

# Customer Operation Capabilities

## API Reference

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# 1 Change History

Description	Released On
<p>This issue is the third official release.</p> <p>This release incorporates the following changes:</p> <ul style="list-style-type: none"><li>• Added the <a href="#">Querying Coupons</a> API for customers to query coupon-related information.</li><li>• Added the <a href="#">Querying Resource Packages</a> API for customers to check resource packages in self-built platforms.</li><li>• Added the <a href="#">Viewing Resource Package Usage</a> API for customers to check resource package usage in self-built platforms.</li><li>• Added the <a href="#">Querying Resource Package Usage Details</a> API for customers to check details of resource package usage in self-built platforms.</li></ul>	2024-05-28
<p>This issue is the second official release.</p> <p>This release incorporates the following change:</p> <p>Added the API for <a href="#">querying the renewal price of a yearly/monthly resource</a>. Customers can set search options to query the renewal price of yearly/monthly resources on their own platforms.</p>	2024-03-18
<p>This issue is the first official release.</p>	2022-12-29

# 2 Customer Operations Capability API

Huawei Cloud provides the operation capabilities for customers to manage products, accounts, transactions, bills, and invoices on the customer platform.

**Table 2-1** APIs and descriptions

Scenario	Sub-Scenario	API Name	Description
Managing products	Querying product information	<a href="#">Querying Cloud Service Types</a>	This API is used to query cloud service types on the customer self-built platform.
		<a href="#">Querying Resource Types</a>	This API is used to query the resource types on the customer self-built platform.
		<a href="#">Querying Resources by Cloud Service Type</a>	This API is used to query the resource type code and name by associated cloud service on the self-built platform and to query the price of a pay-per-use or yearly/monthly product.
		<a href="#">Querying Usage Types</a>	This API is used to query resource usage types on the customer self-built platform.
		<a href="#">Querying Measurement Units</a>	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 self-built platform.
		<a href="#">Querying the Measurement Unit Number System</a>	This API is used to query the measurement unit number system on the self-built platform.

Scenario	Sub-Scenario	API Name	Description
	Querying the price of a product	<a href="#">Querying the Price of a Pay-Per-Use Product</a>	Customers can query the price of a pay-per-use product by criteria on the self-built platform.
		<a href="#">Querying the Price of a Yearly/Monthly Product</a>	Customers can use this API to query prices of yearly/monthly products for new subscriptions on their platforms.
Managing accounts	-	<a href="#">Querying the Account Balance</a>	This API can be used to query the account balance for a customer.
Transaction management	Coupon management	<a href="#">Querying Coupons</a>	Customers can query information about their coupons.
	Managing yearly/monthly orders	<a href="#">Querying orders</a>	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 href="#">Querying order details</a>	Customers can view order details on the self-built platform.
		Querying Available Coupons for an Order	A customer can invoke this API to view the coupons available for an order on the self-built platform.
		<a href="#">Querying Available Discounts of an Order</a>	A customer can query available discounts when paying an order on the self-built platform.
		<a href="#">Paying Yearly-Monthly Product Orders</a>	A customer can invoke this API to pay yearly-monthly product orders in the pending payment status.
		<a href="#">Canceling orders in the pending payment status</a>	A customer can invoke this API to cancel orders in the pending payment status.

Scenario	Sub-Scenario	API Name	Description
		<b>Querying the Amount of Unsubscription Orders</b>	A customer can query the resources and original orders of the unsubscription amount for an unsubscription or degrade order on the partner sales platform.
	Managing yearly/monthly resources	<b>Querying customer's yearly/monthly resources</b>	A customer can query one or all yearly/monthly resources on the self-built platform.
	<b>Renewing subscription to yearly/monthly resources</b>	A customer can renew subscription to yearly/monthly resources on the self-built platform.	
	<b>Unsubscribing from yearly/monthly resources</b>	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.	
	<b>Enabling automatic subscription renewal for yearly/monthly resources</b>	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.	
	<b>Disabling automatic subscription renewal for yearly/monthly resources</b>	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.	
	<b>Enabling/Canceling the Change from Yearly/Monthly to Pay-per-Use upon Expiration</b>	A customer can change the billing mode of resources from yearly/monthly to pay-per-use after the resources expire. The pay-per-use mode takes effect upon a yearly/monthly expiration.	



Scenario	Sub-Scenario	API Name	Description
	Resource package management	<a href="#">Querying Resource Packages</a>	A customer can query resource packages on the self-built platform.
		<a href="#">Querying the Resource Usage</a>	Customers can query the resource package usage on the self-built platform by resource.
		<a href="#">Querying Resource Package Usage Details</a>	Customers can query the resource usage details on their self-built platform.
Managing bills	Managing bills	<a href="#">Querying Summary Bills</a>	This API can be used to query the expenditure summary bills of a customer on the self-built platform. The bills summarize the summary data by month.
		<a href="#">Viewing Resource Usage Details</a>	This API can be used to query usage details of each resource for a customer on the self-built platform.
		<a href="#">Viewing Resource Expenditures</a>	This API can be used to query expenditures of each resource for a customer on the self-built platform.
Managing costs	Managing costs	<a href="#">Querying Cost Data</a>	This API is used to query the cost data on the self-built platform.

# 3 API Invoking Methods

---

## 3.1 RESTful API

The customer platform can invoke RESTful APIs provided by HUAWEI CLOUD. Alternatively, customers can switch from the customer 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 <b>HTTPS</b> .

Parameter	Description
Endpoint	<p>Specifies the domain name or IP address of the server bearing the REST service endpoint.</p> <p>The endpoint of the customer operation capability API is <b>bss.myhuaweicloud.eu</b>.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>This endpoint is a global endpoint and can be used for all regions in Huawei Cloud (European Website).</li> <li>TLS 1.2 supported.</li> </ul>
resource-path	<p>Resource path, that is, the API access path. Obtain the path from the URI of the API. For example, the <b>resource-path</b> of the API for creating a customer is <b>/v2/partners/sub-customers</b>.</p>
query-string	<p>Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "<i>Parameter name=Parameter value</i>". For example, <b>?limit=10</b> indicates that a maximum of 10 data records will be displayed.</p>

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 <b>https</b> is <b>443</b> .	No This field is mandatory only when AK/SK is used for authentication.	.myhuaweicloud.com bss.myhuaweicloud.eu or bss.myhuaweicloud.eu:443

Field	Description	Mandatory	Example
Content-Type	Specifies the request body MIME type. You are advised to use the default value <b>application/json</b> . 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 authentication.	The following is part of an example token: MIIPAgYJKoZlhvcNAQc-CoII08zCCDu8CAQExDTA LBglghkgBZQMEAgEwgg 1QBgkqhkiG9w0BBwGgg g1BBIINPXsidG9rZ

 **NOTE**

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: MIIPAgYJKoZlhvcNAQcCo...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: MIIPAgYJKoZlhcNAQcCo...ggg1BBIINPXsidG9rZ

{
  "domain_name": "test",
  "email": "xxx@huawei.com",
  "verification_code": "253xxx",
  "domain_area": "IE",
  "xaccount_id": "35reyxxxx",
  "xaccount_type": "xxx_IDP",
  "password": "xxxxxxx",
  "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.

### Token Authentication

#### 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 [Constructing Requests](#), the process of calling the [API for obtaining a user token](#) is described as an example. After obtaining the 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 customer token, see [Obtaining a User Token](#).

### AK/SK Authentication

#### NOTE

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](#).

 **NOTE**

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

Temporary Headers (8)	
KEY	VALUE
X-Frame-Options	SAMEORIGIN
Server	SecAs
Cache-Control	no-cache, no-store, must-revalidate
X-Content-Type-Options	nosniff
wise_spanid	1-1
wise_traceid	1017999-1591056752028-914815
Expires	Thu, 01 Jan 1970 00:00:00 GMT
Pragma	no-cache
X-XSS-Protection	1; mode=block
Date	Mon, 08 Jun 2020 01:44:16 GMT
Content-Type	application/json; charset=utf-8
content-length	71

### (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 API Access Permission (Customer)

A customer needs to obtain permissions before accessing APIs. Customers' API access permissions can be granted in IAM. Supported actions of APIs are listed in



the following table. The API cannot be accessed if one of its actions is not supported.

For more information, visit [Customer Operations Capability API](#).

 **NOTE**

- For APIs not listed in the table, fine-grained permission verification is not required and all customer accounts can access them.
- Authentication of system-defined roles is not supported, but policy authentication is. For details about the configuration guide, see [Creating a User Group and Assigning Permissions](#).

**Table 3-4**

Scenario	Sub-Scenario	API	URL	Permission Code	Supported Action
Managing products	Querying product price	Querying pay-per-use product price	POST /v2/bills/ratings/on-demand-resources	bss:discount:view	View discount and price information.
		Querying the price of a yearly/monthly product	POST /v2/bills/ratings/period-resources/subscribe-rate	bss:discount:view	View discount and price information.
Managing accounts	Managing accounts	Querying account balance	GET/v2/accounts/customer-accounts/balances	bss:balance:view	View account information.

Scenario	Sub-Scenario	API	URL	Permission Code	Supported Action
Managing transactions	Managing yearly/monthly orders	Querying orders	GET /v2/orders/customer-orders	bss:order:view	View order information.
		Querying order details	GET /v2/orders/customer-orders/details/{order_id}	bss:order:view	View order information.
		Querying available discounts of an order	GET /v2/orders/customer-orders/order-discounts	bss:discount:view	View discount and price information.
		Canceling orders in the pending payment status	PUT /v2/orders/customer-orders/cancel	bss:order:update	Place orders, cancel orders, and modify recipient information.
		Paying a yearly/monthly order	POST /v3/orders/customer-orders/pay	bss:order:pay	Pay orders.
		Querying financial information of an order unsubscribed from	GET /v2/orders/customer-orders/refund-orders	bss:order:view	View order information.

Scenario	Sub-Scenario	API	URL	Permission Code	Supported Action
	Managing yearly/monthly resource	Querying yearly/monthly resource list	POST /v2/orders/subscriptions/resources/query	bss:order:view	View order information.
		Renewing subscriptions to yearly/monthly resources	POST /v2/orders/subscriptions/resources/renew	bss:order:update	Place orders, cancel orders, and modify recipient information.
		Unsubscribing from yearly/monthly resources	POST /v2/orders/subscriptions/resources/unsubscribe	bss:order:update	Place orders, cancel orders, and modify recipient information.
		Enabling automatic renewal for yearly/monthly resources	POST /v2/orders/subscriptions/resources/autorenew/**	bss:order:update	Place orders, cancel orders, and modify recipient information.

