOTE

- **4**xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Incorrect parameter.

HTTP Status Code	Error Code	Description
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.5.3 Querying Resource Package Usage Details

Function

Customers can query the resource usage details on the partner sales platform.

Constraints

This API can be invoked only by the customer AK/SK or token.

URI

GET /v2/bills/customer-bills/free-resources-usage-records

Table 8-40 Request parameters

Paramete r	Mand atory	Туре	Value Range	Description
free_resou rce_id	No	String	A maximum of 64 characters	Resource ID. A resource package contains multiple resources, and a resource has a usage type. The resource ID is obtained from the response of the API in 8.5.1 Querying Resource Packages. If this parameter is not included or is left empty, it will not be used as a filter criterion.
product_id	No	String	A maximum of 64 characters	Product ID, that is, resource package ID. If this parameter is not included or is left empty, it cannot be used as a filter criterion.

Paramete r	Mand atory	Туре	Value Range	Description
resource_t ype_code	No	String	A maximum of 64 characters	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types. If this parameter is not included or is left empty, it will not be used as a filter criterion.
deduct_ti me_begin	Yes	String	A maximum of 10 characters	Start time of resources deduction, which is in YYYY-MM-DD format (GMT+08:00).
deduct_ti me_end	Yes	String	A maximum of 10 characters	End time of resource deduction, which is in YYYY-MM-DD format (GMT+08:00). NOTE The gap between the start time and end time must be less than or equal to 90 days.
offset	No	Integer	0 to a maximum integer	Offset, starting from 0. The default value is 0. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. Offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-1000]	Maximum number of records in each query. The default value is 10 .

Request

Request Parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/bills/customer-bills/free-resources-usage-records? free_resource_id=free_resource_id&product_id=product_id&resource_type_code=resource_type_code&deduct_ time_begin=2021-10-01&deduct_time_end=2021-10-31&offset=0&limit=10 HTTP/1.1 Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Parameter	Туре	Value Range	Description
error_code	String	20	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	1000	Error description. This parameter is returned only when the query failed.
free_resourc e_records	List <freer esourceRe cord></freer 	Maxim um number : 1000	Resource package usage details. For details, see Table 8-41 .
total_count	Integer	-	Total number of records that meet the conditions.

Table 8-41 FreeResourceRecord

Parameter	Туре	Value Range	Description
deduct_time	String	A maxim um of 20 charact ers	Time when a resource is deducted. UTC time. The format is <i>yyyy-MM-dd</i> 'T'HH:mm:ss'Z', for example, 2021-10-13T10:01:49Z.

Parameter	Туре	Value Range	Description
free_resourc e_id	String	A maxim um of 64 charact ers	Resource ID. A resource package contains multiple resources, and a resource has a usage type.
resource_id	String	A maxim um of 64 charact ers	Resource ID.
resource_typ e_code	String	A maxim um of 64 charact ers	Resource type code. For example, the resource type code of VM is hws.resource.type.vm.
resource_typ e_name	String	A maxim um of 200 charact ers	Resource type. For example, the resource type of ECS is Cloud Host .
resource_tag	String	A maxim um of 10,240 charact ers	Resource tag.
product_id	String	A maxim um of 64 charact ers	Product ID, that is, resource package ID.
product_na me	String	A maxim um of 256 charact ers	Product name, that is, resource package name.

Parameter	Туре	Value Range	Description
usage_type_ code	String	A maxim um of 64 charact ers	Usage type
available_am ount	String	A maxim um of 64 charact ers	Available resources before deduction
remaining_a mount	String	A maxim um of 64 charact ers	Available resources after deduction.
used_amoun t	String	A maxim um of 64 charact ers.	Deducted resource amount.
measure_id	Integer	-	Measurement unit of the quota of a free resource package. Call the API in 4.1.5 Querying Measurement Units to obtain the value.
effective_tim e	String	A maxim um of 20 charact ers	Start time of using a resource (UTC time).
expire_time	String	A maxim um of 20 charact ers	End time of resource usage (UTC time).

Example Response

HTTP/1.1 200 OK Content-Type: application/json;charset=UTF-8

Returned Values

M NOTE

• 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.

• 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Status Code	Error Code	Description
400	CBC.0100	Incorrect parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.6 Managing Pay-Per-Use Resources

8.6.1 Querying Customer's Pay-Per-Use Resources

Function

A partner can query the pay-per-use resources that have been provisioned for customers associated with the partner in the Reseller model.

Constraints

This API can be invoked using the partner AK/SK or token only.

• The data obtained using this API is for reference only because it has a delay, and the delay for each cloud service is different.

URI

POST /v2/partners/sub-customers/on-demand-resources/query

Table 8-42 Header parameter

Paramete r	Manda tory	Value Range	Description
X- Language	No	A maximu m of 8 characte rs	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

Param eter	Man dato ry	Туре	Value Range	Description
custom er_id	Yes	String	A maximu m of 64 character s	Customer account ID. To obtain the customer ID, call the API in 5.2.1 Querying Customers.
region_ code	No	String	A maximu m of 64 character s	Cloud service region code. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
service_ type_co de	No	String	A maximu m of 64 character s	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Param eter	Man dato ry	Туре	Value Range	Description
resourc e_ids	No	List <stir ng></stir 	A maximu m of 50 IDs	Uses IDs to query resources in a batch. It is used to query the resources corresponding to specified resource IDs. A maximum of 50 IDs can be transferred at the same time. If this parameter is not included in the request parameters, is left empty, or is set to null , it cannot be used as a filter criterion.
effectiv e_time_ begin	No	String	A maximu m of 20 character s	Start time of the validity period. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of HH is 0-23, and the range of mm and ss is 0-59. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
effectiv e_time_ end	No	String	A maximu m of 20 character s	End time of the validity period. UTC time in "yyyy-MM- dd'T'HH:mm:ss'Z" format, such as 2019-05-06T08:05:01Z. The range of HH is 0-23, and the range of mm and ss is 0-59. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Param eter	Man dato ry	Туре	Value Range	Description
offset	No	Integer	0 to maximu m integer	Offset, which starts from 0. The default value is 0 . NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	1 to 100	Number of records queried each time. The default value is 10 .
status	No	Integer	1 to 6	Resource status. 1: Normal (provisioned) 2: Grace period 3. Freezing 4: Changing 5: Canceling If this parameter is not included in the request parameters or is set to null , it cannot be used as a filter criterion.
indirect _partne r_id	No	String	A maximu m of 64 character s	Reseller ID. For details about how to obtain such IDs, see Query Huawei Cloud Resellers. This parameter is mandatory only when a distributor queries pay-per-use resources of customers associated with its resellers. Otherwise, the pay-per-use resources of the distributor's own customers will be queried.

Example Request

POST https://bss.myhuaweicloud.eu/v2/partners/sub-customers/on-demand-resources/query HTTP/1.1 Content-Type: application/json X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

```
X-Language: zh_CN

{
    "indirect_partner_id": "051a8a834180d3fb0f25c006b1998800",
    "offset": 0,
    "limit": 10,
    "effective_time_begin": "2020-04-02T08:56:26Z",
    "effective_time_end": "2020-05-02T08:56:26Z",
    "customer_id": "0846606cf580d45f0fd6c01e10c07540",
    "service_type_code": "hws.service.type.ebs",
    "resource_ids": [
    "batch-volume-16380-00024604"
    ],
    "region_code": "cn-east-2",
    "status": 1
}
```

Response

Response Parameters

Param eter	Туре	Description
error_c ode	String	Status code. For details, see Returned Values.
error_ msg	String	Error description.
resourc es	List <customerre sourcev2=""></customerre>	Customer resources. For details, see Table 8-43 .
total_c ount	Integer	Total number of query records.

Table 8-43 CustomerResourceV2

Param eter	Туре	Description
custom er_id	String	Customer account ID.
region_ code	String	Cloud service region code.
availabi lity_zon e_code	String	AZ code.
service _type_c ode	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs.
resourc e_type_ code	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm.

Param eter	Туре	Description
service _type_n ame	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
resourc e_type_ name	String	Resource type. For example, the resource type of ECS is Cloud Host .
resourc e_id	String	Resource ID.
resourc e_nam e	String	Resource instance name.
effectiv e_time	String	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59.
expire_ time	String	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and ss is 0-59.
status	Integer	Resource status. 1: Normal (provisioned) 2: Grace period 3. Freezing 4: Changing 5: Canceling 6: Canceled
resourc e_spec_ code	String	Specification of a cloud service resource. For example, a VM resource specification is s2.small.1.linux (.win or .linux should be added at the end of the specification).

Param eter	Туре	Description
resourc e_info	String	Capacity of pay-per-use resources. The value is in "resourceInfo": "{\"specSize\":40.0}" format.
product _spec_d esc	String	Product specification description. Example: ECS: General computing-plus c6.2xlarge.4 8 vCPUs 32 GB Linux Disk: EVS_SATA_LXH01 40.0 GB

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
    "resources": [
    "customer_id": "0846606cf580d45f0fd6c01e10c07540",
"region_code": "cn-east-2",
"availability_zone_code": "cn-east-2-a",
    "service_type_code": "hws.service.type.ebs",
    "resource_type_code": "hws.resource.type.volume",
    "resource_id": "batch-volume-16380-00024604",
    "resource_name": "batch-volume", "effective_time": "2020-04-02T08:56:26Z",
    "expire_time": "2020-05-02T08:56:26Z",
     "status": 1,
     "resource_spec_code": "SATA",
     "resource_info": "{\"specSize\":2235.0}",
     "product_spec_desc": "High IO|40.0GB"
    total_count": 1
```

Returned Values

□ NOTE

- **4**xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.9900000 0	You do not have the operation permission to the customer.

HTTP Value	Error Code	Description
400	CBC.9900003	You do not have the permission to operate this reseller.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

9 Bill Management

9.1 Managing Customer Consumptions

9.1.1 Querying Customer Resource Usage

Function

This API is used to query customer resource usage.

NOTICE

The resource usage data has a latency. Therefore, the data cannot be used when there are high requirements on data accuracy, such as for usage monitoring or budget control.

File

A partner can subscribe to the customer resource usage in HUAWEI CLOUD Partner Center to learn the resource usage of the customer. For details, see **File Subscription**.

MOTE

- The system generates the customer resource usage file containing the data generated till the previous day from 12:00 to 20:00 (GMT+8:00) (not later than 24:00) every day. Therefore, the partner needs to configure a schedule task in the partner sales platform to obtain the customer resource usage file at 24:00 every day.
- The partner who subscribes to the customer resource usage in Partner Center can obtain the resource usage details file as of the following day (GMT+08:00).
- 1. Link to obtain the file

https://bucketname.obs.Endpoint.myhuaweicloud.eu/customerUsage/filename

Table 9-1 Parameter description

Parameter	Description
bucketnam e	Name of an OBS bucket. Only OBS buckets purchased on Huawei Cloud in the Hong Kong region can be used. For details about how to create a bucket, see Creating a Bucket. NOTE You cannot use your account to buy OBS buckets. Instead, you can use your customers' accounts to do so.
Endpoint	Domain name or IP address of the server bearing the REST service endpoint.
customerUs age	Name of the folder for storing the customer resource usage details uploaded by the system.
filename	 File name. The file name format is customerUsageV2_YYYYMM_YYYYMMDD.tar.gz. The file is a compressed package. YYYYMM indicates the month of the data to be exported. For example, if the data for February 2019 is exported, YYYYMM should be 201902. YYYYMMDD specifies the date when the customer resource usage data is exported. For example, if the file name is customerUsageV2_201902_20190301.tar.gz, the data generated from February 1, 2019 to February 28, 2019 is exported on March 1, 2019. Files in the package are in the format of customerUsageV2_YYYYMM_YYYYMMDD_XXXXXXXXX.csv. Each .csv file contains 100,000 records.

2. Generation time of the resource usage details

Resource usage data is summarized by month. The monthly usage details contain incremental data starting from the first day of each month. The usage details may change after being generated. Therefore, obtain the latest data.

- The system generates the resource usage details from 12:00 to 20:00 (GMT+8:00) (not later than 24:00) every day.
- The usage details of each month are generated on the first day of the following month. For example, the usage details of July are generated on August 1.
- The month-to-date usage details of the current month and all usages
 details of the last month are generated on the second to fourth day of
 the current month. For example, the usage details of August 1 and
 August 2 and of July are generated on August 3.
- The usage details of this month are generated on the fifth day to the end of this month. For example, the usage details from August 1 to August 5 are generated on August 6.

3. File fields

$\label{eq:file:customerUsageV2_YYYMM_YYYYMMDD_XXXXXXXX.csv} File: \textbf{customerUsageV2}_YYYYMM_YYYYMMDD_XXXXXXXXXXX.csv}$

Paramete r	Туре	Maximum Length of Characters	Description	
Billing Cycle	String	256	Billing cycle of the consumption record	
Customer ID	String	256	Domain ID of a customer	
Transactio n Time	String	256	Transaction time in the format of UTC NOTE When the exported file is in Chinese language, the time in the file is GMT+08:00 time.	
Billing Mode	String	8	Billing mode. The options are as follows: 1: Yearly/monthly 3: Pay-per-use 10: Reserved instances	

Paramete r	Туре	Maximum Description Length of Characters	
Bill Type	String	8	 Bill type: 1: Expenditure - purchase 2: Expenditure - renewal 3: Expenditure - change 4: Refund - unsubscription 5: Expenditure - use 8: Expenditure - auto-renewal 9: Adjustment - compensation 12: Expenditure - hourly billing 13: Expenditure - unsubscription handling fee 14: Expenditure - month-end deduction for support plan 15: Expenditure - tax 16: Adjustment - deduction 17: Expenditure - difference amount (min. guaranteed-actual) NOTE Expenditure-difference amount (min. guaranteed-actual) determines the fees that a customer needs to pay if the customer does not reach the minimum expenditure limit stipulated in the signed contract. This rule is applicable to direct sales customers and referral customers who use postpaid method. 20: Refund - change 24: Refund-changing to Pay-Per-Use 100: Refund - unsubscription tax 101: Adjustment - tax compensation
Resource ID	String	256	102: Adjustment - tax deduction Resource instance ID If the resource is a reserved instance, the value is the reserved instance ID.
Resource Name	String	256	Resource name entered when a customer creates a resource instance. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.

Paramete r	Туре	Maximum Length of Characters	Description
Resource Tag	String	11,000	Resource tag. Customers can set tags when managing resources. If a customer purchases a resource package product that is not specific to a certain resource, this field is left empty. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Service Type Code	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.
Resource Type Code	String	100	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types.
Product ID	String	256	Product ID.
Product Name	String	256	Product name
Specificati ons	String	256	Product specifications. Example: General Computing s2.small.1 1vCPUs 1GB linux
Region Code	String	64	Cloud service region code, for example, eu-west-101.
Project ID	String	256	ID of the project to which a resource belongs. You can select a project when purchasing a resource.
Order ID/ Transactio n ID	String	256	Order ID generated when a customer places the order. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty.

Paramete r	Туре	Maximum Length of Characters	Description
Order Type	String	256	Order type. This parameter is available only for yearly/monthly products. This parameter is left empty in the following cases: 1: New purchase 2: Renewal 3: Change 4: Unsubscription 10: Yearly/monthly to pay-per-use 11: Pay-per-use to yearly/monthly 13: Trial 14: Commercial use
Period Number	String	256	Duration of a yearly/monthly subscription. NOTE This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty. The value can be an integer, or a decimal.
Period Type	String	256	Period type for yearly/monthly products. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty. • 0: Daily • 2: Monthly • 3: Yearly • 4: Hourly • 99: Unknown
Usage Type	String	256	Usage type, which can be obtained by calling the API described in 4.1.4 Querying Usage Types.
Usage	String	256	Total resource usage
Usage Unit	String	256	Usage unit To obtain the unit, call the API in 4.1.5 Querying Measurement Units.

Paramete r	Туре	Maximum Length of Characters	Description	
Package Usage	String	256	Used amount of the package. The used resources are not calculated using the pay-per-use price.	
Unit (Package Usage)	String	256	Unit of the usage in the package To obtain the unit, call the API in 4.1.5 Querying Measurement Units.	
Reserved Instance Usage	String	256	Used reserved instance. The used resources are not calculated using the pay-per-use price.	
Unit (Reserved Instance Usage)	String	256	Usage unit for reserved instance To obtain the unit, call the API in 4.1.5 Querying Measurement Units.	
Expenditur e Amount	String	256	Transaction price listed on the HUAWEI CLOUD official website, excluding the commercial discount provided by HUAWEI CLOUD for partners Unit: USD NOTE If HUAWEI CLOUD writes off the outstanding amount as required or refunds the over-deducted amount, a record with the negative amount will be generated.	
Unit Price	String	256	Unit price of a pay-per-use product. This parameter has a value only when the price is the same. For tiered billing, this parameter is left empty.	
Unit	String	256	 Unit of the product. The unit of linear products is USD/ {linear unit}/month or USD/{linear unit}/hour. The unit of non-linear products is USD/month or USD/hour. NOTE The linear unit is the unit of linear products (those come in sizes). For example, the linear unit of the hard disk is GB, and that of the bandwidth is Mbit/s. For example, 0.6 USD/10,000 times. The unit price is 0.6, the price unit is dollar, and the step is 10,000 times. The unit price is 0.6 and the price unit is USD/10,000 times. 	

Paramete r	Туре	Maximum Length of Characters	Description
Combined Order No	String	256	The combined order number generated when a customer places orders. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty.
			This parameter is reserved.
Product Type Name	String	200	Product type name
Resource Type Name	String	200	Resource type name
Expenditur e Time	String	256	Expenditure time in the format of UTC NOTE When the exported file is in Chinese language, the time in the file is GMT+08:00 time.

4. File example

Billing Cycle, Customer ID, Transaction Time, Billing Mode, Bill Type, Resource ID, Resource Name, Resource Tag, Service Type Code, Resource Type Code, Product ID, Product Name, Specifications, Region Code, Project ID, Order ID/ Transaction ID, Order Type, Period Number, Period Type, Usage Type, Usage, Usage Unit, Package Usage, Unit (Package Usage), Reserved Instance Usage, Unit (Reserved Instance Usage), Expenditure Amount, Unit Price, Unit, Combined Order No, Product Type Name, Resource Type Name, Expenditure Time

Apr-21, 4FB84D6C27DB4C768B0940560C2AB2CE, 2021-04-26 16:13:35 GMT +08:00, 1, 1, 34ae3e78-d93e-4d46-9bc7-aa8532e44d18, FALSE, 111, hws.service.type.ebs,hws.resource.type.volume, 5797403154426640, GD3 linear EVS disk_ Monthly, GD3 linear EVS disk_ Monthly 1, cn-north-1, ab7eb17368654ff4b1bb3c63c6a478e0,CS20012416121ADNL2, 1, 1, 99, Duration-1, 12312.125, 1, 123, 3, 120, 1, 8400, 12312.123, 1, CS20012416121ADNL3, Elastic Cloud Server, Cloud Host, 2024-05-15 20:06:36 GMT+08:00

9.2 Managing Partner Bill

9.2.1 Querying Monthly Bills

Function

You can query your monthly bills that cover amount due, expenditures, refunds, and adjustments.

For details about how to query monthly bills in the Partner Center, click here.

M NOTE

The partner bill for each month is generated before 12:00 (Beijing Time) on the fifth day of the next month.

Constraints

This API can be invoked only by the partner account AK/SK or token.

URI

GET /v2/bills/partner-bills/postpaid-bill-summary

The following table describes the parameters.

Table 9-2 Query parameters

Parameter	Manda tory	Туре	Value Range	Description
bill_cycle	Yes	String	A maximum of 10 characters	Month when a bill is generated. Format: YYYY-MM

Request

Request parameters

None

Example Request

GET https://bss.myhuaweicloud.eu/v2/bills/partner-bills/postpaid-bill-summary?bill_cycle=2020-12 HTTP/1.1 Content-Type: application/json

X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response parameters

Parameter	Туре	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values. This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
bill_cycle	String	A maximum of 10 characters	Month when a bill is generated. This parameter is returned only when the query is successful. Format: YYYY-MM
initial_amount _due	BigDecimal	-	Amount due (tax included) in a bill. Amount due (output tax included) = Expenditures + Refunds + Adjustments
consume_amo unt	BigDecimal	-	Expenditures in a bill.
refunds	BigDecimal	-	Refunds in a bill.
adjustments	BigDecimal	-	Partner's adjustments in a billing cycle, for example, arrears write-offs.
tax_amount	BigDecimal	-	Output tax in a bill, which is not included in the amount due.
currency	String	A maximum of 8 characters	This parameter is returned only when the query is successful. USD

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
    "bill_cycle": "2020-12",
    "initial_amount_due": 90,
    "consume_amount": 140,
    "refunds": -30,
    "adjustments": -20,
    "tax_amount": 10,
    "currency": "USD"
}
```

Returned Values

MOTE

4xx: This class of HTTP
 status code is intended for situations in which the error seems to
 have been caused by the client, for example, the request contains bad syntax or
 incorrect parameters. You must ensure the request is correct.

• 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

HTTP Value	Error Code	Description
400	CBC.0100	Invalid parameter
403	CBC.0151	Access denied.
500	CBC.0999	Other errors

9.2.2 Querying Bill Details of Monthly Expenditures

Function

Partners can query bill details of monthly expenditures.

For details about how to query the bill details of monthly expenditures in the Partner Center, click **here**.

Bill File

A partner can subscribe to the partner bill (customer resource usage) in the HUAWEI CLOUD Partner Center. For details, see **File Subscription**. Your sales platform will calculate the customer expenditures and generate the customer bills based on this bill and then you can perform reconciliation with HUAWEI CLOUD.

 Link to Obtain the File https://bucketname.obs.Endpoint.myhuaweicloud.eu/customerBill/filename

Table 9-3 Parameter descriptions

Parameter	Description
bucketna me	OBS bucket name. Only OBS buckets purchased on Huawei Cloud in the Hong Kong region can be used. For details about how to create a bucket, see Creating a Bucket. NOTE You cannot use your account to buy OBS buckets. Instead, you can use your customers' accounts to do so.
Endpoint	Domain name or IP address of the server bearing the REST service endpoint.

Parameter	Description
customerB ill	Name of the folder for storing the partner bill details file uploaded by the system.
filename	File name. • The name of a bill details file is in customerBill_YYYYMM.tar.gz format. In the preceding command, customerBill_YYYYMM.tar.gz is a compressed package. The files contained in the package are named in customerBill_YYYYMM_xxxx.csv format. Each CSV file contains 100 000 records

2. File Generation Cycle

The file is generated each natural month.

The system automatically creates the file of previous month before 12:00 (Beijing Time) at the fifth day of each month and uploads the file to the created OBS bucket. If the upload fails on the current day, the system uploads the file again next day. If the upload still fails, the system uploads the file the day after that day. The system can try a maximum of five times. Every time when the upload fails, the system sends a failure notification email to the email address of the partner.

3. File Fields

Parameter	Typ e	Value Limit	Description
Customer ID	Strin g	64	Domain ID of a customer.
Product ID	Strin g	64	Product ID
Product type code	Strin g	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types.
Resource type code	Strin g	100	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types.
Cloud service region code	Strin g	64	Cloud service region code, for example, euwest-101.