Scenario	Sub-Scenario	API	URL	Permission Code	Supported Action
		Disabling automatic renewal for yearly/monthly resources	DELETE /v2/orders/subscriptions/resources/autorenew/{resource_id}	bss:order:update	Place orders, cancel orders, and modify recipient information.
		Enabling/Canceling the change from yearly/monthly to pay-per-use upon expiration	POST /v2/orders/subscriptions/resources/to-on-demand	bss:order:update	Place orders, cancel orders, and modify recipient information.
Managing bills	Managing bills	Viewing bill details	POST /v2/bills/customer-bills/res-records/query	bss:billDetail:view	View expenditure details, resource expenditures, bill analysis, and historical payments.
		Querying bill summary	GET /v1.0/{domain_id}/customer/account-mgr/bill/monthly-sum	bss:bill:view	View bills, monthly costs, usage details, cost management, expenditures and revenues, and cost trends.

Scenario	Sub-Scenario	API	URL	Permission Code	Supported Action
		Querying expenditure records	GET /v2/bills/customer-bills/res-fee-records	bss:bill:view	View bills, monthly costs, usage details, cost management, expenditures and revenues, and cost trends.
Managing costs	Managing costs	Querying cost data	POST /v4/costs/cost-analysed-bills/query	bss:costanalysis:view	View cost analysis.

# 4 Managing Products

---

## 4.1 Querying Product Information

### 4.1.1 Querying Cloud Service Types

#### Function

This API is used to query cloud service types on the customer self-built platform.

#### Constraints

This API can be invoked using the customer AK/SK or token.  
KooGallery services are not included.

#### URI

GET /v2/products/service-types

**Table 4-1** Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"><li>• <b>zh_CN</b>: Chinese</li><li>• <b>en_US</b>: English</li></ul> Default value: <b>zh_CN</b>

**Table 4-2** Query parameters

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

## 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: MIIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
X-Language: zh_CN
```

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
total_count	Integer	-	Total number.
service_types	List<ServiceType>	-	Cloud service type list. For details, see <a href="#">Table 4-3</a> .

**Table 4-3** ServiceType

Parameter	Type	Value Range	Description
service_type_name	String	A maximum of 200 characters	Cloud service type name.
service_type_code	String	A maximum of 64 characters	Cloud service type code.
abbreviation	String	A maximum of 200 characters	Abbreviation of the cloud service type.

**Example Response**

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



```
Content-Length: length
Date: response time
{
  "total_count": 1,
  "service_types": [
    {
      "service_type_name": "Huawei Cloud WeLink",
      "service_type_code": "hws.service.type.workplace",
      "abbreviation": "WeLink"
    }
  ]
}
```

## 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 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 customer self-built platform.

### Constraints

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

### URI

GET /v2/products/resource-types

**Table 4-4** Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"> <li>• <b>zh_CN</b>: Chinese</li> <li>• <b>en_US</b>: English</li> </ul> Default value: <b>zh_CN</b>

**Table 4-5** Query parameters

Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to 100000000	<p>Offset, which starts from 0. The default value is <b>0</b>.</p> <p>If this parameter is not included in the request, is left empty, or is set to <b>null</b>, the value <b>0</b> is used. This parameter cannot be set to "".</p> <p><b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b>, the second and subsequent data records are returned.</p> <p>For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b>, the second to the tenth records are returned.</p> <p>If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.</p>
limit	No	Integer	[1-1000]	<p>Number of records queried each time. The default value is <b>10</b>.</p> <p>If this parameter is not included in the request, is left empty, or is set to <b>null</b>, the value <b>10</b> is used. This parameter cannot be set to "".</p>

## 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	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
total_count	Integer	-	Total number.
resource_types	List<ResourceTypes>	-	Resource type list. For details, see <a href="#">Table 4-6</a> .

**Table 4-6** ResourceTypes

Parameter	Type	Value Range	Description
resource_type_code	String	A maximum of 64 characters	Resource type code. For example, the resource type code of ECS is <b>hws.resource.type.vm</b> .
resource_type_name	String	A maximum of 200 characters	Resource type name.

Parameter	Type	Value Range	Description
resource_type_desc	String	A maximum of 200 characters	Resource type description.
service_type_code	String	A maximum of 64 characters	Code of the service type which a resource belongs to. Example: <b>hws.service.type.offline</b> .

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "total_count": 1,
  "resource_types": [
    {
      "resource_type_code": "hws.resource.type.workspacehost.desktop",
      "resource_type_name": "Cloud Desktop",
      "resource_type_desc": "Cloud Desktop",
      "service_type_code": "hws.service.type.workspacehost"
    }
  ]
}

```

### 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 Status Code	Error Code	Description
400	CBC.0100	Invalid parameter.
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 self-built platform and to query the price of a pay-per-use or yearly/monthly product.

### Constraints

This API can be invoked using the customer 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

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"><li>• <b>zh_CN</b>: Chinese</li><li>• <b>en_US</b>: English</li></ul> Default value: <b>zh_CN</b>

**Table 4-8** Request parameters

Parameter	Mandatory	Type	Value Range	Description
service_type_code	Yes	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a> .

Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to 1000000	<p>Offset, which starts from 0. The default value is <b>0</b>.</p> <p>If this parameter is not included in the request, is left empty, or is set to <b>null</b>, the value <b>0</b> is used. This parameter cannot be set to "".</p> <p><b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b>, the second and subsequent data records are returned.</p> <p>For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b>, the second to the tenth records are returned.</p> <p>If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.</p>
limit	No	Integer	[1-100]	<p>Number of records queried each time. The default value is <b>10</b>.</p> <p>If this parameter is not included in the request, the value <b>10</b> is used. This parameter cannot be set to "" or <b>null</b> and cannot be left empty.</p>

## 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: MIIPAgYJKoZIHvcNAQcCo...ggg1BBIINPXsidG9rZ
X-Language: zh_CN
```

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
total_count	Integer	-	Total number.
infos	List<ServiceResourceInfo>	A maximum of 100 values	List of basic resource information. For details, see <a href="#">Table 4-9</a> .

**Table 4-9** ServiceResourceInfo

Parameter	Type	Value Range	Description
basic_info	BasicInfo Object	-	Basic resource information. For details, see <a href="#">Table 4-10</a> .

**Table 4-10** ResourceBasicInfo

Parameter	Type	Value Range	Description
resource_type_code	String	A maximum of 64 characters	Resource type code. Example: <b>hws.resource.type.general</b> .
product_owner_service	String	A maximum of 64 characters	Code of the service where a resource belongs. Example: <b>hws.service.type.offline</b> .

Parameter	Type	Value Range	Description
name	String	A maximum of 1024 characters	Resource type. Example: general specifications.
description	String	A maximum of 1024 characters	Resource type description.

### Example Response

```

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"
      }
    },
    {
      "basic_info": {
        "resource_type_code": "hws.resource.type.vm",
        "product_owner_service": "hws.service.type.ec2",

```



```

    "name": "ECS",
    "description": "ECS"
  }
]
}

```

## 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	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 customer self-built platform.

### Constraints

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

### URI

GET /v2/products/usage-types

**Table 4-11** Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"> <li>• <b>zh_CN:</b> Chinese</li> <li>• <b>en_US:</b> English</li> </ul> Default value: <b>zh_CN</b>

**Table 4-12** Query parameters

Parameter	Mandatory	Type	Value Range	Description
resource_type_code	No	String	A maximum of 64 characters	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> . To obtain a specific resource type, call the API in <a href="#">Querying Resource Types</a> .  If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If the value is "", it can be used as a filter criterion.
offset	No	Integer	0 to 1000000	Offset, which starts from 0. The default value is 0.  <b>NOTE</b> This parameter is used for pagination. Retain its default value 0 if pagination is not required. <b>offset</b> 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 10 records that meet query conditions, when you set limit to 10 and <b>offset</b> 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.

## 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-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIIINPXsidG9rZ
X-Language: zh_CN
```

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
total_count	Integer	-	Total number.
usage_types	List<UsageType>	-	Usage type list. For details, see <a href="#">Table 4-13</a> .

**Table 4-13 UsageType**

Parameter	Type	Value Range	Description
code	String	A maximum of 64 characters	Usage type code, for example, <b>reqNumber</b> .
name	String	A maximum of 1024 characters	Usage type name, for example, the number of invoking times.
resource_type_code	String	A maximum of 64 characters	Resource type code. For example, the resource type code of VM is <b>hws.resource.type.vm</b> .

Parameter	Type	Value Range	Description
service_type_code	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
resource_type_name	String	A maximum of 200 characters	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "total_count": 6048,
  "usage_types": [
    {
      "code": "flow",
      "name": "Video connection traffic",
      "resource_type_code": "hws.resource.type.live.videoconnect",
      "service_type_code": "hws.service.type.live",
      "resource_type_name": "Video connection",
      "service_type_name": "Live streaming"
    },
    {
      "code": "reqNumber",
      "name": "Invoking times",
      "resource_type_code": "hws.resource.type.pca.quantity",
      "service_type_code": "hws.service.type.ccm",
      "resource_type_name": "Number of private certificates",
      "service_type_name": "The cloud certificate management service"
    },
    {
      "code": "dailyalarmnum",
      "name": "Alarms",
      "resource_type_code": "hws.resource.type.aicms.cdf",
      "service_type_code": "hws.service.type.aimgs",
      "resource_type_name": "The fault identification and root cause locating service",
      "service_type_name": "The modeling service"
    }
  ]
}

```

## 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 self-built platform.

### Constraints

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

### URI

GET /v2/bases/measurements

**Table 4-14** Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"> <li>• <b>zh_CN</b>: Chinese</li> <li>• <b>en_US</b>: English</li> </ul> Default value: <b>zh_CN</b>

### 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	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
measure_units	List<MeasureUnitRest>	-	Measurement unit information. For details, see <a href="#">Table 4-15</a> .

**Table 4-15** MeasureUnitRest

Parameter	Type	Value Range	Description
measure_id	Integer	-	Measurement unit ID. For example, <b>10</b> indicates GB.
measure_name	String	A maximum of 128 characters	Measurement unit name, which is returned based on the language type. Example: GB.
abbreviation	String	A maximum of 64 characters	Abbreviation of a measurement unit name. For example, the abbreviation of GB is <b>G</b> .

Parameter	Type	Value Range	Description
measure_type	Integer	-	Measurement type. <ul style="list-style-type: none"> <li>● 1: Currency</li> <li>● 2: Duration</li> <li>● 3: Traffic</li> <li>● 4: Quantity</li> <li>● 7: Capacity</li> <li>● 9: Number of lines</li> <li>● 10: Period</li> <li>● 11: Frequency</li> <li>● 12: Count</li> <li>● 16: Bandwidth</li> <li>● 17: Capacity-duration</li> <li>● 18: Query rate</li> <li>● 19: Bandwidth (1000)</li> <li>● 20: Performance test usage</li> <li>● 21: Area</li> <li>● 22: Video</li> <li>● 23: Throughput</li> <li>● 24: Resolution</li> <li>● 26: Deduction unit for a general resource package</li> <li>● 30: Throughput x Duration</li> <li>● 31: Number/Duration</li> <li>● 40: Traffic (1000)</li> <li>● 41: 1K tokens</li> </ul>

### Example Response