Parameter	Typ e	Value Limit	Description	
Billing mode	Strin	2	0: Yearly/monthly	
	g		1: Pay-per-use	
			2: Reserved instance–upfront payment	
			3: Reserved instance–hourly billing	
			6: Savings plan-discount	
Official website price	BigD ecim al	-	List price or promotional price at which customers purchased Huawei Cloud products, in USD.	
Fee generation	Strin g	32	Time when fees are generated. The format is YYYY-MM, indicating year-month.	
time			When the exported file is in Chinese language, the time in the file is GMT+08:00 time.	
Order ID	Strin g	64	Order ID. This field is available only for yearly/monthly subscriptions.	
Usage	BigD ecim al	-	Usage (usage of packages and reserved instances not included). This field is available only for pay-per-use subscriptions.	
Usage Unit	Inte ger	-	Usage unit. You can call the API in 4.1.5 Querying Measurement Units to obtain the value.	
Whether a spot ECS	Strin g	1	2 : Yes	
Cash coupon amount	BigD ecim al	-	Cash coupon amount, in USD. It specifies the amount deducted using cash coupons.	
Flexi- purchase coupon amount	BigD ecim al	-	Flexi-purchase coupon amount	
Stored-value card amount	BigD ecim al	-	Stored-value card amount	

Parameter	Typ e	Value Limit	Description
Settlement	Inte	-	0: Common product
product type	ger		1: Promotional product
			2: Hybrid hosting products
			5: Stored-value card
			6: Marketplace products
			7: Spot ECSs
			8: FCS (reserved)
			11: Special price request
			60: KooGallery product discounts in resales
Partner preference ratio	BigD ecim al	-	Discount percentage for each settlement type. Leave this parameter empty when Partner Preferential Type is set to 1 .
Currency	Strin g	3	USD
Billing cycle	Strin g	32	Billing cycle, in the YYYY-MM format.
Customer account	Strin g	64	HUAWEI CLOUD username of the customer.
Customer name	Strin g	192	Name used by the customer for real-name authentication. If the customer does not perform real-name authentication, this field is left blank.
Product name	Strin g	576	Product name.
Product type name	Strin g	192	Cloud service name, which can be obtained by calling the API in 4.1.1 Querying Cloud Service Types.
Resource type name	Strin g	192	Resource type name, which can be obtained by calling the API in 4.1.2 Querying Resource Types.
Cloud service region name	Strin g	96	Cloud service region.
Package Usage	BigD ecim al	-	Used amount of the package. The used resources are not calculated using the payper-use price.
Unit (Package Usage)	Inte ger	-	Package usage unit. For details, see Usage Unit . If the package usage is 0, this field is left blank.

Parameter	Typ e	Value Limit	Description	
Reserved Instance Usage	BigD ecim al	-	Used reserved instance. The used resources are not calculated using the pay-per-use price.	
Unit (Reserved Instance Usage)	Inte ger	-	Reserved instance usage unit. For details, see Usage Unit . If the reserved instance usage is 0, this field is left blank.	
Bill Type	Strin g	1	Type of a bill item. • 0: Expenditure • 1: Unsubscription • 2: Huawei write-off	
BizID	Strin g	64	Business ID.	
BizltemID	Strin g	64	Business item ID.	
Amount After Coupons	BigD ecim al	-	Consumption amount of a customer, excluding the amount of flexi-purchase coupons, cash coupons, and stored-value cards.	
Amount Due	BigD ecim al	-	Bill amount that a partner must pay.	
Specification s	Strin g	256	Product specifications, such as General Computing s2.small.1 1vCPUs 1GB linux . General Computing s2.small.1 1vCPUs 1GB linux	
Billing item	Strin g	256	Billing item To obtain a specific billing item, call the API in 4.1.4 Querying Usage Types. The value is the same as the usage type in SDRs. The mappings between cloud services and usage types are as follows: ECS: Duration EVS: Duration EIP: Duration Bandwidth: Duration (by bandwidth) or upflow (by traffic) Marketplace image: Duration	

Parameter	Тур	Value Limit	Description
Unit Price	BigD ecim al	-	 Unit price. For the unit price of a pay-per-use product, this parameter has a value only when the price is the same. For tiered billing, this parameter is left empty. Unit price of a yearly/monthly product is returned only in the following scenarios: Yearly/monthly subscription, renewal, specification downsizing, specification upgrade, and capacity expansion Simple pricing Unit price of a reserved instance is returned only in the following scenarios: Subscription, renewal, specification downsizing, specification upgrade, capacity expansion, and pay-per-use Simple pricing
Unit	Strin g	256	Price unit For example, the price is 0.6 yuan/10,000 times. The unit price is 0.6, the price unit is yuan, and the step is 10,000 times. The unit price is 0.6 and the price unit is yuan/10,000 times.
Payment	BigD ecim al	-	 When Partner Preferential Type is set to 0, the settlement amount is calculated as follows: Settlement amount = List price x (1 – Partner discount ratio). When Partner Preferential Type is set to 1, the settlement amount is calculated based on the fixed unit price. The settlement amount includes the cash coupon amount and does not include the tax amount. Unit: USD (\$) This parameter is returned only when a coupon quota has been converted for partner use only.
Partner cash coupon amount	BigD ecim al	-	Amount of the cash coupon that is deducted after a discount is used. Unit: USD (\$)

Parameter	Typ e	Value Limit	Description
Whether to Refund	Strin g	-	Whether to refund partner's cash coupon generated during the refund. Unit: USD (\$)
Coupons			• Y: yes
			N: no This parameter is returned only when a
			coupon quota has been converted for partner use only.
Cash Payment	BigD ecim	-	Amount that needs to pay after partner's cash coupons are deducted. Unit: USD (\$)
	al		This parameter is returned only when a coupon quota has been converted for partner use only.
			NOTE
			 If Scene is set to Y, this parameter value is calculated as follows: Partner amount without tax = Settlement amount – Partner coupon
			 If Scene is set to N, the partner amount without tax equals the settlement amount.
Tax Amount	BigD ecim al	-	Tax amount. If tax determination is not involved or the tax base is 0, the tax amount is 0. Unit: USD (\$)
			This parameter is returned only when a coupon quota has been converted for partner use only.
Billing Item Name	Strin g	-	Usage type name. To obtain a specific type, call the API in 4.1.4 Querying Usage Types.
Partner Preferential	Strin g	-	Partner Preferential Type. The options are as follows:
Туре			• 0: Discount
			• 1: Fixed unit price
Combined Order No.	Strin g	256	The combined order number generated when a customer places orders. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty.

□ NOTE

- When Partner Preferential Type is set to 0, Amount due = List price x (1 Partner discount ratio) Partner coupon + Tax amount.
- When Partner Preferential Type is set to 1, Amount due = Settlement amount -Partner coupon + Tax amount.

4. Sample File

Customer ID, Product ID, Product type code, Resource type code, Cloud service region code, Billing mode, Official website price, Fee generation time, Order ID, Usage, Usage Unit, Whether a spot ECS, Cash coupon amount, Flexipurchase coupon amount, Stored-value card amount, Settlement product type, Partner preference ratio, Currency, Billing cycle, Customer account, Customer name, Product name, Product type name, Resource type name, Cloud service region name, Package Usage, Unit (Package Usage), Reserved Instance Usage, Unit(Reserved Instance Usage), Bill Type, BizID, BizItemID, Amount After Coupons, Amount Due, Specifications, Billing item, Unit Price, Unit, Payment, Partner cash coupon amount, Whether to Refund Coupons, Cash Payment, Tax Amount, Billing Item Name, Partner Preferential Type, Combined Order No.

05876442ca80d5cc0f2dc01c66d6d0c0, 00301-25435-0--0, hws.service.type.ebs, hws.resource.type.volume, cn-east-2, 0, 30.3, Jan-21, CS2008210926C178U, 2664000, 6, 2, 0, 0, 0, 11, 0.75, USD, Jan-21, xiajing_zs_hff, Ai*******Company, GD3 linear EVS Ondemand, Elastic Volume Service, Volume, CN North-Ulanqab3, 0, 6, 0, 6, 0, 1100886031001, 0310015570361001_ONDEMAND, 210.1008, 147.07056, mon IO| 4056.000000GB, Duration, 0.00007, Dollar/GB/Hour, Duration, 147.07056, 0, N, 147.07056, 0, Duration, 0, BO2023050900011.

10 Managing Service Tickets

Partners and customers can submit HUAWEI CLOUD service tickets on the partner sales platform. When receiving the service tickets, the HUAWEI CLOUD after-sales service team will assist the customers to handle the problems related to HUAWEI CLOUD usage.

Related APIs

API	API Definition
Creating a service ticket	
Querying templates	
Querying service ticket list	
Querying service ticket details	
Performing operations on a service ticket	
Adding messages	

For details, see .

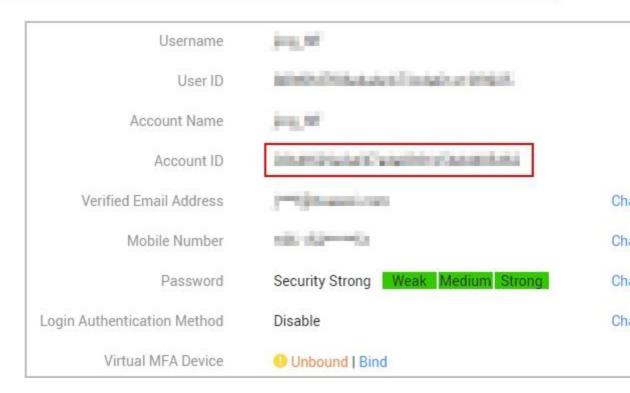
11 Appendix

11.1 How Do I Obtain Customers' customer_id or domain_id?

You can direct customers to Huawei Cloud from your sales platform. If a customer creates a Huawei Cloud account after being directed from your own platform, the **customer_id** can be obtained from the association result notification sent by Huawei Cloud. For details, see **Basic Configuration**. If you invoke a CBC API to create an account for a customer, the **customer_id** is returned through the **domainId** field in the response.

You can sign in to Huawei Cloud using your customers' accounts and passwords to obtain **customer_id** from the **My Credential** page.

Visit **My Credential** at https://console.eu.huaweicloud.com/iam/#/mine/apiCredential.



11.2 Switching to the HUAWEI CLOUD Page and Binding the HUAWEI CLOUD Account

The following describes how to bind a customer account on the partner sales platform with the HUAWEI CLOUD account on the web UI. You can create a HUAWEI CLOUD account and bind it with the customer account, or directly bind an existing HUAWEI CLOUD account with the customer account. The following scenarios are involved:

- A customer has created an account on the partner sales platform and does not have a HUAWEI CLOUD account. The customer needs to create such an account and bind it with the account on the partner sales platform.
- Before creating an account on the partner sales platform, a customer has created a HUAWEI CLOUD account. The customer needs to create an account on the partner sales platform and bind it with the HUAWEI CLOUD account.

Subsequent operations, such as product purchasing and subscription query, depend on the customer's HUAWEI CLOUD account in this scenario.

Figure 11-1 shows the procedure for binding a HUAWEI CLOUD account with a customer account on the partner sales platform and notifying the binding result.

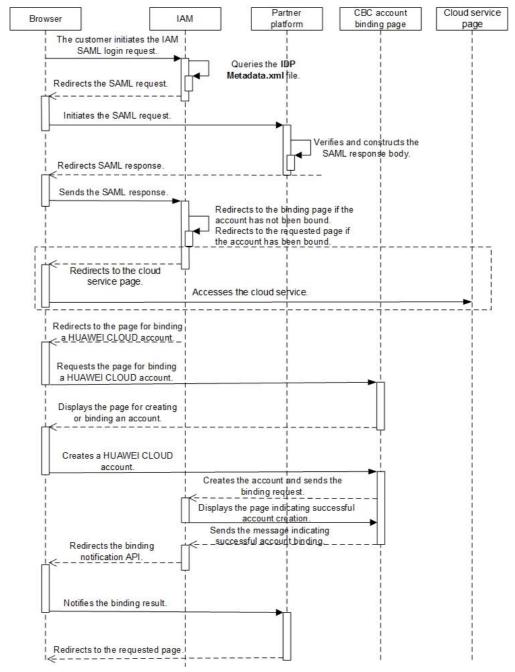


Figure 11-1 Binding a HUAWEI CLOUD account

- A partner's customer uses a browser to call the HUAWEI CLOUD login link. IAM sends the SAML request.
 - a. The customer uses a browser to call the HUAWEI CLOUD login link.

Parameter	Mand atory	Description	Example
xAccountTy pe	Yes	Indicates the identifier of the partner sales platform, which is globally unique. The value is provided by Huawei. After the partner configures the access parameters on the Partner Center page, the partner ID is generated. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?	ZXT
isFirstLogin	No	If no HUAWEI CLOUD account is bound, this parameter is mandatory and must be set to true . Otherwise, the value can be left empty or set to false .	true
service	No	Indicates the redirection address after login. The encodeURIComponent function is used for coding.	

b. IAM receives the login request of the partner's customer, locates the **SingleSignOnService** configuration item in the **IDP Metadata.xml** file based on the **xAccountType** value, and sends the **samlRequest** request to the required path.



Parameter	Description
SAMLRequest	Indicates the response message body. The response message is in XML format. IAM then compresses the message, encodes the message using Base64, and URL encodes the message. If the partner uses the SAML toolkits, this parameter can be directly used. The partner does not need to parse the XML file. If the partner needs to parse the XML file, the partner needs to URL decode the message, decode the message using Base64, and decompress the message (zip.inflate). For details, see Sample Code for Parsing the SAMLRequest.
RelayState	Indicates the response parameters for SAML.
SigAlg	Indicates the signature algorithm. Huawei uses SHA256 for signatures by default. HTTP://WWW.W3.ORG/2001/04/XMLDSIG-MORE#RSA-SHA256
Signature	Indicates the signature. The signature is used to verify the initiator of a request. When initiating a request, HUAWEI CLOUD uses the private key to sign \$\$SAMLRequest={\$SAMLRequest} & RelayState={\$RelayState} & SigAlg={\$SigAlg} & in request https://www.test.com/saml/login? \$\$SAMLRequest={\$SAMLRequest} & RelayState={\$RelayState} & SigAlg={\$SigAlg} & Signature={\$Signature} & and then performs Base64 coding to obtain the signature value.} The signature algorithm is specified by the SigAlg field. When receiving the request, the receiver verifies the signature value using the public key provided by HUAWEI CLOUD (the value in the <ds:x509certificate></ds:x509certificate> tag in the SP Metadata.xml file). If the signature verification succeeds, the request is sent by HUAWEI CLOUD, and the follow-up operations can be performed. Otherwise, the request is invalid.

- 2. The partner sales platform generates the SAML response message and sends it to HUAWEI CLOUD IAM.
 - a. The partner sales platform obtains the HUAWEI CLOUD public key and the response message path of **samlResponse** from the **SP Metadata.xml**

- file. For details, see Example, Public Key, and Response Path in Obtaining the SP Metadata File.
- b. The partner sales platform constructs the response message body **response.xml** for the SAML response.

The response message body is in XML format. For the correct response message body and its parameter description, see the following displayed content.

NOTICE

The following content is for reference only. The description in the comments must be modified. The time and ID defined by SAML vary depending on the message. Therefore, it is recommended that you should not directly modify the response message content. Instead, you shall use the SAML toolkits to generate the response message.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the SAML request message. -->
<!-- Parameter Destination needs to be the same as the Location value in the
AssertionConsumerService tag in the SP Metadata.xml file. -->
<saml2p:Response Consent="urn:oasis:names:tc:SAML:2.0:consent:unspecified"</p>
ID="_d794dc393ae6724e236003bf0b917cf0" Destination="https://auth.huaweicloud.com/authui/
saml/SAMLAssertionConsumer"
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
  xmlns:saml2p="urn:oasis:names:tc:SAML:2.0:protocol">
 <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
 <saml2:Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-format:entity"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion">https://www.test.com</saml2:Issuer>
 <saml2p:Status>
  <saml2p:StatusCode Value="urn:oasis:names:tc:SAML:2.0:status:Success" />
  <saml2p:StatusMessage>urn:oasis:names:tc:SAML:2.0:status:Success</saml2p:StatusMessage>
 </saml2p:Status>
 <saml2:Assertion ID=" 2320c40ac7b5e857b2d0d4ea0c8758c3"</p>
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
 <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
  <saml2:lssuer>https://www.test.com</saml2:lssuer>
  <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
   <ds:SianedInfo>
     <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
     <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-</p>
sha256" />
<!-- The value after "URI #" must be the same as the ID in the Assertion tag. -->
     <ds:Reference URI="#_2320c40ac7b5e857b2d0d4ea0c8758c3">
      <ds:Transforms>
            <ds:Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
        <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
         <ec:InclusiveNamespaces PrefixList="xsd"
          xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#" />
       </ds:Transform>
      </ds:Transforms>
      <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
<!-- The value of DigestValue is the digest of the Assertion tag object. The digest
algorithm is the same as that of DigestMethod. -->
      <ds:DigestValue>rFxrycznfGNYOnprZIFJJou4ro0Mz65+43MIR5F0+H4=</ds:DigestValue>
     </ds:Reference>
   </ds:SignedInfo>
    <!-- Partner signature value. For details about how to obtain the value, see the
following description. -->
```

```
<ds:SignatureValue>
YqTWQngAPfGqQmWa610PM7LeefqWdKuveUVINrqL67NoHJIDa2WxLwdVzoJIIJh64QiNPr6+ndm
L DCMgIC5F/9ijuzhIICZcc6lHNljy6EsPkKRjfo9oeoVAqLqG/kmVQYeHLBID0y11RNXXpAVY4nhJ
26KiIVGt7ywyKAmhichE+eW/UYAGiOI5vkfgD2gZUGV+yPkv64k7xK4yAH3mL2NaCPuw/90e4enm
iUx0YuazDwM5FiRUSMpcJs0rcNmS6clWAUcCzbOx+y2vJGtTjHb7k3UsmpnTop5eYNp94+sDPEat
8FaV4SgafMEL5z54gpe8+//9yOWEvIBs1b0RYg==
   </ds:SignatureValue>
   <ds:KeyInfo>
     <ds:X509Data>
     <!-- Partner public key certificate. The certificate must be the one specified in the IDP
Metadata.xml file. -->
      <ds:X509Certificate>
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAhK3L160NjP9EhBGQOC2s4r
+Wc62bkRkc nUxfhiZwCwJdQCykzuLOAoATnfoEamV5W25xtSS5kFs+4OC0mYVpKcl3SWoydX
+UE5Qik5UfJ8Dt G1AvSEKhSluy09axrV5Uv089jMxBnlm/R+xND73WcZM11ylbKJEZSTCEDfh
+KnFbMw108umFMden RZCrNWUJoSp/90XeG0V2Nmj7Fkq72skSifwIASLRq9KqLbmh1QwUX
+AoWpHK/jRUBustMBmG1n1i
       AqpD4EBjjBOB27k1wXZ30+loJt8lZmfSZRFoNn5VFWXNeEmZ1aQvGSvd3Tyyw2/Wr+w/
8Mags69C mpeX6QIDAQAB
      </ds:X509Certificate>
     </ds:X509Data>
   </ds:KeyInfo>
  </ds:Signature>
  <saml2:Subject>
  <!-- The value of NameQualifier must be the same as the entityID value in the SP
Metadata.xml file. -->
   <saml2:NameID Format="urn:oasis:names:tc:SAML:2.0:nameid-format:transient"</p>
NameQualifier="https://auth.huaweicloud.com/">Some NameID value</saml2:NameID>
   <saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:bearer">
     <!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the samlRequest message. -->
     <saml2:SubjectConfirmationData
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
NotBefore="2018-10-28T08:21:41.740Z" NotOnOrAfter="2018-11-01T08:21:41.740Z"
Recipient="https://auth.huaweicloud.com/authui/saml/SAMLAssertionConsumer" />
   </saml2:SubjectConfirmation>
  </saml2:Subject>
  <saml2:Conditions NotBefore="2018-10-28T08:21:41.740Z"</p>
NotOnOrAfter="2018-11-01T08:21:41.7407">
    <saml2:AudienceRestriction>
   <!-- Must be the same as the entityID value in the SP Metadata.xml file. -->
     <saml2:Audience>https://auth.huaweicloud.com/</saml2:Audience>
   </saml2:AudienceRestriction>
  </saml2:Conditions>
  <saml2:AttributeStatement>
   <!-- For values between<saml2:AttributeValue> and </saml2:AttributeValue>, see the
following table. -->
   <saml2:Attribute FriendlyName="xUserId" Name="xUserId"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
xsi:type="xsd:string">******</saml2:AttributeValue>
    </saml2:Attribute>
<!-- The values of xAccountId and xUserId must be the same. -->
   <saml2:Attribute FriendlyName="xAccountId" Name="xAccountId"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
xsi:type="xsd:string">*******</saml2:AttributeValue>
   </saml2:Attribute>
    <saml2:Attribute FriendlyName="bpld" Name="bpld"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">******</saml2:AttributeValue>
   </saml2:Attribute>
   <saml2:Attribute FriendlyName="email" Name="email"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:tvpe="xsd:string" />
   </saml2:Attribute>
```

```
<saml2:Attribute FriendlyName="name" Name="name"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">******</saml2:AttributeValue>
    </saml2:Attribute>
    <saml2:Attribute FriendlyName="mobile" Name="mobile"</p>
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
     <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</p>
xsi:type="xsd:string">*****</saml2:AttributeValue>
     </saml2:Attribute>
  </saml2:AttributeStatement>
  <saml2:AuthnStatement AuthnInstant="2018-10-30T08:21:41.741Z">
    <!-- Must be the same as the entityID value in the SP Metadata.xml file. -->
    <saml2:SubjectLocality Address="https://auth.huaweicloud.com/" />
    <saml2:AuthnContext>
     <saml2:AuthnContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:unspecified
saml2:AuthnContextClassRef>
    </saml2:AuthnContext>
  </saml2:AuthnStatement>
 </saml2:Assertion>
</saml2p:Response>
```

The partner signature value is in standard XML format, and the signature type is **enveloped-signature**. You are advised to use the SAML library provided by a third party for signature.

The signature procedure is as follows.

Obtain the signature object (Assertion).

```
<saml2:Assertion ID="_2320c40ac7b5e857b2d0d4ea0c8758c3"
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
    xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    ......
</saml2:Assertion>
```

ii. Obtain the tag object (Signature).