```

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_name": "GB",
  "abbreviation": "G",
  "measure_type": 3
}
```

## 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.

## 4.1.6 Querying the Measurement Unit Number System

### Function

This API is used to query the measurement unit number system on the self-built platform.

### Constraints

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

### URI

GET /v2/bases/conversions



**Table 4-16** Request parameters

Parameter	Mandatory	Type	Value Range	Description
measure_type	No	Integer	-	<p>Measurement type.</p> <ul style="list-style-type: none"> <li>● 1: Currency</li> <li>● 2: Duration</li> <li>● 3: Traffic</li> <li>● 4: Quantity</li> <li>● 7: Capacity</li> <li>● 9: Number of lines</li> <li>● 10: Period</li> <li>● 11: Frequency</li> <li>● 12: Count</li> <li>● 16: Bandwidth</li> <li>● 17: Capacity-duration</li> <li>● 18: Query rate</li> <li>● 19: Bandwidth (1000)</li> <li>● 20: Performance test usage</li> <li>● 21: Area</li> <li>● 22: Video</li> <li>● 23: Throughput</li> <li>● 24: Resolution</li> <li>● 26: Deduction unit for a general resource package</li> <li>● 30: Throughput x Duration</li> <li>● 31: Number/Duration</li> <li>● 40: Traffic (1000)</li> <li>● 41: 1K tokens</li> </ul> <p>If this parameter is not included in the request, is left empty, or is set to <b>null</b>, it will not be used as a filter criterion.</p>

## 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: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
conversion_s	List<Conversions>	-	Measurement unit conversion information. For details, see <a href="#">Table 4-17</a> .

**Table 4-17** Conversion

Parameter	Type	Value Range	Description
measure_id	Integer	-	Measurement unit ID. For example, <b>10</b> indicates GB.
ref_measure_id	Integer	-	Measurement unit ID after conversion. For example, <b>11</b> 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	Type	Value Range	Description
measure_type	Integer	-	Measurement type. <ul style="list-style-type: none"> <li>● 1: Currency</li> <li>● 2: Duration</li> <li>● 3: Traffic</li> <li>● 4: Quantity</li> <li>● 7: Capacity</li> <li>● 9: Number of lines</li> <li>● 10: Period</li> <li>● 11: Frequency</li> <li>● 12: Count</li> <li>● 16: Bandwidth</li> <li>● 17: Capacity-duration</li> <li>● 18: Query rate</li> <li>● 19: Bandwidth (1000)</li> <li>● 20: Performance test usage</li> <li>● 21: Area</li> <li>● 22: Video</li> <li>● 23: Throughput</li> <li>● 24: Resolution</li> <li>● 26: Deduction unit for a general resource package</li> <li>● 30: Throughput x Duration</li> <li>● 31: Number/Duration</li> <li>● 40: Traffic (1000)</li> <li>● 41: 1K tokens</li> </ul>

### Example Response

```

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
    }
  ]
}
    
```

```
]
}
```

## 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.

## 4.2 Querying the Price of a Product

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

#### Function

Customers can query the price of a pay-per-use product by criteria on the self-built 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.

---

#### CAUTION

- Ensure that you provide the correct service type, region, resource type, and resource specification are provided. Otherwise, an error may be reported.
- 

#### Constraints

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

#### URI

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

## Request

### Request Parameters

Parameter	Mandatory	Type	Value Range	Description
project_id	Yes	String	A maximum of 64 characters	Project ID. <b>NOTE</b> <ul style="list-style-type: none"> <li>Access the <a href="#">My Credentials</a> page. On the <b>Projects</b> tab, view the project IDs of different regions.</li> <li>To call this API, an IAM member account must be authorized by the IAM master account. For details, see <a href="#">Creating a User Group and Assigning Permissions</a>.</li> </ul>
product_infos	Yes	List<DemandProductInfo>	A maximum of 100 values	Indicates the product information list. For details, see <a href="#">Table 4-18</a> .
inquiry_precision	No	Integer	-	Precision of the price query result. The default value of this parameter is <b>0</b> (default precision of the price query result). <ul style="list-style-type: none"> <li><b>0</b>: 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.</li> <li><b>1</b>: The result contains a maximum of 10 decimal places with the unit of USD, such as USD 1.0000000001.</li> </ul> <b>NOTE</b> Value <b>0</b> and value <b>1</b> make differences only when the query result contains at least six decimal places.

**Table 4-18** DemandProductInfo

Parameter	Mandatory	Type	Value Range	Description
id	Yes	String	A maximum of 64 characters	The ID is used to identify the mapping between the inquiry result and the request and must be unique in an inquiry.
cloud_service_type	Yes	String	A maximum of 400 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a> .
resource_type	Yes	String	A maximum of 400 characters	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> . To obtain a specific resource type, call the API in <a href="#">Querying Resource Types</a> .  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	Mandatory	Type	Value Range	Description
resource_spec	Yes	String	A maximum of 400 characters	<p>Resource specifications. For details, see related cloud service documentation.</p> <p>The following provides examples of services and resource specifications:</p> <ul style="list-style-type: none"> <li>• ECS <ul style="list-style-type: none"> <li>Add <b>.win</b> or <b>.linux</b> to the end of the ECS flavor ID based on the OS type, for example, s2.small.1.linux. Call the API for <a href="#">querying details about flavors and extended flavor information</a> to obtain the flavor IDs.</li> </ul> </li> <li>• Bandwidth <ul style="list-style-type: none"> <li>- 12_bgp: dynamic BGP bandwidth billed by traffic</li> <li>- 12_sbgp: static BGP bandwidth billed by traffic</li> <li>- 19_bgp: dynamic BGP bandwidth billed by bandwidth</li> <li>- 19_sbgp: Static BGP bandwidth billed by bandwidth</li> <li>- 19_share: Shared bandwidth billed by bandwidth</li> </ul> </li> <li>• IP address: <ul style="list-style-type: none"> <li>- 5_bgp: dynamic BGP public IP address</li> <li>- 5_sbgp: static BGP public IP address</li> </ul> </li> <li>• EVS <ul style="list-style-type: none"> <li>- SATA: common I/O EVS disk</li> <li>- SAS: high I/O EVS disk</li> <li>- GPSSD: general-purpose SSD EVS disk</li> <li>- SSD: ultra-high I/O EVS disk</li> <li>- ESSD: Extreme SSD</li> <li>- GPSSD2.storage: General-purpose SSD V2 storage</li> <li>- GPSSD2.iops: General-purpose SSD V2 iops</li> </ul> </li> </ul>

Parameter	Mandatory	Type	Value Range	Description
				- GPSSD2.throughput: General-purpose SSD V2 throughput
region	Yes	String	A maximum of 64 characters	Cloud service region code, for example, eu_west_101.
usage_factor	Yes	String	A maximum of 64 characters	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: <ul style="list-style-type: none"> <li>• Cloud server: <b>Duration</b></li> <li>• Cloud disk: <b>Duration</b></li> <li>• EIP: <b>Duration</b></li> <li>• Bandwidth: <b>Duration</b> or <b>upflow</b></li> <li>• Marketplace image: <b>Duration</b></li> </ul> You can call the API in <a href="#">Querying Usage Types</a> to obtain the value of parameter <b>code</b> in <a href="#">Table 4-13</a> . The value indicates the billing factor of each cloud service.
usage_value	Yes	BigDecimal	-	Usage value. For example, if you want to inquire a product price by hour, set <b>usageValue</b> to <b>1</b> and <b>usageMeasureID</b> to <b>4</b> (hour).
usage_measure_id	Yes	Integer	A maximum of 4 characters	Usage unit. You can call the API in <a href="#">Querying Measurement Units</a> to obtain the value. For example, if you want to inquire a product price by hour, set <b>usageValue</b> to <b>1</b> and <b>usageMeasureID</b> to <b>4</b> (hour).
subscription_num	Yes	Integer	[1-10000]	Number of subscriptions.



Parameter	Mandatory	Type	Value Range	Description
available_zone	No	String	A maximum of 64 characters	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 <b>null</b> , it cannot be used as a filter criterion.
resource_size	No	Integer	[1-214783647]	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 <b>null</b> , it cannot be used as a filter criterion.
size_measurement_id	No	Integer	A maximum of 4 characters	Resource capacity measurement ID. The options are: <ul style="list-style-type: none"> <li>● <b>15</b>: Mbit/s (used when the bandwidth is subscribed)</li> <li>● <b>17</b>: GB (used when an EVS disk is subscribed to)</li> <li>● <b>14</b>: amount (times)</li> </ul> This field should be filled together with <b>resource_size</b> 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 <b>null</b> , 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: MIIPAgYJKoZlhvcNAQcCo...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",
      "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	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Status code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
amount	BigDecimal	-	Final price after discount
discount_amount	BigDecimal	-	Discount amount (difference between the list price and the final price).
official_website_amount	BigDecimal	-	List price of a pay-per-use product
measure_id	Integer	A maximum of 4 characters	Measurement unit ID. 1: USD
currency	String	A maximum of 20 characters	Currency. USD If the parameter is left blank, USD is used.
product_rating_results	List<DemandProductRatingResult>	-	Product price query result. For details, see <a href="#">Table 4-19</a> .

**Table 4-19** DemandProductRatingResult

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

Parameter	Type	Value Range	Description
product_id	String	A maximum of 64 characters	Product ID.
amount	BigDecimal	-	Final price after discount
discount_amount	BigDecimal	-	Discount amount (difference between the list price and final price).
official_website_amount	BigDecimal	-	List price of a pay-per-use product
measure_id	Integer	A maximum of 4 characters	Measurement unit ID. 1: USD
discount_rating_results	List<DemandDiscountRatingResult>	-	Discount details, including the product promotion information and commercial or partner discount information. For details, see <a href="#">Table 4-20</a> .

**Table 4-20** DemandDiscountRatingResult

Parameter	Type	Value Range	Description
discount_id	String	A maximum of 64 characters	Discount ID.
discount_type	Integer	A maximum of 4 characters	Discount type. <ul style="list-style-type: none"> <li>• Commercial discounts: <ul style="list-style-type: none"> <li>- 605: Contract commercial discount in the HUAWEI CLOUD BE scenario</li> <li>- 606: Contract commercial discount in the reseller BE scenario</li> </ul> </li> <li>• Partner discounts: <ul style="list-style-type: none"> <li>607: Partner authorized discount</li> </ul> </li> </ul>

Parameter	Type	Value Range	Description
amount	BigDecimal	-	Discounted amount.
measure_id	Integer	A maximum of 4 characters	Measurement unit ID. 1: USD
discount_name	String	A maximum of 256 characters	Discount name.

### Example Response