```
<ds:Signature
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
  <ds:SignedInfo>
    <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
     <ds:SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-</p>
     <ds:Reference URI="#_2320c40ac7b5e857b2d0d4ea0c8758c3">
       <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-</p>
signature" />
          <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
             <ec:InclusiveNamespaces
               xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#"
                         PrefixList="xs" />
             </ds:Transform>
          </ds:Transforms>
          <ds:DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha256" />
          <ds:DigestValue>.....</ds:DigestValue>
       </ds:Reference>
     </ds:SignedInfo>
   <!-- Third-party signature value -->
     <ds:SignatureValue>
   </ds:SignatureValue>
     <ds:KeyInfo>
       <ds:X509Data>
          <!-- Third-party public key certificate -->
          <ds:X509Certificate>
      </ds:X509Certificate>
       </ds:X509Data>
```

</ds:KeyInfo> </ds:Signature>

- iii. Generate the **DigestValue** value for the signature object **Assertion**.
 - Convert Assertion according to the algorithm defined in Transform of Signature.
 - 2) Generate a digest for the object obtained in 1) according to the algorithm specified in **DigestMethod**.
 - 3) Place the generated digest value in the **DigestValue** tag.
- iv. Use the private key in Step 6 in Generating a Certificate to generate the SignatureValue value for the SignedInfo object signature.
 - Convert SignedInfo according to the algorithm defined in CanonicalizationMethod
 - Generate the signature value for the object obtained in 1) according to the signature algorithm defined in SignatureMethod. Place the obtained signature value in SignatureValue.
- v. Combine the values of **DigestValue** and **SignatureValue** to form the final **Signature** object. Place the value in **Assertion** as its subelement.

The signature is displayed as follows.

```
<saml2:Assertion ID="_2320c40ac7b5e857b2d0d4ea0c8758c3"</p>
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ds:Signature
    xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
   <!-- Third-party signature value -->
     <ds:SignatureValue>
   </ds:SignatureValue>
     <ds:KeyInfo>
       <ds:X509Data>
     <!-- Third-party public key certificate -->
          <ds:X509Certificate>
      </ds:X509Certificate>
       </ds:X509Data>
     </ds:KeyInfo>
  </ds:Signature>
</saml2:Assertion>
```

Table 11-1 Description of parameters between **<saml2:AttributeValue>** and **</saml2:AttributeValue>**

Parameter	Description
xUserId	Indicates the user ID of the partner's customer on the partner sales platform.
xAccountId	Indicates the account ID of the partner's customer on the partner sales platform.
bpld	

Parameter	Description
email	Indicates the email address.
	This parameter is optional.
	The parameter must meet the following requirements:
	Must be unique for each customer.
	A maximum of 64 characters
	 Passes the verification using the following regular expression: ^[azA-Z0-9.!#\$%&'*+\V=?^_`{ }~-]+@[a-zA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?(?:\\. [azA-Z0-9](?:[a-zA-Z0-9-]{0,61}[a-zA-Z0-9])?)*\$
name	Indicates the HUAWEI CLOUD account name of the
	partner.
	This parameter is optional.
	The parameter must meet the following requirements:
	Must be 5 to 32 characters long.
	 Can contain only letters, digits, hyphens (-), and underscores (_), and cannot start with a digit. Can contain spaces in the middle.
	 Passes the verification using the following regular expression: ^([a-zA-Z_\\-][0-9a-zA-Z_\\-]*)+\$

◯ NOTE

Table 11-1 involves the account ID and user ID because HUAWEI CLOUD IAM has account and user concepts. For details about the two concepts, see "Account" and "IAM User" in .

c. If the customer has logged in to the partner sales platform, the SAML response message is returned directly. Otherwise, the SAML response message is displayed after the login.

Send a POST request to the HUAWEI CLOUD response path **AssertionConsumerService** in **2.a**. The parameters must be in the Form Data format.

TQUq1IFJ7%2FFNMFHFlKQgbKijySZlM8uQqb%2FKSFxN%289S6dvim%2BAatPgbxX9hj0pfR%2BHEXEPzRNnds
wX6LQaqPQ%2F%2Bc4IJufmvz7Rue%2FAA%3D%3D&RelayState=_lidh2rjxc81dnuc72qmpbs1f4bml6r9fgb
n8rNI5twTosXm0NhZDj%2BGnfVBfG9T4X5nisoK843vRqzY1JCPmb0swQWb%2FFHryetP9deoceEBkTgf81xMJ
HCPUJ%2BNSZc5aUinPUDIn9gxGsEMosv8f%2FcYPe1GL%2F9iMS1ChGElk18Rmj6Y5F3SVrFEsVVYMckzPPAzh
L2Ts%284BW8YbdqeUyfIKJwruVfX8KoHdC8xCl8bRN5mOHqAjCMYTQAJrCm%2BBGJVxUXit0gYeqkYH6dYkVf/b
BgDXY1GUe0QqdckhgT36Aiz2GCZwK7lpvhAEFi2xMZGZU4x1KVZNYY1yzfjMB164pMsyd3JDrzZfcbraPnTBa:
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko)
Form Data view source view URL encoded

SAMLResponse: PD94bWwgdmVyc2lvbj@iMS4wIiBlbmNvZGluZz@iVVRGLTgiPz4KPHNhbWwycDpSZXNwb25
MDAzYmYwYjkxN2NmMCIgSW5SZXNwb25zZVRvPSJfZGNrNG1tMDhxbWRoYzhrNG51aXIwN2hnaGV@ZHFxZzh1bW
1lczp@YzpTQU1MOjIuMDpwcm9@b2NvbCI+PHNhbWwyOklzc3VlciBGb3JtYXQ9InVybjpvYXNpczpuYW1lczp@
Pmh@dHBzOi8vaWRwLm1zZXNvbC5jb2@vaWRwL3NoaWJib2xldGg8L3NhbWwyOklzc3Vlcj48c2FtbDJwOlN@YX
RhdHVzTWVzc2FnZT51cm46b2FzaXM6bmFtZXM6dGM6U@FNTDoyLjA6c3RhdHVzOlN1Y2Nlc3M8L3NhbWwyCDpT
IElzc3VlSW5zdGFudD@iMjAxOC@xMC@zMFQwODoyMTo@MS43NDBaIiBWZXJzaW9uPSIyLjAiIHhtbG5zonNhbW

Parameter	Description
SAMLResponse	Identifies the string obtained by encoding the SAML response message body in 2.b using Base64.
RelayState	The value of this parameter is the same as that in the SAML request message.

- 3. Create a HUAWEI CLOUD account and bind it with the customer account on the partner sales platform.
 - After the SAML response message is returned, IAM checks whether there is a HUAWEI CLOUD account already bound with the customer account on the partner sales platform based on the response message. If the required HUAWEI CLOUD account exists, the partner can directly log in to HUAWEI CLOUD. If the required HUAWEI CLOUD account does not exist, the page for creating and binding a HUAWEI CLOUD account is displayed.
 - shows the page for creating a HUAWEI CLOUD account. The partner configures the required parameters on the page for creating a HUAWEI CLOUD account and clicks Create And Bind to create a HUAWEI CLOUD account and bind the account with the customer account on the partner sales platform.
 - If the partner's customer already has a HUAWEI CLOUD account, click
 Bind Account on the page shown in . On the displayed page, configure
 the required parameters as prompt and click Bind Account to bind the
 HUAWEI CLOUD account with the customer account on the partner sales
 platform.

MOTE

The customer cannot bind its customer account on the partner sales platform to its existing HUAWEI CLOUD account if this account is in one of the following conditions:

- In arrears
- Associated to another partner
- Used to sign a special contract with HUAWEI CLOUD, such as offline directly-signed contract, authorized telemarketing contract with discounts, or directly-signed special offer contract) with HUAWEI CLOUD
- A consulting partner account in use or pending approval
- An enterprise subaccount or an enterprise primary account associated with an enterprise subaccount
- Containing valid reserved instances
- HUAWEI CLOUD notifies the account binding result using the binding notification API provided by the partner through browser redirection.
 - a. Obtain the request parameters bindRequest, SigAlg, and Signature.
 - b. Decode the signature using Base64 and use the signature algorithm **SigAlg** to perform signature verification for the **bindRequest** parameters.

◯ NOTE

HUAWEI CLOUD uses the private key used for SAML interconnection to verify the signature. The partner uses the public key (value of the <ds:X509Certificate></dd>

ds:X509Certificate> tag in the SP Metadata.xml file) used by HUAWEI CLOUD for SAML interconnection to verify the signature.

c. If the signature verification succeeds, decode the binding request using Base64 to obtain JSON strings and perform required operations based on the JSON data processing procedure. If the signature verification fails, the request is invalid and the processing is terminated.

11.3 How Do I Obtain the xaccountType Value?

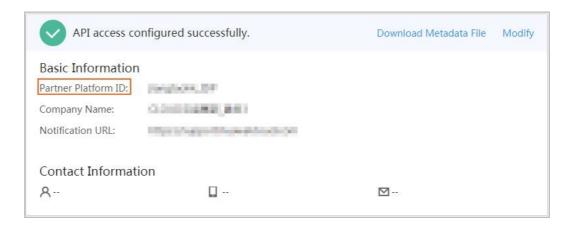
The xaccountType value is the system ID of your partner sales platform. You can obtain the ID of your partner sales platform on the **Configure** page.

NOTICE

To obtain the value of **xaccountType**, you need to configure the access parameters on the **Support Center** > **API Management** page of Partner Center first.

For details, see .

After you configure the access parameters, you can obtain the **xaccountType** value (**Partner Platform ID** value) on the **Configure** page.



11.4 How Can I Replace a Partner Token with a Customer Token

Operations

 Invoke the IAM API to obtain your Huawei Cloud account token. For details, see .

□ NOTE

For details about the IAM API endpoints, see . If the **scope** field in the request body is **domain**, use the endpoint with **Region** being **AII**. If the **scope** field is set to **project**, you can use the endpoint with **Region** being **AII**, or the endpoint of the region to which the project belongs.

In this step, no token needs to be transferred. You only need to add **Content- Type** to the header, and set its value to **application/json**. As shown in **Figure 11-2**, the **x-subject-token** field in the red box on the **Headers** tab is your account token.

Example request

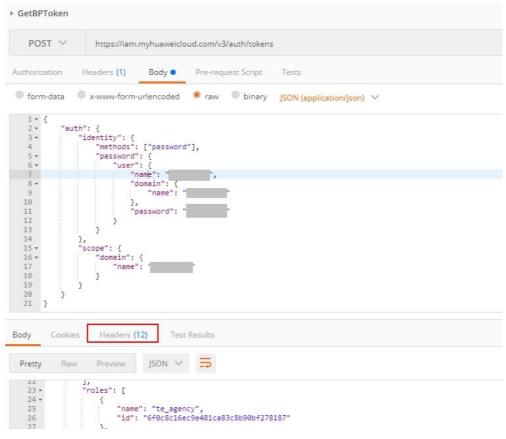


Figure 11-2 Obtaining partner's HUAWEI CLOUD account token

2. Invoke the IAM API to obtain the customer account token. For details, see . Add Content-Type and X-Auth-Token to the request header. Set Content-Type to application/json and X-Auth-Token to the BP token obtained in 1. As shown in Figure 11-3, the x-subject-token field in the red box on the Headers tab is the customer account token. A partner can use the customer's HUAWEI CLOUD account token to perform operations on resources in the customer's HUAWEI CLOUD account.