```

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": []  
}  
]  
}
```

## 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.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

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

---

### CAUTION

- Ensure that you provide the correct service type, region, resource type, region and resource specification. Otherwise, an error may be reported.
-

## Constraints

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

## URI

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

## Request

### Request Parameters

Parameter	Mandatory	Type	Value Range	Description
project_id	Yes	String	A maximum of 64 characters	Project ID. <b>NOTE</b> <ul style="list-style-type: none"> <li>Access the <a href="#">My Credentials</a> page. On the <b>Projects</b> tab, view the project IDs of different regions.</li> <li>To call this API, an IAM member account must be authorized by the IAM master account. For details, see <a href="#">Creating a User Group and Assigning Permissions</a>.</li> </ul>
product_infos	Yes	List<PeriodProductInfo>	A maximum of 100 values	Product information list. For details, see <a href="#">Table 4-21</a> .

**Table 4-21** PeriodProductInfo

Parameter	Mandatory	Type	Value Range	Description
id	Yes	String	A maximum of 64 characters	The ID is used to identify the mapping between the inquiry result and the request and must be unique in an inquiry.
cloud_service_type	Yes	String	A maximum of 400 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a> .

Parameter	Mandatory	Type	Value Range	Description
resource_type	Yes	String	A maximum of 400 characters	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> . To obtain a specific resource type, call the API in <a href="#">Querying Resource Types</a> .  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	Mandatory	Type	Value Range	Description
resource_spec	Yes	String	A maximum of 400 characters	<p>Resource specifications. For details, see related cloud service documentation.</p> <p>The following provides examples of services and resource specifications:</p> <ul style="list-style-type: none"> <li>• ECS                             <ul style="list-style-type: none"> <li>Add <b>.win</b> or <b>.linux</b> to the end of the ECS flavor ID based on the OS type, for example, s2.small.1.linux. Call the API for <a href="#">querying details about flavors and extended flavor information</a> to obtain the flavor IDs.</li> </ul> </li> <li>• Bandwidth                             <ul style="list-style-type: none"> <li>- 12_bgp: dynamic BGP bandwidth billed by traffic</li> <li>- 12_sbgp: static BGP bandwidth billed by traffic</li> <li>- 19_bgp: dynamic BGP bandwidth billed by bandwidth</li> <li>- 19_sbgp: Static BGP bandwidth billed by bandwidth</li> <li>- 19_share: Shared bandwidth billed by bandwidth</li> </ul> </li> <li>• IP address:                             <ul style="list-style-type: none"> <li>- 5_bgp: dynamic BGP public IP address</li> <li>- 5_sbgp: static BGP public IP address</li> </ul> </li> <li>• RDS:                             <p>You can call the API for <a href="#">querying database specifications</a> to obtain the RDS specifications.</p> </li> <li>• DCS:                             <p>You can call the API for <a href="#">querying service specifications</a> to obtain the DCS specifications.</p> </li> <li>• EVS:                             <ul style="list-style-type: none"> <li>- SATA: Common I/O</li> <li>- SAS: High I/O</li> </ul> </li> </ul>

Parameter	Mandatory	Type	Value Range	Description
				<ul style="list-style-type: none"> <li>- GPSSD: General-purpose SSD</li> <li>- SSD: Ultra-high I/O</li> <li>- ESSD: Extreme SSD</li> <li>- GPSSD2.storage: General-purpose SSD V2 storage</li> </ul>
region	Yes	String	A maximum of 64 characters	Cloud service region code, for example, eu_west_101.
period_type	Yes	Integer	[0-4]	Period type of a yearly/monthly product order. <ul style="list-style-type: none"> <li>• 0: Day</li> <li>• 2: Month</li> <li>• 3: Year</li> <li>• 4: Hour</li> </ul>
period_num	Yes	Integer	[1-214783647]	Number of periods of a yearly/monthly product order.
subscription_num	Yes	Integer	[1-10000]	Number of subscriptions of a yearly/monthly product order.
available_zone	No	String	A maximum of 64 characters	AZ identifier, for example, <b>cn-north-1a</b> . AZ identifiers are case-insensitive. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
resource_size	No	Integer	[1-214783647]	<p>Resource capacity. It can be the subscribed volume size or bandwidth size.</p> <p>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.</p> <p>For non-linear products, if this parameter is not included in the request parameters or is set to <b>null</b>, it cannot be used as a filter criterion.</p>
size_measurement_id	No	Integer	-	<p>Resource capacity measurement ID. The options are as follows:</p> <ul style="list-style-type: none"> <li>● <b>15</b>: Mbit/s (used when the bandwidth is subscribed)</li> <li>● <b>17</b>: GB (used when a cloud disk is subscribed)</li> <li>● <b>14</b>: amount</li> </ul> <p>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.</p> <p>For non-linear products, if this parameter is not included in the request parameters or is set to <b>null</b>, it cannot be used as a filter criterion.</p>

### Example Request

```
POST https://bss.myhuaweicloud.eu/v2/bills/ratings/period-resources/subscribe-rate HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "project_id": "84c53ec51e794a4888fb0f5c0cfb24208b9a7edf90024702adbec2b2fd72e5f2",
  "product_infos": [
    {
      "id": "1",
      "cloud_service_type": "hws.service.type.ec2",
      "resource_type": "hws.resource.type.vm",
      "resource_spec": "c6.2xlarge.2.linux",
      "region": "eu-west-101",
    }
  ]
}
```

```

"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",
  "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",
  "available_zone": "eu-west-101a",
  "resource_size": 40,
  "size_measure_id": 15,
  "period_type": 2,
  "period_num": 1,
  "subscription_num": 1
}
}
]
}

```

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Status code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.

Parameter	Type	Value Range	Description
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
official_website_rating_result	List<OfficialWebsiteRatingResult Object>	-	The result for querying the list price of a yearly/monthly product. For details, see <a href="#">Table 4-22</a> .
optional_discount_rating_results	List<OptionalDiscountRatingResult>	-	Rating results by discount if optional discounts exist. Each optional discount has a rating result. For details, see <a href="#">Table 4-24</a> .
currency	String	A maximum of 20 characters	Currency. USD If the parameter is left blank, USD is used.

**Table 4-22** OfficialWebsiteRatingResult

Parameter	Type	Value Range	Description
official_website_amount	BigDecimal	-	Price of a yearly/monthly product on the official website.
measure_id	Integer	A maximum of 4 characters	Measurement unit ID. 1: USD
product_rating_results	List<PeriodProductOfficialRatingResult>	-	Price query result. For details, see <a href="#">Table 4-23</a> .

**Table 4-23** Price query result

Parameter	Type	Value Range	Description
id	String	A maximum of 64 characters	ID, which comes from the ID in the request.
product_id	String	A maximum of 64 characters	Yearly/monthly product ID.
official_website_amount	BigDecimal	-	Price of a yearly/monthly product on the official website.
measure_id	Integer	A maximum of 4 characters	Measurement unit ID. <ul style="list-style-type: none"> <li>• 1: USD</li> </ul>

**Table 4-24** OptionalDiscountRatingResult

Parameter	Type	Value Range	Description
discount_id	String	A maximum of 64 characters	Discount ID.
amount	BigDecimal	-	Final price after the discount. Amount= official_website_amount - discountAmount
official_website_amount	BigDecimal	-	Price of a yearly/monthly product on the official website.
discount_amount	BigDecimal	-	Amount of an available discount, such as commercial discounts, partner discounts, promotion discounts, and coupons.

Parameter	Type	Value Range	Description
measure_id	Integer	A maximum of 4 characters	Measurement unit ID. 1: USD
discount_type	Integer	A maximum of 32 characters	Discount type. <ul style="list-style-type: none"> <li>Commercial discounts: <ul style="list-style-type: none"> <li>605: Contract commercial discount in the HUAWEI CLOUD BE scenario</li> <li>606: Contract commercial discount in the reseller BE scenario</li> </ul> </li> <li>Partner discounts: <ul style="list-style-type: none"> <li>607: Partner authorized discount</li> </ul> </li> </ul>
discount_name	String	A maximum of 256 characters	Discount name.
best_offer	Integer	-	Optimal discount. <ul style="list-style-type: none"> <li>0: No (default value)</li> <li>1: Yes</li> </ul> <p>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.</p>
product_rating_results	List<PeriodProductRatingResult>	-	Product price query result. For details, see <a href="#">Table 4-25</a> .

**Table 4-25** PeriodProductRatingResult

Parameter	Type	Value Range	Description
id	String	A maximum of 64 characters	ID, which comes from the ID in the request.
product_id	String	A maximum of 64 characters	Yearly/monthly product ID.
amount	BigDecimal	-	Final price after the discount. Amount= official_website_amount - discountAmount
official_website_amount	BigDecimal	-	Price of a yearly/monthly product on the official website.
discount_amount	BigDecimal	-	Amount of an available discount, such as commercial discounts, partner discounts, promotion discounts, and coupons.
measure_id	Integer	A maximum of 4 characters	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": "OFF1777523764289028104",
        "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 a self-built 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 [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 [Querying Customer's Yearly/Monthly Resources](#).

### Constraints

Only customer AK/SK or Token can be used to call the API.

### URI

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

### Request

Request parameters

Parameter	Mandatory	Parameter Type	Value Range	Description
resource_ids	Yes	List<String>	[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 <b>is_main_resource</b> , a response parameter described in <a href="#">Querying Customer's Yearly/Monthly Resources</a> .
period_type	Yes	Integer	[2 3]	Period type: <ul style="list-style-type: none"><li>• 2: Month</li><li>• 3: Year</li></ul>

Parameter	Mandatory	Parameter Type	Value Range	Description
period_num	Yes	Integer	[1-11]	Number of periods: <ul style="list-style-type: none"> <li>Month: 1 to 11</li> <li>Year: 1 to 3</li> </ul>
include_relative_resources	No	Boolean	-	Specifies whether to include associated resources for renewal price querying. <ul style="list-style-type: none"> <li>false: Not included.</li> <li>true: Included.</li> </ul> If this parameter is not included in the request or is set to "", the default value <b>false</b> 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: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "resource_ids": ["230221_169ee*****9d5b8af6a38f099abea"],
  "period_type": 2,
  "period_num": 1,
  "include_relative_resources": false
}
```

## Response

### Response Parameters

Parameter	Parameter Type	Value Range	Description
error_code	String	A maximum of 20 characters	Status code For details, see <a href="#">Status Codes</a> .
error_msg	String	A maximum of 1,000 characters	Error description

Parameter	Parameter Type	Value Range	Description
currency	String	A maximum of 20 characters	Currency USD If the parameter is left blank, USD is used.
renew_inquiry_results	List<RenewInquiryResultInfo>	--	Renew price inquiry result of the primary resources and their attached resources For details, see <a href="#">Table 4-26</a> .
official_website_rating_result	OfficialWebsiteRatingResult Object	--	For list price of a primary resource and its attached resources, see <a href="#">Table 4-27</a> .
optional_discount_rating_results	List<OptionalDiscountRatingResult>	--	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 <a href="#">Table 3 OptionalDiscountRating-Result</a> .
fail_resource_infos	List<FailResourceInfo>	--	Resource information for a failed query. For details, see <a href="#">resource information for a failed query</a> .