```
Example request:
```

https://iam.myhuaweicloud.com/v3/auth/tokens POST Authorization Headers (12) Body • Pre-request Script Tests • -"auth": { 2 · "identity": { --- "methods": [---- "assume_role" 6 --- "assume_role":-{", domain_name":-" 8 "agency_name": " 10} 11 "scope": { 12 --- "project": { 13 "name": "cn-north-1" 15 ---} 16 17 18 Body Cookies (2) Headers (16) Test Results (1/1) Pretty Visualize JSON V Raw Preview 1 "token": { "expires_at": "2023-08-04T03:09:26.087000Z", 3 4 "methods": ["assume_role"

Figure 11-3 Obtaining customer's HUAWEI CLOUD account token

Response body descriptions

readonly indicates that the account has the Tenant Guest permissions.
 te_admin indicates that the account has the Tenant Administrator permissions.

Figure 11-4 Permissions descriptions



Information marked in the red box in Figure 11-5 is the project ID.

Figure 11-5 Project ID

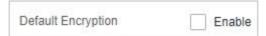
```
"project": {
   "domain": {
       "name": "_____",
       "id": "2aa29cbca17a4822abd096610e378ffa"
    "name": "cn-north-1",
   "id": "74610f3a5ad941998e91f076297ecf27"
"issued_at": "2017-12-26T11:01:56.228000Z",
"user": {
   "domain": {
       "name": "______",
       "id": "2aa29cbca17a4822abd096610e378ffa"
   "id": "84e3bb19e6e7403ab96f837e9c9a9a33
"assumed_by": {
       "domain": {
           "name": "[______]",
"id": "e5b8b8758ce94763a6e2f93b3b3ffcba"
```

11.5 File Subscription

Partners can subscribe to files in the Partner Center on HUAWEI CLOUD.

M NOTE

- •
- Do not enable **Default Encryption** when other tenants have obtained the permission to access your OBS bucket.

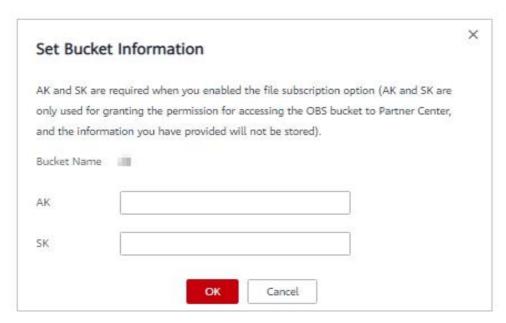


Procedure

- **Step 1** Use the partner account to log in to Partner Center. In the navigation pane on the left, choose > API Management.
- Step 2 Click File Subscription.
- **Step 3** If the partner has enabled real-name authentication, the bucket information is displayed on the **File Subscription** page.

Select the files to be subscribed to and click Save.

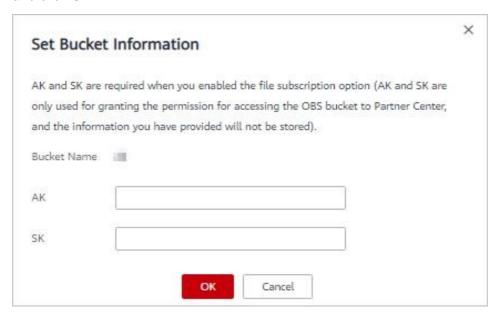
In the **Set Bucket Information** dialog box, enter the AK and SK of the OBS bucket and click **OK**.



Step 4 If the partner has not enabled real-name authentication, the bucket information is not displayed on the **File Subscription** page.

Enter the OBS bucket name, select the files to be subscribed to, and click **Save**.

In the **Set Bucket Information** dialog box, enter the AK and SK of the OBS bucket and click **OK**.





- AK and SK are mandatory.
- If your account is in arrears, pay off the outstanding fees in a timely manner.
 Otherwise, you cannot receive the subscription files. If you do not renew the
 subscription or pay off the outstanding fees after the retention period ends, the
 OBS bucket will be released, and the data stored in the bucket will be deleted.
 You are not allowed to subscribe files.

----End

11.6 How Do I Upload the Attachment for Real-Name Authentication?

If a partner's customers buy products from HUAWEI CLOUD Chinese mainland website and want to perform real-name authentication, customers need to upload pictures of the certificates for HUAWEI CLOUD to read to complete the real-name authentication.

Procedure

- **Step 1** Log in to the HUAWEI CLOUD Partner Center using your partner account. In the navigation pane on the left, choose **Support Center > API Management**.
- **Step 2** Click the **Configure** icon in the flowchart to switch to the **Configure** page. Enable **Upload Photos of Handheld ID Cards Required for Real-Name Authentication**.

Upload Photos of Handheld ID Cards Required for Real-Name Authentication

If your customers want to buy products from HUAWEI CLOUD China website, enable this function to allow uploading your customers' photos of handheld ID Cards to a specified bucket for HUAWEI CLOUD to read to complete the real-name authentication. How can I upload the photos of handheld ID Cards required for real-name authentication?

ON

M NOTE

Skip this step if **Upload Photos of Handheld ID Cards Required for Real-Name Authentication** has been enabled when partners **configure the access parameters**.

Step 3 For details about how to create an OBS bucket, see Creating a Bucket.

M NOTE

- A partner account cannot be used to purchase resources. Therefore, partners need to use a common HUAWEI CLOUD account to log in to the system and create a bucket.
- To change a bucket, partners need to go to the configuration modification page, cancel subscription to all files, and disable attachment uploading for real-name authentication. Then, the partners can add a bucket on the configuration modification page.
- Different partners cannot share the same bucket.
- Only OBS buckets purchased on Huawei Cloud in the **EU-Ireland** region can be used.

Step 4 Upload the attachment for real-name authentication to the OBS bucket created by the partner..

----End

11.7 Support for Discounts or Coupons

When a partner invokes the interface described in **8.4.2 Renewing Subscription to Yearly/Monthly Resources** to renew the subscription, it can configure automatic payment.

If the isAutoPay parameter is set to 1, automatic payment is enabled.
 Discounts and coupons can be used in automatic payment.
 For details about the payment rules, see Rule Description in .

11.8 Status Codes and Retry Policies

□ NOTE

To ensure reliability, the API call success rate should hit 99.99%. If errors arise during API access, it is recommended to implement a retry strategy. For short-term issues, retry up to three times within six hours. For persistent problems, attempt one retry at an interval of one minute over the same period.

Table 1-1 describes the HTTP status codes and retry policies.

Table 1-1 HTTP status codes and retry policies

Status Code	Message	Description	Retry Policy
100	Continue	Continue sending requests. This temporary response is used to inform the client that initial part of the request has been received and has not yet been rejected by the server.	Retry up to three times within six hours.
101	Switching Protocols	Switching protocols. The target protocol must be more advanced than the original one. For example, the protocol in use is switched to a later version of HTTP.	Retry is not performed.
200	OK	The request was successfully processed. It is generally used for GET and POST requests.	Retry is not performed.
201	Created	The request has been fulfilled and has resulted in one or more new resources being created.	Retry is not performed.
202	Accepted	The request has been accepted for processing, but the processing has not been completed.	Retry is not performed.
203	Non- Authoritative Information	The request was successful but the response has been modified by a transforming proxy.	Retry is not performed.
204	NoContent	The server has successfully fulfilled the request, but did not return any response body. The status code is returned in response to an HTTP OPTIONS request.	Retry is not performed.
205	Reset Content	The server has fulfilled the request and requires the client to reset the content.	Retry is not performed.
206	Partial Content	The server has fulfilled a range GET request.	Retry up to

Status Code	Message	Description	Retry Policy
			three times within six hours
300	Multiple Choices	There are multiple options for the requested resource. The response contains a list of resource characteristics and addresses from which the customer or customer agent (such as a browser) can choose the most appropriate one.	Retry is not performed.
301	Moved Permanently	The requested resource has been assigned with a new permanent URI. This new URI is contained in the response.	Retry is not performed.
302	Found	The requested resource resides temporarily under a different URI.	Retry is not performed.
303	See Other	The response to the request can be found under a different URI. It is expected to be accessed using a GET or POST method.	Retry is not performed.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, it does not return any resources.	Retry is not performed.
305	Use Proxy	The requested resource must be accessed through a proxy.	Retry is not performed.
306	Unused	This HTTP status code is no longer used.	Retry is not performed.
400	BadRequest	Invalid request. Modify the request and retry.	Retry is not performed.
401	Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.	Retry up to three times within six hours
402	Payment Required	This status code is reserved for future use.	Retry is not performed.
403	Forbidden	The request has been rejected. The server has received and understood the request; yet it refused to respond, because the request is set to deny access. Do not retry the request before modification.	Retry is not performed.
404	NotFound	The requested resource could not be found. Modify the request and retry.	Retry is not performed.
405	MethodNotAll owed	The request contains one or more methods not supported by the resource. Modify the request and retry.	Retry is not performed.
406	Not Acceptable	The server cannot fulfill the request according to the content characteristics of the request.	Retry is not performed.
407	Proxy Authentication	This status code is similar to 401, but the	Retry is not

Status Code	Message	Description	Retry Policy
	Required	client must be authenticated using a proxy.	performed.
408	Request Time- out	The client does not produce a request within the time that the server was prepared to wait. The client may repeat the request without modifications at any time later.	Attempt one retry at an interval of one minute within six hours.
409	Conflict	The request cannot be processed due to a conflict. The resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.	Retry is not performed.
410	Gone	The requested resource is no longer available. The requested resource has been deleted permanently.	Retry is not performed.
411	Length Required	The server fails to process the request which does not contain the Content-Length header field.	Retry is not performed.
412	Precondition Failed	The server does not meet one of the requirements that the requester puts on the request.	Retry is not performed.
413	Request Entity Too Large	The request is larger than that the server can process. The server may close the connection to prevent the client from continuously sending the request. If the server cannot process the request temporarily, the response will contain a Retry-After header field.	Retry is not performed.
414	Request-URI Too Large	The Request-URI is too long for the server to process.	Retry is not performed.
415	Unsupported Media Type	The server cannot process the media format in the request.	Retry is not performed.
416	Requested range not satisfiable	The requested range is invalid.	Retry is not performed.
417	Expectation Failed	The server fails to meet the requirements of the Expect request header field.	Retry is not performed.
422	Unprocessable Entity	The request is well-formed but is unable to be processed due to semantic errors.	Retry is not performed.
429	TooManyRequ ests	Too many requests have been made within the allowed time. In this case, the client should retry after the time period specified in the Retry-After response header.	Attempt one retry at an interval of one minute within six hours.
500	InternalServerE rror	The server is able to receive the request but unable to understand it.	Attempt one retry at an interval of one minute

Status Code	Message	Description	Retry Policy
			within six hours.
501	Not Implemented	The server does not support the function required to fulfill the request.	Retry is not performed.
502	Bad Gateway	The server was acting as a gateway or proxy and received an invalid request from a remote server.	Retry is not performed.
503	ServiceUnavail able	The requested service is invalid. Modify the request and retry.	Retry is not performed.
504	ServerTimeout	The request cannot be fulfilled within a given amount of time. The response will reach the client only if the request carries a timeout parameter.	Attempt one retry at an interval of one minute within six hours.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.	Retry is not performed.

11.9 Error Codes

Function Description

This section describes the error code and message for the operational APIs provided by Huawei Cloud for partners.

NOTICE

- 4xx: This class of HTTP status code is intended for situations in which the error seems to have been caused by the client, for example, the request contains bad syntax or incorrect parameters. You must ensure the request is correct.
- 5xx: This class of HTTP status code is intended for cases in which the Huawei Cloud server is aware that it has encountered an error or is otherwise incapable of performing the request. In this case, contact Huawei Cloud customer service.

Error Code Structure Format