**Table 4-26** RenewInquiryResultInfo

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

**Table 4-27** OfficialWebsiteRatingResult

Parameter	Parameter Type	Value Range	Description
official_website_amount	String	A maximum of 64 characters	List price Unit: USD

**Table 4-28** OptionalDiscountRatingResult

Parameter	Parameter Type	Value Range	Description
discount_id	String	A maximum of 64 characters	Discount ID.
amount	String	A maximum of 64 characters	Final price after the discount Unit: USD Amount= official_website_amount - discount_amount
official_website_amount	String	A maximum of 64 characters	List price Unit: USD
discount_amount	String	A maximum of 64 characters	Amount of an available discount, such as commercial discounts, partner discounts, promotion discounts, and coupons Unit: USD
discount_type	Integer	A maximum of 32 characters	Discount type <ul style="list-style-type: none"> <li>• Commercial discounts:                             <ul style="list-style-type: none"> <li>- 605: Contract commercial discount in the Huawei Cloud BE scenario</li> <li>- 606: Contract commercial discount in the reseller BE scenario</li> </ul> </li> <li>• Partner discounts:                             <ul style="list-style-type: none"> <li>607: Partner authorized discount - discount rate</li> </ul> </li> </ul>

Parameter	Parameter Type	Value Range	Description
discount_name	String	A maximum of 256 characters	Discount name
best_offer	Integer	-	Optimal discount or not <ul style="list-style-type: none"> <li>• 0: No (default value)</li> <li>• 1: Yes</li> </ul> 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 <a href="#">Table Status Codes</a> .
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.30050007	Renewal price inquiry is not applicable to non-primary resources.
200	CBC.30050008	The period type or number of periods for the resource does not exist.
200	CBC.30050009	The resources have expired and been deleted or do not exist.
200	CBC.30050010	This operation is not allowed because some resources included in your orders are to be paid.
200	CBC.30050011	Resources are being unsubscribed from or changed.
200	CBC.30050013	Renewal not supported.
400	CBC.0100	Incorrect parameter
400	CBC.99006006	The required product cannot be found.
400	CBC.99006024	Failed to query product information.
400	CBC.99006016	Failed to query coupon information.
400	CBC.99006017	Failed to query customer information.
400	CBC.99006050	Incorrect usage unit
400	CBC.99006055	The queried amount exceeds the upper limit.
400	CBC.99006066	Billing query failed

<b>HTTP Status Code</b>	<b>Error Code</b>	<b>Description</b>
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 Managing Accounts

---

## 5.1 Querying the Account Balance

### Function

This API can be used to query the account balance for a customer.

Customers log in to the Billing Center, switch to the [Overview](#) page, and query the account balance on the page.

### Constraints

- When a customer queries its account balance, only the AK/SK or token of the customer can be used.
- This API is not applicable to reseller customers.

### URI

GET /v2/accounts/customer-accounts/balances

### Request Message

Request parameters

None

#### Example Request

```
GET https://bss.myhuaweicloud.eu/v2/accounts/customer-accounts/balances HTTP/1.1  
Content-Type: application/json  
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

### Response Message

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 2,000 characters	Error description. This parameter is returned only when a failure occurs.
account_balances	List<Account BalanceV2>	-	Account balances. For details, see <a href="#">Table 5-1</a> .
debt_amount	BigDecimal	-	Total amount due.
measure_id	Integer	-	Fee unit. <ul style="list-style-type: none"> <li>1: Dollar</li> </ul>
currency	String	A maximum of 4 characters	Currency. USD: US dollar

**Table 5-1** AccountBalanceV2

Parameter	Type	Value Range	Description
account_id	String	A maximum of 64 characters	Account ID.
account_type	Integer	-	Account type. <ul style="list-style-type: none"> <li>1: Balance</li> <li>2: Credit</li> <li>5: Bonus</li> <li>7: Deposit</li> </ul>
amount	Bigdecimal	-	Account balance.
currency	String	-	Currency. The options are as follows: USD: US dollar
designated_amount	Bigdecimal	-	Balance of earmarked funds.

Parameter	Type	Value Range	Description
credit_amount	Bigdecimal	-	Total credit limit. This field is available only for credit accounts.
measure_id	Integer	-	Measurement unit. <ul style="list-style-type: none"> <li>1: Dollar</li> </ul>

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "account_balances": [
    {
      "account_id": "AT001017264D6E9FF7",
      "account_type": 1,
      "amount": 0,
      "currency": "USD",
      "designated_amount": 0,
      "credit_amount": 0,
      "measure_id": 1
    },
    {
      "account_id": "AT001017264D6EA084",
      "account_type": 5,
      "amount": 0,
      "currency": "USD",
      "designated_amount": 0,
      "credit_amount": 0,
      "measure_id": 1
    }
  ],
  "debt_amount": 120.0,
  "measure_id": 1,
  "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.99000049	BindType cannot be resale.

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

# 6 Transaction Management

---

## 6.1 Managing Coupons

### 6.1.1 Querying Coupons

#### Function

Customers can query information about their coupons.

Customers can follow the instructions described in [Viewing Cash Coupons](#) to view the coupons in Billing Center.

#### NOTE

Huawei CloudEuropean website does not provide flexi-purchase coupons or discount coupons.

#### Constraints

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

#### URI

GET /v2/promotions/benefits/coupons

The following table describes the parameters.

**Table 6-1** Request parameters

Parameter	Mandatory	Type	Value Range	Description
coupon_id	No	String	A maximum of 64 characters	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 maximum of 64 characters	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 maximum of 64 characters	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_type	No	Integer	[1-4]	Coupon type. <ul style="list-style-type: none"> <li>1: Cash coupon</li> <li>2: Discount coupon (reserved)</li> <li>4: Flexi-purchase coupon (reserved)</li> </ul> If this parameter is not included in the request parameters, is left empty, or is set to <b>null</b> , it cannot be used as a filter criterion. It cannot be set to "".
status	No	Integer	[1-5]	Customer coupon status. <ul style="list-style-type: none"> <li>1: Inactivated</li> <li>2: To be used</li> <li>3: Used</li> <li>4: Expired</li> </ul> If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. <b>NOTE</b> For used, expired, and reclaimed coupons, data within 12 months after expiration can be queried.

Parameter	Mandatory	Type	Value Range	Description
active_start_time	No	String	A maximum of 64 characters	<p>Activation time.</p> <p>UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.</p> <p>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 <b>null</b>.</p>
active_end_time	No	String	A maximum of 64 characters	<p>End time.</p> <p>UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.</p> <p>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 <b>null</b>.</p>
offset	No	Integer	0 to maximum integer	<p>Offset, which starts from 0. The default value is <b>0</b>.</p> <p><b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b>, the second and subsequent data records are returned.</p> <p>For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b>, the second to the tenth records are returned.</p> <p>If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.</p>
limit	No	Integer	[1-100]	Number of coupons queried each time. The default value is <b>10</b> .

Parameter	Mandatory	Type	Value Range	Description
source_id	No	String	A maximum of 255 characters	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 <b>null</b> , 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

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see <a href="#">Returned Values</a> .
error_msg	String	A maximum of 1024 characters	Error description.
count	Integer	-	Total number of records that meet the search criteria.
user_coupons	List<QueryUserCouponsResult>	-	Coupon records. For details, see <a href="#">Table 6-2</a> .



**Table 6-2** IQueryUserCouponsResult

Parameter	Type	Description
coupon_id	String	Coupon ID.
coupon_code	String	Coupon code.
status	Integer	Coupon status <ul style="list-style-type: none"> <li>• 1: Inactivated</li> <li>• 2: To be used</li> <li>• 3: Used</li> <li>• 4: Expired</li> <li>• 5: Withdrawn</li> </ul>
customer_id	String	Customer account ID.
coupon_type	Integer	Coupon type. <ul style="list-style-type: none"> <li>• 1: Cash coupon</li> <li>• 2: Discount coupon (reserved)</li> <li>• 4: Flexi-purchase coupon (reserved)</li> </ul>
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 <b>2019-05-06T08:05:01Z</b>
expire_time	String	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>
order_id	String	Order ID. <b>NOTE</b> 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,CS1904011928GIBHC3;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.

Parameter	Type	Description
media_type	Integer	Medium type. <ul style="list-style-type: none"> <li>1: E-coupon</li> <li>2: Paper coupon</li> </ul>
fetch_method	Integer	Obtaining method. <ul style="list-style-type: none"> <li>1: Claimed online</li> <li>2: Redeemed online</li> <li>3: Issued online</li> <li>4: Obtained offline</li> <li>5: Rewarded based on events</li> </ul>
use_limits	List<ICouponUseLimitInfoV2>	Coupon usage limits. For details, see <a href="#">Table 6-3</a> .
active_time	String	Activation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>
reserve_time	String	Usage time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>
promotion_id	String	Promotion ID.
create_time	String	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>
coupon_version	Integer	Coupon version. <ul style="list-style-type: none"> <li>2: Coupons can be used repeatedly.</li> </ul>
balance	Double	Coupon balance. Unit: USD
lock_order_id	String	ID of the order for the coupon.
coupon_usage	String	Coupon usage.
is_frozen	String	Whether a coupon is frozen. <ul style="list-style-type: none"> <li>0: No</li> <li>1: Yes</li> </ul>
currency	String	Currency. The options are as follows: USD
extend_param1	String	Extended field.

Parameter	Type	Description
source_id	String	<p>Coupon source.</p> <ul style="list-style-type: none"> <li>• If the coupon is sent by a partner, the parameter value is the partner ID.</li> <li>• If the coupon is issued for an activity, the parameter value is the activity ID. <ul style="list-style-type: none"> <li>– Coupons redeemed by cloud beans: Cloud bean ID</li> <li>– Coupons issued as rewards of accumulated consumption: Consumption accumulation reward ID</li> <li>– Coupons issued as rewards for lucky draw: Lucky draw ID</li> <li>– Coupons issued based on events: Event ID</li> <li>– Customized coupons: Creator ID</li> </ul> </li> </ul>

**Table 6-3** ICouponUseLimitInfoV2

Parameter	Type	Description
use_limit_info_id	String	Usage limit ID.
limit_key	String	Usage limit. For details about the value, see <a href="#">Table 6-4</a> .
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 6-4** limit\_key requirements for ICouponUseLimitInfo

Key	Meaning	Description	Remarks
baseValue	Order amount.	<b>value1</b> specifies the lower limit of the order amount, and <b>value2</b> specifies the upper limit of the order amount.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.

Key	Meaning	Description	Remarks
serviceType	Cloud service type.	Only <b>value1</b> is valid. To obtain a specific cloud service type, call the API in <a href="#">Querying Cloud Service Types</a> .	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
regionCode	Region code.	<b>value1</b> specifies the region code, and <b>value2</b> 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.
subscribeType	Order type.	Only <b>value1</b> is valid. The value can be: <ul style="list-style-type: none"> <li>• <b>new</b>: Order placement</li> <li>• <b>renew</b>: Order renewal</li> <li>• <b>change</b>: Order change</li> </ul>	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
firstOrderInService	Restriction for the first-time purchase.	Only <b>value1</b> is valid.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.
cycleNum	Number of periods.	Only <b>value1</b> is valid.	Cash coupons, flexi-purchase coupons, and discount coupons are supported.

Key	Meaning	Description	Remarks
cycleType	Trial use period type.	<ul style="list-style-type: none"> <li>● 0: Yearly/monthly (unlimited)</li> <li>● 1: Yearly/monthly (yearly)</li> <li>● 2: Yearly/monthly (monthly)</li> <li>● 3: Yearly/monthly (daily)</li> <li>● 4: Yearly/monthly (hourly)</li> <li>● 5: Pay-per-use</li> <li>● 6: General purpose</li> <li>● 7: One-off payment</li> <li>● 8: Reserved instance</li> <li>● 11: Savings plan</li> </ul>	Cash coupons, flexi-purchase coupons, and discount coupons are supported. Discount coupons support only the yearly/monthly mode.
simultaneousUseWithEmpowerDiscount	Whether cash coupons can be used together with authorized discounts.	<p>Whether cash coupons can be used with authorized discounts (including commercial discounts and discounts authorized by partners).</p> <ul style="list-style-type: none"> <li>● 0: No</li> <li>● 1: Yes</li> </ul>	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.	<p>The value is specified in <b>value1</b>. The value can be:</p> <ul style="list-style-type: none"> <li>• 0: Used for unlimited times</li> <li>• 1: Used for only once</li> <li>• N: Used for <i>N</i> times. (For cash coupons of the old version, <i>N</i> is fixed at 1.)</li> </ul>	<ul style="list-style-type: none"> <li>• When <b>CouponType</b> is set to <b>2</b> (discount coupons), this parameter can only be set to <b>1</b>, and if this parameter is not specified or is set to a non-1 value, the parameter value is <b>1</b>.</li> <li>• When <b>CouponType</b> is set to <b>1</b> (cash coupons) (or <b>4</b> (flexi-purchase coupons), if this parameter is not specified or is set to a value other than <b>0</b> or <b>1</b>, the parameter value is <b>0</b>.</li> </ul>
isOnlyForStrictSelected	Whether the coupons can only be used for Featured Products on KooGallery .	<p>The value is specified in <b>value1</b>. The value can be:</p> <ul style="list-style-type: none"> <li>• 0: No</li> <li>• 1: Yes</li> </ul> <p>If there is no such restriction, the value is <b>0</b>. This restriction applies only to flexi-purchase coupons.</p>	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 <b>value1</b> . The value can be: <ul style="list-style-type: none"> <li>• 0: No</li> <li>• 1: Yes</li> </ul> This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.
serviceTypeBlackList	Service type blacklist.	Service type blacklist. The service type code is specified in <b>value1</b> . This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.
minConsumeDiscount	Minimum customer consumption discount.	The value is specified in <b>value1</b> . The value ranges from 0 to 1 (excluding 0 and 1).	Cash coupons and flexi-purchase coupons are supported.
isForAnnualContracts	Whether coupons can only be used for yearly/monthly (one-year) orders.	The value can be: <ul style="list-style-type: none"> <li>• 0: No</li> <li>• 1: Yes</li> </ul>	Cash coupons and discount coupons are supported.
simultaneousUseWithPromotionalProduct	Whether cash coupons can be used together with promotional products.	The value is specified in <b>value1</b> . The value can be: <ul style="list-style-type: none"> <li>• 0: No</li> <li>• 1: Yes</li> </ul>	Cash coupons and discount coupons are supported.
simultaneousUseWithPromotionDiscount	Whether cash coupons can be used together with promotion discounts.	The value is specified in <b>value1</b> . The value can be: <ul style="list-style-type: none"> <li>• 0: No</li> <li>• 1: Yes</li> </ul>	Cash coupons are supported.

Key	Meaning	Description	Remarks
simultaneousUseWithDiscountCoupon	Whether cash coupons can be used together with discount coupons.	The value is specified in <b>value1</b> . The value can be: <ul style="list-style-type: none"> <li>0: No</li> <li>1: Yes</li> </ul>	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",
      "coupon_code": "CP19092406014086E3",
      "status": "2",
      "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_limit_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": "17071919060338056FEH60VIRWEP",
      "is_frozen": "0",
      "currency": "USD",
      "extend_param1": "2019091702368200",
      "source_id": "c9e731c4663646988ef4cdb3122837b6"
    }
  ]
}

```



## 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

## 6.2 Managing Yearly/Monthly Orders

### 6.2.1 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 customer can log in to Billing Center and go to **My Orders** and select **All** for **Created On** to view all orders in pending approval, processing, canceled, completed, and pending payment statuses.

### 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 [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 customer AK/SK or token.

#### URI

GET /v2/orders/customer-orders

**Table 6-5** Query parameters

Parameter	Mandatory	Type	Value Range	Description
order_id	No	String	A maximum of 64 characters	Order ID. Order IDs are case insensitive. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. <b>NOTE</b> When special characters are used for query, perform the URL code conversion. For example, % should be converted to %25.
customer_id	No	String	A maximum of 64 characters	Customer account ID. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
create_time_begin	No	String	A maximum of 20 characters	Start time of order creation. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> 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. The range queried cannot exceed one year.
create_time_end	No	String	A maximum of 20 characters	End time of order creation. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> 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. The range queried cannot exceed one year.
service_type_code	No	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . Cloud service type code is case insensitive. You can call <a href="#">Querying Cloud Service Types</a> to obtain a specific service type. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
status	No	Integer	-	Order status. The value can be: <ul style="list-style-type: none"> <li>• 1: Pending approval</li> <li>• 3: Processing</li> <li>• 4: Canceled</li> <li>• 5: Completed</li> <li>• 6: Pending payment</li> <li>• 9: To be confirmed</li> </ul> If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
order_type	No	String	A maximum of 64 characters	Order type. The value can be: <ul style="list-style-type: none"> <li>• 1: New purchase</li> <li>• 2: Renewal</li> <li>• 3: Change</li> <li>• 4: Unsubscription</li> <li>• 10: Yearly/monthly to pay-per-use</li> <li>• 11: Pay-per-use to yearly/monthly</li> <li>• 13: Trial</li> <li>• 14: Commercial use</li> <li>• 15: Price adjustment</li> </ul> If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
limit	No	Integer	1 to 100	Number of orders queried each time. The default value is <b>10</b> . If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , the default value <b>10</b> is used.

Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to a maximum integer	<p>Offset, which starts from 0. The default value is <b>0</b>.</p> <p>If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b>, the default value <b>10</b> is used.</p> <p><b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b>, the second and subsequent data records are returned.</p> <p>For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b>, the second to the tenth records are returned.</p> <p>If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.</p>
order_by	No	String	A maximum of 36 characters	<p>Sorting order of the orders. This parameter is case insensitive.</p> <p>You can sort the orders by creation time.</p> <p>If you set the value to <b>createTime</b>, the system sorts orders by creation time in ascending order. If you set the value to <b>-createTime</b>, the system sorts orders by creation time in descending order.</p> <p>If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.</p>
payment_time_begin	No	String	A maximum of 20 characters	<p>Start time of order payment.</p> <p>UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b></p> <p>The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.</p> <p>If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. The range queried cannot exceed one year.</p>

Parameter	Mandatory	Type	Value Range	Description
payment_time_end	No	String	A maximum of 20 characters	End time of order payment. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> 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. The range queried cannot exceed one year.