```
"error_code": "xxxx",
"error_msg": "xxxx"
```

Error Codes

Table 11-3 Error codes

Status Code	Error Code	Error Message	Description
200	CBC.0000	Success.	Succeeded.
403	CBC.0156	Access denied. The customer does not belong to the website you are now at.	Access failed. You are not a client of this website.
400	CBC.180000 16	Insufficient permissions. Contact your associated partner.	Insufficient permissions. Contact your partner.
400	CBC.180000 48	Too many independent accounting members. Specify a member account for query.	Too many independent accounting members. Specify a member account for query.
200	CBC.3002	The resource has been locked.	The resource has been locked.
200	CBC.3006	Unsupported cloud service type.	Unsupported cloud service type.
200	CBC.3016	Expired resources exist.	Expired resources exist.

Status Code	Error Code	Error Message	Description
200	CBC.300500 07	It is not a primary resource, and the renewal quotation is not allowed.	Renewal price inquiry is not available for non-primary resources.
200	CBC.300500 08	The period type or number of periods for the resource does not exist.	The period type or the number of periods for the resource is unavailable.
200	CBC.300500 09	The resources do not exist or has been deleted due to expiration.	The resources have expired and been deleted or do not exist.
200	CBC.300500 10	This operation is not allowed because some resources are included in the unpaid orders.	Some resources are included in your orders to be paid. The operation is not supported.
200	CBC.300500	The resources are being unsubscribed from or changed.	Resources are being unsubscribed from or changed.
200	CBC.300500 13	The product cannot be renewed.	Renewal not supported.
200	CBC.3106	The order status has changed and no payment can be made.	The order status has changed and no payment can be made.
200	CBC.3112	The coupon or stored-value card has been used.	The coupon or stored-value card has been used.
200	CBC.3124	Resources have been unsubscribed from.	Resources have been unsubscribed from.
200	CBC.3144	Operation not supported. There is an order in progress for this resource.	You have orders in progress and cannot perform the current operation.

Status Code	Error Code	Error Message	Description
200	CBC.3128	The resource does not have renewed periods or its renewed periods have taken effect, and the renewal periods cannot be unsubscribed from.	The resource does not have renewed periods or its renewed periods have taken effect, and the renewal periods cannot be unsubscribed from.
200	CBC.3141	Cloud service quota or capacity is insufficient, or the resource specifications have changed.	Cloud service quota or capacity is insufficient, or the resource specifications have changed.
200	CBC.3155	Insufficient enterprise project fund quota, or invalid project.	Insufficient enterprise project fund quota, or invalid project.
200	CBC.3162	The add-on package you purchased does not meet payment requirements.	The add-on package you purchased does not meet payment requirements.
200	CBC.3185	The cloud service can only be unsubscribed from as a whole.	The cloud service can only be unsubscribed from as a whole.
200	CBC.3638	Subscription to bandwidth add-on packages cannot be renewed.	Subscription to bandwidth add- on packages cannot be renewed.
200	CBC.3640	Bandwidth add-on packages cannot be unsubscribed from.	Bandwidth add-on packages cannot be unsubscribed from.
200	CBC.5005	The customer is being authenticated by HUAWEI CLOUD.	The customer is being authenticated by HUAWEI CLOUD.

Status Code	Error Code	Error Message	Description
200	CBC.500000 45	No frequent operations are allowed for the same coupon quota.	No frequent operations are allowed for the same coupon quota. You are in the process of allocating coupon quotas. Wait until the process ends.
200	CBC.5006	The customer type (individual/ enterprise) is different from the customer type stored in HUAWEI CLOUD.	The customer type (individual/ enterprise) is different from the customer type stored in HUAWEI CLOUD.
200	CBC.5007	The subscribed products must belong to the same region.	The subscribed products must belong to the same region.
200	CBC.5020	Partial failure.	Partial failure.
200	CBC.5023	The account type does not match the association type.	The account type does not match the association type.
200	CBC.5024	This API cannot be invoked because the association type of the customer is incorrect.	This API cannot be invoked because the association type of the customer is incorrect.
200	CBC.5041	Resources in this order have been unsubscribed.	Resources in this order have been unsubscribed.
200	CBC.5042	Resources cannot be found.	Resources cannot be found.
200	CBC.6001	Required param resource id or rilnstanceld is null or empty.	The resource ID or reserved instance ID is empty.
200	CBC.6055	Calculate result exceeds max value.	The queried amount exceeds the upper limit.
200	CBC.6006	The required product cannot be found.	The required product cannot be found.

Status Code	Error Code	Error Message	Description
400	CBC.0100	parameter error.	Invalid parameter.
400	CBC.0101	Invalid parameter.	Invalid parameter.
400	CBC.180000 14	Inactive Cost Management.	Cost Center not enabled.
400	CBC.180000 53	Insufficient permissions. Contact your enterprise master.	Insufficient permissions. Contact your enterprise master.
400	CBC.300000 10	Invalid order (maybe the order does not exist), unable to operate.	Operation not allowed because the order is invalid or does not exist.
400	CBC.300000 67	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.
400	CBC.300000 52	The resource or account has been already frozen.	Operation not allowed. Your resource has been frozen.
400	CBC.300000 53	Unsubscription not supported. The billing mode of the resource is Savings Plans.	Unsubscription not supported. The billing mode of the resource is Savings Plans.
400	CBC.300100 35	resource deleted.	Resource deleted.
400	CBC.300100 36	Renewal is only supported for primary resources.	Renewal is only supported for primary resources.
400	CBC.300100 69	The renewal period does not exist.	The renewal period does not exist.
400	CBC.300500 06	Automatic order payment failed.	Automatic order payment failed.
400	CBC.300500 12	Duplicate resource ID.	There are duplicate resource IDs.

Status Code	Error Code	Error Message	Description
400	CBC.5001	You has not been a partner.	You are not a partner yet.
400	CBC.5002	The customer does not exist.	The customer does not exist.
400	CBC.5003	Insufficient balance.	Insufficient balance.
400	CBC.5004	You do not have the operation permission to the customer.	You do not have the operation permission to the customer.
200	CBC.500000 53	Unfreezing customer account failed. Selected object and the frozen object do not match.	Unfreeze customer account failed. Selected object and the frozen object do not match.
400	CBC.500100 59	Customer association not supported for distributors.	Customer association not supported for distributors.
400	CBC.500100 85	Customer association not allowed. The account of this partner has been restricted.	Customer association not allowed. The account of this partner has been restricted.
400	CBC.500100 86	Customer association not allowed. This partner is a Huawei Cloud reseller, and the account of its associated distributor has been restricted.	Customer association not allowed. This partner is a Huawei Cloud reseller, and the account of its associated distributor has been restricted.
200	CBC.703000 07	Account frozen. To change the frozen scope, unfreeze the account first.	Changing freezing objects failed. Unfreeze this account first.

Status Code	Error Code	Error Message	Description
400	CBC.706000 26	Huawei Cloud cannot review the information you submitted for real-name authentication. Contact your account manager.	Sorry, Huawei Cloud cannot review your real-name authentication information. Please contact your account manager for assistance.
400	CBC.7151	Expired verification code.	Expired verification code.
400	CBC.7152	Incorrect verification code.	Incorrect verification code.
400	CBC.7188	The customer has passed real-name authentication or is being reviewed.	This customer has completed real-name authentication or is currently being authenticated.
400	CBC.7191	The number of real-name authentication times of the customer exceeds the upper limit.	The number of real-name authentication times of the customer exceeds the upper limit.
400	CBC.7202	Real-name authentication failed.	Real-name authentication failed.
400	CBC.7219	Real-name authentication information does not match the facial image.	Real-name authentication information does not match the facial image.
400	CBC.7253	The picture of the ID card is invalid or blurred.	The picture of the ID card is invalid or blurred.
400	CBC.7254	Currently, registration with HUAWEI CLOUD is not available to users in this country.	Currently, registration with HUAWEI CLOUD is not available to users in this country.
400	CBC.7255	The ID information or mobile number is incorrect.	The ID information or mobile number is incorrect.

Status Code	Error Code	Error Message	Description
400	CBC.7256	The legal entity information is incorrect.	The legal entity information is incorrect.
400	CBC.7257	The enterprise information is incorrect.	The enterprise information is incorrect.
400	CBC.7265	You are a partner and cannot be authenticated as an individual using your real name.	You are a partner and cannot be authenticated as an individual using your real name.
400	CBC.7267	The member account is being associated with a master account and cannot perform realname authentication again.	The member account is being associated with a master account and cannot perform real-name authentication again.
400	CBC.7281	Renewal, payment, or unsubscription not supported. Your account has been frozen.	Renewal, unsubscription, or payment not supported. Your account has been frozen.
400	CBC.990000 00	You do not have the operation permission to the customer.	You do not have the operation permission to the customer.
400	CBC.990000 04	An exception occurred when the customer authorized rights to the partner.	An exception occurred when the customer authorized rights to the partner.
400	CBC.990000 26	Incorrect verification code.	Incorrect verification code.
400	CBC.990000 27	Expired verification code.	Expired verification code.
400	CBC.990000 28	The email address already exists.	Invalid email address. Email already in-use.

Status Code	Error Code	Error Message	Description
400	CBC.990000 31	Invalid DomainName.	Invalid DomainName.
400	CBC.990000 32	Invalid email address.	Invalid email address.
400	CBC.990000 34	Currently, registration with HUAWEI CLOUD is not available to users in this country.	Currently, registration with HUAWEI CLOUD is not available to users in this country.
400	CBC.990000 35	This customer has not been associated with you.	You are not a customer of a partner yet.
400	CBC.990000 36	Invalid password.	Invalid password.
400	CBC.990000 37	You do not have the permission to operate this Huawei Cloud reseller.	You do not have the permission to operate this Huawei Cloud reseller.
400	CBC.990000 38	The account name already exists.	The account name already exists.
400	CBC.990000 39	xAccountId exists.	Duplicate xAccountId.
400	CBC.990000 46	Insufficient budget.	Insufficient budget.
400	CBC.990000 49	BindType cannot be resale.	The customer associated in Reseller model has no account balance.
400	CBC.990000 51	Customer creation failed because this mobile number or email address has been preregistered by Huawei.	Customer creation failed because this mobile number or email address has been preregistered by Huawei.
400	CBC.990000 55	Referral model not supported.	Referral model not supported.

Status Code	Error Code	Error Message	Description
400	CBC.990000 82	You have exceeded the maximum verification code requests allowed.	Maximum verification code requests reached.
400	CBC.990000 88	We have received your payment and it is currently being processed. Please do not attempt to make the payment again.	Your payment is being processed.
400	CBC.990000 89	The current operation can only be performed on combined orders.	Operation failed. Sub-orders of a combine order cannot be processed independently.
400	CBC.990000 92	Incorrect subscription period.	Incorrect subscription period.
400	CBC.990000 99	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.
400	CBC.990001	Incorrect format of the certificate attachment the customer submitted for real-name authentication.	Incorrect format of the certificate attachment the customer submitted for realname authentication.
400	CBC.990030 04	The resource has dependencies.	The resource has dependencies.
400	CBC.990030 12	The resource ID does not exist.	The resource ID does not exist.
400	CBC.990030 16	The resources have expired and been deleted or do not exist.	The resources have expired and been deleted or do not exist.

Status Code	Error Code	Error Message	Description
400	CBC.990031 00	This operation is not allowed because some resources are included in your orders to be paid.	This operation is not allowed because some resources are included in your orders to be paid.
400	CBC.990031 06	The order status has changed and no payment can be made.	The order status has changed and no payment can be made.
400	CBC.990031 08	Unavailable discount.	Unavailable discount.
400	CBC.990031	The order has not been paid before the expiration time. Please resubmit the order.	The order has not been paid before the expiration time. Please re-submit the order.
400	CBC.990031	The coupon or stored-value card has been used.	The coupon or stored-value card has been used.
400	CBC.990031 15	An error occurred. Try again later.	An error occurred. Try again later.
400	CBC.990031 16	The restriction to selected coupon regulates that the coupon cannot be used with the discount at the same time.	The restriction to selected coupon regulates that the coupon cannot be used with the discount at the same time.

Status Code	Error Code	Error Message	Description