## Request

Request Parameters

None

### Example Request

```
GET https://bss.myhuaweicloud.eu/v2/orders/customer-orders?
order_id=CS1905251035OA1AF&customer_id=c9e731c4663646988ef4cdb3122837b6&create_time_begin=2020-05-06T08:05:01Z&create_time_end=2020-05-07T08:05:01Z&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
HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response

Response Parameters

Parameter	Type	Maximum Length	Description
error_code	String	20	Status code. For details, see <a href="#">Returned Values</a> .
error_msg	String	2000	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<CustomerOrderV2>	-	- Order details. For details, see <a href="#">Table 6-6</a> .

**Table 6-6** CustomerOrderV2

Parameter	Type	Maximum Length	Description
order_id	String	64	Order ID
customer_id	String	A maximum of 64 characters	Customer account ID.
service_type_code	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
source_type	Integer	-	Customer order source type. The value can be: <ul style="list-style-type: none"> <li>• 1: Customer</li> <li>• 2: Agent</li> <li>• 3: Contract</li> <li>• 4: Distributor</li> </ul>
status	Integer	-	Order status. The value can be: <ul style="list-style-type: none"> <li>• 1: Pending approval</li> <li>• 2: Pending refund</li> <li>• 3: Processing</li> <li>• 4: Canceled</li> <li>• 5: Completed</li> <li>• 6: Pending payment</li> <li>• 9: To be confirmed</li> <li>• 10: To be shipped</li> <li>• 11: To be received</li> <li>• 12: Pending pick-up</li> <li>• 13: Exchange in progress</li> </ul>

Parameter	Type	Maximum Length	Description
order_type	Integer	-	Order type. The value can be: <ul style="list-style-type: none"> <li>• 1: New purchase</li> <li>• 2: Renewal</li> <li>• 3: Change</li> <li>• 4: Unsubscription</li> <li>• 10: Yearly/monthly to pay-per-use</li> <li>• 11: Pay-per-use to yearly/monthly</li> <li>• 13: Trial</li> <li>• 14: Commercial use</li> <li>• 15: Price adjustment</li> </ul>
official_amount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of <b>amount_after_discount</b> .
amount_after_discount	Double	-	Order amount after a discount (excluding the vouchers or cards).
measure_id	Integer	-	Order amount unit. <ul style="list-style-type: none"> <li>• 1: 1 Yuan/Dollar</li> </ul>
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
payment_time	String	A maximum of 20 characters	Payment time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
currency	String	A maximum of 4 characters	Currency code.

Parameter	Type	Maximum Length	Description
contract_id	String	A maximum of 64 characters	Contract ID.
amount_info	AmountInfoV2 Object	-	Order details For details, see <a href="#">Table 6-7</a> .

**Table 6-7** AmountInfoV2

Parameter	Type	Value Range	Description
discounts	List<DiscountItemV2>	-	Item For details, see <a href="#">Table 6-8</a> .
flexipurchase_coupon_amount	Double	-	Flexi-purchase coupon amount (reserved).
coupon_amount	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 6-8** DiscountItemV2

Parameter	Type	Value Range	Description
discount_type	String	A maximum of 8 characters	Discount type. <ul style="list-style-type: none"> <li>• <b>200</b>: Promotion product discount</li> <li>• <b>300</b>: Promotion discount coupon</li> <li>• <b>301</b>: Promotion coupon</li> <li>• <b>302</b>: Promotion flexi-purchase coupon</li> <li>• <b>500</b>: Specified discount for agent subscription</li> <li>• <b>501</b>: Specified exemption for agent subscription</li> <li>• <b>502</b>: Specified buy-it-now price for agent subscription</li> <li>• <b>600</b>: Discount specified in the discount and rebate contract</li> <li>• <b>601</b>: Discount specified in the channel frame contract</li> <li>• <b>602</b>: Discount specified in the designated-purpose fund contract</li> <li>• <b>603</b>: Discount specified in the directly signed offline contract</li> <li>• <b>604</b>: Discount specified in the authorized telemarketing contract</li> <li>• <b>605</b>: Discount specified in the commercial contract</li> <li>• <b>606</b>: Discount specified in the channel commercial contract</li> <li>• <b>607</b>: Partner authorized discount</li> <li>• <b>609</b>: Discount for order price adjusting</li> <li>• <b>610</b>: Discount amount</li> <li>• <b>700</b>: Promotion discount</li> <li>• <b>800</b>: Top-up account discount</li> </ul>
discount_amount	Double	-	Discounted amount.

**Example Response**

```
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": "CS1905251035OA1AF",
    "customer_id": "17a80a9f9d3949ddb60ee73a5b3c9618",
    "service_type_code": "hws.service.type.rds",
    "source_type": 1,
    "status": 5,
    "order_type": 1,
    "amount_after_discount": 0,
    "official_amount": 100,
    "measure_id": 1,
    "create_time": "2020-05-06T09:08:03Z",
    "payment_time": "2020-05-06T09:08:03Z",
    "currency": "USD",
    "contract_id": null,
    "amount_info": {
      "discounts": [
        {
          "discount_type": "700",
          "discount_amount": 15
        },
        {
          "discount_type": "302",
          "discount_amount": 85
        }
      ]
    },
    "flexipurchase_coupon_amount": 85,
    "coupon_amount": 0,
    "stored_card_amount": 0,
    "commission_amount": null,
    "consumed_amount": null
  }
]
}

```

## 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.0101	Invalid parameter.
400	CBC.300000 10	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.

## 6.2.2 Querying Order Details

### Function

Customers can view order details on the self-built platform.

For details about how to view order details in Billing Center, see [Viewing Order Details](#).

#### NOTE

If you want to query the resource information of a specified order, invoke the API described in [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 customer AK/SK or token.

### URI

GET /v2/orders/customer-orders/details/{order\_id}

The following table describes the parameters.

**Table 6-9** Path parameters

Parameter	Mandatory	Value Range	Description
order_id	Yes	A maximum of 64 characters	Order ID. The system will return the orders if the orders are queried.

**Table 6-10** Query parameters

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

**Table 6-11** Message header parameter

Parameter	Mandatory	Type	Value Range	Description
X-Language	No	String	A maximum of 10 characters	<p>Language.</p> <ul style="list-style-type: none"> <li>• <b>zh_CN</b>: Chinese</li> <li>• <b>en_US</b>: English</li> </ul> <p>Default value: <b>zh_CN</b></p>

## Request

### Request Parameters

None

### Example Request

```
GET https://bss.myhuaweicloud.eu/v2/orders/customer-orders/details/CS19040119281JMYC?
limit=10&offset=0 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZihvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Status code. For details, see <a href="#">Returned Values</a> .
error_msg	String	A maximum of 2,000 characters	Error description.
order_info	Customer OrderEntityV2 Object	-	Order details. For details, see <a href="#">Table 6-12</a> .
total_count	Integer	-	Order item ID array.
order_line_items	List<Order LineItemEntityV2>	-	ID of the primary order item mapping the order item. For details, see <a href="#">Table 6-13</a> .

**Table 6-12** CustomerOrderEntityV2

Parameter	Type	Maximum Length	Description
order_id	String	64	Order ID.
customer_id	String	A maximum of 64 characters	Customer account ID.
service_type_code	String	-	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .

Parameter	Type	Maximum Length	Description
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
source_type	Integer	-	Customer order source type. The value can be: <ul style="list-style-type: none"> <li>• 1: Customer</li> <li>• 2: Agent</li> <li>• 3: Contract</li> <li>• 4: Distributor</li> </ul>
status	Integer	-	Order status. The value can be: <ul style="list-style-type: none"> <li>• 1: Pending approval</li> <li>• 2: Pending refund</li> <li>• 3: Processing</li> <li>• 4: Canceled</li> <li>• 5: Completed</li> <li>• 6: Pending payment</li> <li>• 9: To be confirmed</li> <li>• 10: To be shipped</li> <li>• 11: To be received</li> <li>• 12: Pending pick-up</li> <li>• 13: Exchange in progress</li> </ul>
order_type	Integer	-	Order type. The value can be: <ul style="list-style-type: none"> <li>• 1: New purchase</li> <li>• 2: Renewal</li> <li>• 3: Change</li> <li>• 4: Unsubscription</li> <li>• 10: Yearly/monthly to pay-per-use</li> <li>• 11: Pay-per-use to yearly/monthly</li> <li>• 13: Trial</li> <li>• 14: Commercial use</li> <li>• 15: Price adjustment</li> </ul>
official_amount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of <b>amount_after_discount</b> .
amount_after_discount	Double	-	Order amount after a discount (excluding the vouchers or cards).

Parameter	Type	Maximum Length	Description
measure_id	Integer	-	Order amount unit. <ul style="list-style-type: none"> <li>1: 1 Yuan/Dollar</li> </ul>
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
payment_time	String	A maximum of 20 characters	Payment time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
amount_info	AmountInfoV2 Object	-	Order deduction details. For details, see <a href="#">Table 6-14</a> .
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 <ul style="list-style-type: none"> <li>If the order is placed by the customer, the login name of the operator who places the order is returned.</li> <li>If the order is placed by the operation personnel at the background, <b>Operation personnel</b> is returned.</li> <li>If the order is automatically placed by the operation system, <b>Operation system</b> is returned.</li> </ul>

**Table 6-13** OrderLineItemEntityV2

Parameter	Type	Value Range	Description
order_line_item_id	String	A maximum of 64 characters	Order ID.
service_type_code	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
product_id	String	A maximum of 64 characters	Product ID.
product_spec_desc	String	A maximum of 512 characters	Product specification description.
period_type	Integer	-	Period type. The options are as follows: <ul style="list-style-type: none"> <li>● <b>0</b>: Day</li> <li>● <b>1</b>: Week</li> <li>● <b>2</b>: Month</li> <li>● <b>3</b>: Year</li> <li>● <b>4</b>: Hour</li> <li>● <b>5</b>: One-off</li> <li>● <b>6</b>: Pay-per-use (reserved)</li> <li>● <b>7</b>: By usage report (reserved)</li> </ul>
period_num	Integer	-	Number of periods. <b>NOTE</b> The value of this parameter is <b>null</b> for an unsubscription order.
effective_time	String	A maximum of 20 characters	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.



Parameter	Type	Value Range	Description
expire_time	String	A maximum of 20 characters	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b> The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
subscription_num	Integer	-	Number of subscriptions.
amount_after_discount	Double	-	Order amount after a discount (excluding the vouchers or cards).
official_amount	Double	-	Order amount (list price). In the unsubscription order, the amount is equal to the value of <b>currencyAfterDiscount</b> .
amount_info	AmountInfoV2 Object	-	Order deduction details. For details, see <a href="#">Table 6-14</a> .
currency	String	A maximum of 4 characters	Currency code.
category_code	String	A maximum of 64 characters	Product catalog code.
product_owner_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 <b>hws.service.type.obs</b> . To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a> .
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 <b>hws.resource.type.vm</b> . To obtain a specific resource type, call the API in <a href="#">Querying Resource Types</a> .

**Table 6-14** AmountInfoV2

Parameter	Type	Value Range	Description
discounts	List<DiscountItemV2>	-	Fee item. For details, see <a href="#">Table 6-15</a> .
flexipurchase_coupon_amount	Double	-	Flexi-purchase coupon amount (reserved).
coupon_amount	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 6-15** DiscountItemV2

Parameter	Type	Value Range	Description
discount_type	String	A maximum of 8 characters	Discount type. <ul style="list-style-type: none"> <li>• <b>200</b>: Promotion product discount</li> <li>• <b>300</b>: Promotion discount coupon</li> <li>• <b>301</b>: Promotion coupon</li> <li>• <b>302</b>: Promotion flexi-purchase coupon</li> <li>• <b>500</b>: Specified discount for agent subscription</li> <li>• <b>501</b>: Specified exemption for agent subscription</li> <li>• <b>502</b>: Specified buy-it-now price for agent subscription</li> <li>• <b>600</b>: Discount specified in the discount and rebate contract</li> <li>• <b>601</b>: Discount specified in the channel frame contract</li> <li>• <b>602</b>: Discount specified in the designated-purpose fund contract</li> <li>• <b>603</b>: Discount specified in the directly signed offline contract</li> <li>• <b>604</b>: Discount specified in the authorized telemarketing contract</li> <li>• <b>605</b>: Discount specified in the commercial contract</li> <li>• <b>606</b>: Discount specified in the channel commercial contract</li> <li>• <b>607</b>: Partner authorized discount</li> <li>• <b>609</b>: Discount for order price adjusting</li> <li>• <b>610</b>: Discount amount</li> <li>• <b>700</b>: Promotion discount</li> <li>• <b>800</b>: Top-up account discount</li> </ul>
discount_amount	Double	-	Discounted amount.