400	CBC.990031	The selected discount is less than the minimum discount rate configured for the selected coupon. Note: For example, if the minimum discount rate configured for a coupon is 90% and the selected discount is less than 90% in all order lines, the discount cannot be used.	The selected discount is less than the minimum discount rate configured for the selected coupon. Note: For example, if the minimum discount rate configured for a coupon is 90% and the selected discount is less than 90% in all order lines, the discount cannot be used.
400	CBC.990031 24	Resources have been unsubscribed from.	Resources have been unsubscribed from.
400	CBC.990031 28	The resource does not have renewed periods or its renewed periods have taken effect, and the renewal periods cannot be unsubscribed from.	The resource does not have renewed periods or its renewed periods have taken effect, and the renewal periods cannot be unsubscribed from.
400	CBC.990031 41	Cloud service quota or capacity is insufficient, or the resource specifications have changed.	Cloud service quota or capacity is insufficient, or the resource specifications have changed.
400	CBC.990031	Operation not supported. There is an order in progress for this resource.	You have orders in progress and cannot perform the current operation.
400	CBC.990031 47	Discounts and cash coupons cannot be used together.	Discounts and cash coupons cannot be used together.

Status Code	Error Code	Error Message	Description
400	CBC.990031 51	This discount cannot be used together with other discounts.	This discount cannot be used together with other discounts.
400	CBC.990031 54	The sum of the existing and renewal durations has exceeded the maximum. Select another renewal duration.	Subscription plus renewal too long. Select shorter renewal.
400	CBC.990031 55	Insufficient enterprise project fund quota, or invalid project.	Insufficient enterprise project fund quota, or invalid project.
400	CBC.990031 56	Coupons applicable to Marketplace products cannot be used together with dedicated coupons.	Coupons applicable to KooGallery products cannot be used together with dedicated coupons.
400	CBC.990031 62	The payment time must be earlier than the specified effective time.	The payment time must be earlier than the specified effective time.
400	CBC.990031 85	The cloud service can only be unsubscribed from as a whole.	The cloud service can only be unsubscribed from as a whole.
400	CBC.990031 98	Insufficient organization budget.	Insufficient budget of the organization.
400	CBC.990036 02	Automatic renewal is not supported for expired or frozen resources.	Automatic renewal is not supported for expired or frozen resources.
400	CBC.990036 05	Theautomatic renewal has been canceled. The current operation cannot be performed.	Automatic renewal has been canceled and you cannot perform the current operation.

Status Code	Error Code	Error Message	Description
400	CBC.990036 09	The billing mode of this product type cannot be converted into pay-per-use.	The billing mode of this product type cannot be converted into pay-per-use.
200	CBC.990036 10	The billing mode of resources in the grace or retention period cannot be converted into pay-per-use.	The billing mode of resources in the retention period cannot be converted into pay-per-use.
400	CBC.990036 11	The billing mode of pay-per-usage packages cannot be converted into pay-per-use.	The billing mode of pay-per- usage packages cannot be converted into pay-per-use.
400	CBC.990036 22	The billing mode of solutions cannot be converted into pay-per-use.	The billing mode of solutions cannot be converted into payper-use.
400	CBC.990036 23	Cannot be converted into the pay-per-use billing mode because there are transactions being processed.	Cannot be converted into the pay-per-use billing mode because there are transactions being processed.
400	CBC.990036 24	Cannot be converted into the pay-per-use billing mode because the resource has been frozen due to security reasons.	Cannot be converted into the pay-per-use billing mode because the resource has been frozen due to security reasons.
400	CBC.990036 26	Cannot be converted into the pay-per-use billing mode because this account has been frozen.	Cannot be converted into the pay-per-use billing mode because this account has been frozen.
400	CBC.990036 31	Unsubscribed,dele ted, and released resources cannot be renewed.	Resources that are being unsubscribed, deleted, or released cannot be renewed.

Status Code	Error Code	Error Message	Description
400	CBC.990036 34	Resources in discount packages must be renewed as a whole and cannot be renewed together with other resources.	Resources in discount packages must be renewed as a whole and cannot be renewed together with other resources.
400	CBC.990036 38	Subscription to bandwidth add-on packages cannot be renewed.	Subscription to bandwidth add- on packages cannot be renewed.
400	CBC.990036 43	Unsubscription not allowed for cloud services that have been invoiced.	For cloud services for which invoices have been issued, unsubscription is not supported.
400	CBC.990036 45	Unsubscription not supported for the service type of the resource.	Unsubscription not supported for this cloud service type.
400	CBC.990036 47	Unsubscription not supported for this pay-per-use package.	Unsubscription not supported for this pay-per-use package.
400	CBC.990036 49	Unsubscription not supported for cloud services in trial use.	Unsubscription not supported for cloud services in trial use.
400	CBC.990036 50	Unsubscription not supported for this cloud service from the KooGallery.	Unsubscription not supported for this cloud service in KooGallery.
400	CBC.990036 51	Unsubscription not supported. An operation associated with this instance is in progress.	Unsubscription not supported. An operation associated with this instance is in progress.
400	CBC.990036 52	Unsubscription is not supported for DevCloud packages.	Unsubscription is not supported for DevCloud packages.

Status Code	Error Code	Error Message	Description
400	CBC.990036 54	This renewal period cannot be canceled because it includes an addon bandwidthpackag e.	If there is a bandwidth add-on package, you cannot unsubscribe from the renewal period.
400	CBC.990036 56	Operation not allowed. Your account has been frozen.	Operation not allowed. Your resource has been frozen.
400	CBC.990040 01	The template does not exist.	The template does not exist.
400	CBC.990040 02	Failed to generate the verification code.	Failed to generate the verification code.
400	CBC.990040 03	The verification code is successfully generated but fails to be sent.	The verification code is successfully generated but fails to be sent.
400	CBC.990040 04	Empty email address./Invalid format.	Empty email address./Invalid format.
400	CBC.990040 05	Empty mobile number./Invalid format.	Empty mobile number./Invalid format.
400	CBC.990040 08	Invalid verification code.	Invalid verification code.
400	CBC.990040 09	The verification code is available, but the number of verification failures is greater than 3.	The verification code is available, but the number of verification failures is greater than 3.
400	CBC.990040 10	The verification code entered is incorrect.	The verification code entered is incorrect.

Status Code	Error Code	Error Message	Description
400	CBC.990040 15	The number of verification code sending times has reached the upper limit (15 times per hour, 60 times per day).	The number of verification code sending times has reached the upper limit (15 times per hour, 60 times per day).
400	CBC.990050 03	Your balance is insufficient.	Insufficient balance.
400	CBC.990050 10	Orders in this state cannot be canceled.	Orders in this state cannot be canceled.
400	CBC.990050 36	The customer does not support payment via interface.	The customer does not support payment via interface.
400	CBC.990050 24	This API cannot be invoked because the association type of the customer is incorrect.	This API cannot be invoked because the association type of the customer is incorrect.
400	CBC.990050 26	The order is not a degrade or unsubscription order.	The order is not a degrade or unsubscription order.
400	CBC.990050 30	The partner did not complete real-name authentication or bucket authentication.	The partner did not complete real-name authentication or bucket authentication.
400	CBC.990050 35	This API cannot be used by a sandbox account.	This API cannot be used by a sandbox account.
400	CBC.990050 42	The resource cannot be found or unsubscribed from.	The resource cannot be found or unsubscribed from.
400	CBC.990060 06	Product not found.	Product not found.

Status Code	Error Code	Error Message	Description
400	CBC.990060 16	Failed to query coupon information.	Failed to query coupon information.
400	CBC.990060 17	Failed to query customer details.	Failed to query customer information.
400	CBC.990060 24	Failed to query product information.	Failed to query product information.
400	CBC.990060 50	Incorrect usage measurement unit.	Incorrect usage unit
400	CBC.990060 55	The queried amount exceeds the upper limit.	The queried amount exceeds the upper limit.
400	CBC.990060 66	An error occurred during the query of the fee information.	An error occurred during the query of the fee information.
400	CBC.990060 73	Project not found.	Project not found.
400	CBC.990060 74	The billing item does not exist.	The billing item does not exist.
400	CBC.990060 93	Failed to obtain tax rate information.	Failed to obtain the tax rate.
400	CBC.990071 88	The customer has passed real-name authentication or is being reviewed.	This customer has completed real-name authentication or is currently being authenticated.
400	CBC.990071 89	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.
400	CBC.990071 91	The number of real-name authentication times of the customer exceeds the upper limit.	The number of real-name authentication times of the customer exceeds the upper limit.

Status Code	Error Code	Error Message	Description
400	CBC.990071 93	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.
400	CBC.990072 53	The picture of the ID card is invalid or blurred.	The picture of the ID card is invalid or blurred.
400	CBC.990072 56	The legal entity information is incorrect.	The legal entity information is incorrect.
400	CBC.990072 57	The enterprise information is incorrect.	The enterprise information is incorrect.
400	CBC.990072 61	This bank is not supported. Please try other bank cards.	The bank card is not supported. Try another bank card.
400	CBC.990072 65	Other errors.	Other errors.
400	CBC.990072 67	The member account is being associated with a master account and cannot perform realname authentication again.	The member account is being associated with a master account and cannot perform real-name authentication again.
400	CBC.990080 40	Too many attempts.	Too many attempts.
400	CBC.990080 56	The maximum number of transactions allowed today has been reached.	The maximum number of transactions allowed today has been reached.
401	CBC.0154	Invalid or expired token.	Invalid or expired token.
403	CBC.0150	Invalid operation.	Invalid operation.
403	CBC.0151	Access denied.	Access denied.

Status Code	Error Code	Error Message	Description
403	CBC.0155	The request was a valid request, but the server is refusing to respond to it.	The request was a valid request, but the server is refusing to respond to it.
429	CBC.0250	Connection request control triggered.	Connection request control triggered.
500	CBC.0999	Other errors.	Other errors.
500	CBC.4001	The template does not exist.	The template does not exist.
500	CBC.4002	Failed to generate the verification code.	Failed to generate the verification code.
500	CBC.4003	The verification code is successfully generated but fails to be sent.	The verification code is successfully generated but fails to be sent.
500	CBC.4004	The email address is empty.	The email address is empty.
500	CBC.4005	Empty mobile number./Invalid format.	Empty mobile number/Invalid format.
500	CBC.4006	Failed to verify the mobile number.	Failed to verify the mobile number.
500	CBC.4007	Failed to verify the email address.	Failed to verify the email address.
500	CBC.4008	Invalid verification code.	Invalid verification code.
500	CBC.4009	The verification code is available, but the number of verification failures is greater than 3.	The verification code is available, but the number of verification failures is greater than 3.

Status Code	Error Code	Error Message	Description
500	CBC.4015	The number of verification code sending times has reached the upper limit.	The number of verification code sending times has reached the upper limit.
500	CBC.5012	The account name already exists.	The account name already exists.
500	CBC.5013	The email address already exists.	The email address already exists.
500	CBC.5014	The mobile number already exists.	The mobile number already exists.
500	CBC.5015	Invalid account name.	Invalid account name.
500	CBC.5016	Invalid email address.	Invalid email address.
400	CBC.5017	Invalid mobile number.	Invalid mobile number.
500	CBC.5018	Duplicate xAccountId.	Duplicate xAccountId .
500	CBC.5019	The number of customers exceeds the license limit.	The number of customers exceeds the license limit.
500	CBC.5025	An exception occurred when the customer authorized rights to the partner.	An exception occurred when the customer authorized rights to the partner.
500	CBC.7001	Failed to allocate money to the member account because the primary account is not associated with the subaccount.	Failed to allocate money to the member account because the primary account is not associated with the sub-account.
500	CBC.7004	The initiated service operation does not meet the service check item requirement.	The initiated service operation does not meet the service check item requirement.

Status Code	Error Code	Error Message	Description
500	CBC.7181	The validity period of the credit line allocated or recovered has expired.	The credit limit allocated to or withdrawn from the customer account has expired.
500	CBC.7189	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.
500	CBC.7193	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.
500	CBC.7228	Invalid password.	Invalid password.
500	CBC.990000 50	Query for the result of associating partner and its sub-customer timed out. Use the API for querying customers to check the association result.	Query for the result of associating partner and its subcustomer timed out. Use the API for querying customers to check the association result.