**Example Response**

```
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"
},
"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
  },
  {
    "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|1vCPU|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": null,
      "commission_amount": 27.2,

```

```

        "consumed_amount": 0.0
      },
      "currency": "USD",
      "category_code": "hws.resource.computing.ecs",
      "product_owner_service": null,
      "commercial_resource": null
    }
  ]
}

```

## 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.0101	Invalid parameter.
400	CBC.300000 10	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.

## 6.2.3 Querying Available Discounts of an Order

### Function

A customer can query available discounts when paying an order on the self-built platform.

### NOTE

No discount is available to reseller customers.

### Constraints

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

## URI

GET /v2/orders/customer-orders/order-discounts

The following table describes the parameters.

**Table 6-16** Request parameters

Parameter	Mandatory	Value Range	Description
order_id	Yes	A maximum of 64 characters	Order ID.

## Request

Request Parameters

None

### Example Request

```
GET https://bss.myhuaweicloud.eu/v2/orders/customer-orders/order-discounts?
order_id=CS2011091132EMKL9 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZihvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> .
error_msg	String	A maximum of 2,000 characters	Error description.
discounts	List<DiscountInfoV3>	-	List of available discounts. For details, see <a href="#">Table 6-17</a> .

**Table 6-17** DiscountInfoV3

Parameter	Type	Value Range	Description
discount_id	String	A maximum of 64 characters	ID of the available order discount. To use a discount, enter the value of this parameter when paying an order.
discount_value	String	-	Discount percentage or reduction. Leave this parameter empty if the discount model is set to <b>1</b> .
discount_type	Integer	-	Discount type. The options are as follows: <ul style="list-style-type: none"> <li>• 0: promotion discount</li> <li>• 1: contract discount</li> <li>• 2: commercial discount</li> <li>• 3: discount granted by a partner</li> <li>• 609: discount for adjusting an order price</li> </ul>
orders	List<OrderV3>	-	List of the orders that can use discounts. For details, see <a href="#">Table 6-18</a> .

**Table 6-18** OrderV3

Parameter	Type	Maximum Length	Description
order_id	String	-	ID of the order that can use discounts.
order_line_items	List<OrderLineItemV3>	A maximum of 100 items	List of the order items that can use the same discount. For details, see <a href="#">Table 6-19</a> .

**Table 6-19** OrderLineItemV3

Parameter	Type	Value Range	Description
order_line_item_ids	List<String>	A maximum of 1000 IDs	List of the IDs of the combined order items that can use the same discount.  Order items with the same product, same specifications (for linear products), and same final price (for example, price adjustment for a featured product) will be combined.
discount_mode	Integer	-	Available discount model of an order.  <ul style="list-style-type: none"> <li>• 0: discount</li> <li>• 1: buy-it-now price</li> <li>• 2: reduction for specific amount</li> </ul>
discount_amount	Number	-	Discount amount of an order, that is, the deducted amount.
discount_ratio	Number	-	Discount ratio of an order.

**Example Response**

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "discounts": [
    {
      "discount_id": "PDP2011260815047721TYT48G0BA02EI",
      "discount_value": "0.9",
      "discount_type": 0,
      "orders": [
        {
          "order_id": "CS2011091132EMKL9",
          "order_line_items": [
            {
              "order_line_item_ids": [
                "CS2011091132EMKL9-000002"
              ],
              "discount_mode": 0,
              "discount_amount": null,
              "discount_ratio": 0.9
            },
            {
              "order_line_item_ids": [
                "CS2011091132EMKL9-000001"
              ],
              "discount_mode": 0,
              "discount_amount": null,
              "discount_ratio": 0.9
            }
          ]
        }
      ]
    }
  ]
}

```



```
}  
  }  
} ]  
}
```

## 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.

## 6.2.4 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.

### NOTE

- 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 coupons, commercial discounts, and partner-authorized discounts cannot be used together.
  - 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.

## Constraints

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

## URI

POST /v3/orders/customer-orders/pay

## Request

Request Parameters

Parameter	Mandatory	Type	Maximum Length of Characters	Description
order_id	Yes	String	A maximum of 64 characters	Order ID. The value is the same as the <b>order_ids</b> value in the response message of API described in <a href="#">Renewing Subscription to Yearly/Monthly Resources</a> .
use_coupon	Yes	String	[YES] [NO]	Whether coupons are used for order payment. If this parameter is set to <b>YES</b> , the <b>coupon_infos</b> field is mandatory. If this parameter is set to <b>NO</b> , the value of <b>coupon_infos</b> is ignored. <ul style="list-style-type: none"> <li><b>YES</b>: indicates that the coupons are used for payment.</li> <li><b>NO</b>: indicates that the coupons are not used for payment.</li> </ul>
use_discount	Yes	String	[YES] [NO]	Whether a discount is used for the order payment. If this parameter is set to <b>YES</b> , the <b>discount_infos</b> field is mandatory. If this parameter is set to <b>NO</b> , the value of <b>discount_infos</b> is ignored. <ul style="list-style-type: none"> <li><b>YES</b>: indicates that the discount is used for payment.</li> <li><b>NO</b>: indicates that the discount is not used for payment.</li> </ul>

Parameter	Mandatory	Type	Maximum Length of Characters	Description
coupon_infos	No	List<CouponSimpleInfo>	A maximum of 3 IDs are supported.	<p>For details, see <a href="#">Table 6-20</a>. This parameter is reserved.</p> <p>If <b>use_coupon</b> is set to <b>YES</b>, this parameter is mandatory. If <b>use_coupon</b> is set to <b>NO</b>, this parameter can be left empty. Otherwise, a message indicating parameter error is displayed.</p> <p><b>CAUTION</b> 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.</p>
discount_infos	No	List<DiscountSimpleInfo>	Only one discount ID is allowed.	<p>For details, see <a href="#">Table 6-21</a>. Discount ID list.</p> <p>If <b>use_discount</b> is set to <b>YES</b>, this parameter is mandatory. If <b>use_discount</b> is set to <b>NO</b>, this parameter can be left empty. Otherwise, a message indicating parameter error is displayed.</p>

**Table 6-20** CouponSimpleInfo

Parameter	Mandatory	Type	Maximum Length of Characters	Description
id	Yes	String	A maximum of 64 characters	Coupon ID.

Parameter	Mandatory	Type	Maximum Length of Characters	Description
type	Yes	Integer	[300-303]	Coupon type. <ul style="list-style-type: none"> <li>• <b>300</b>: Discount coupon (reserved)</li> <li>• <b>301</b>: Promotion coupon</li> <li>• <b>302</b>: Promotion flexi-purchase coupon (reserved)</li> <li>• <b>303</b>: Promotion stored-value card (reserved)</li> </ul>

**Table 6-21** DiscountSimpleInfo

Parameter	Mandatory	Type	Maximum Length of Characters	Description
id	Yes	String	A maximum of 64 characters	Discount ID.
type	Yes	Integer	[0,2,3]	Discount type. <ul style="list-style-type: none"> <li>• 0: promotion discount</li> <li>•</li> <li>• 2: commercial discount</li> <li>• 3: discount granted by a partner</li> </ul>

**Example Request**

POST <https://bss.myhuaweicloud.eu/v3/orders/customer-orders/pay> HTTP/1.1

Content-Type: application/json

X-Auth-Token: *MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ*

```
{
  "use_coupon": "YES",
  "use_discount": "YES",
  "coupon_infos": [
    {
      "id": "CP200527025610NGSC",
      "type": 301
    }
  ],
}
```

```
"discount_infos": [
  {
    "id": "PDP2011260815047721TYT48G0BA02EI",
    "type": 1
  }
],
"order_id": "CS20052715001E4CR"
}
```

## Response

### Response Parameters

Status code: 204

**Success** is returned by default.

Status code: 400

Parameter	Type	Maximum Length of Characters	Description
error_code	String	A maximum 10 characters	Error code. For details, see <a href="#">Returned Values</a> .
error_msg	String	A maximum of 256 characters	Error description.
quota_infos	List<QuotaInfo>	-	List of the resources whose quota or capacity is insufficient. For details, see <a href="#">Table 6-22</a> . This parameter is valid only when <b>error_code</b> is set to <b>CBC.99003141</b> . <ul style="list-style-type: none"> <li>• If the quota is insufficient, submit a service ticket on the HUAWEI CLOUD official website to increase the quota and then pay the order.</li> <li>• If the capacity is insufficient, place an order again.</li> <li>• If the specifications have changed, place an order again.</li> </ul>

Parameter	Type	Maximum Length of Characters	Description
enterprise_project_auth_result	List<EnterpriseProject>	-	Information about the enterprise project whose fund is insufficient. For details, see <a href="#">Table 6-23</a> . This parameter is valid only when <b>error_code</b> is set to <b>CBC.99003155</b> .

**Table 6-22** QuotaInfo

Parameter	Type	Description
region	String	Cloud service region code, for example, eu_west_101.
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
resource_type_code	String	Resource type code. For example, the resource type code of VM is <b>hws.resource.type.vm</b> . 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_spec_code	String	Resource specifications of the subscribed cloud service products. For example, the resource specification of a small-scale VM is <b>s2.small.1.linux</b> .
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
resource_type_name	String	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .

Parameter	Type	Description
auth_result	Integer	<p>Verification result of the change of the cloud service quota, capacity, or specifications.</p> <ul style="list-style-type: none"> <li>• 1: The quota is insufficient.</li> <li>• 2: The capacity is insufficient.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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 the customer pays the order.</li> </ul>
available_zone	String	AZ ID.

**Table 6-23** EnterpriseProject

Parameter	Type	Description
enterprise_project_id	String	<p>ID of the enterprise project where an order belongs.</p> <ul style="list-style-type: none"> <li>• 0: ID of a default project</li> <li>• -1 or null: Non-project ID</li> </ul>
enterprise_project_name	String	Enterprise project name.
auth_statuses	Integer	<p>Verification result of the enterprise project's fund quota.</p> <p>10: The fund quota is insufficient./The project is invalid.</p> <p>11: The organization budget quota is insufficient.</p>

**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 Status Code	Error Code	Description
400	CBC.99000046	Insufficient budget.
500	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.

## 6.2.5 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.

#### NOTE

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

### Constraints

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

### URI

PUT /v2/orders/customer-orders/cancel

### Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
order_id	Yes	String	A maximum of 64 characters	Order ID. The value is the same as the value of <b>order_id</b> in the response of the API described in <a href="#">Querying Orders</a> .

### Example Request

```
PUT https://bss.myhuaweicloud.eu/v2/orders/customer-orders/cancel HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "order_id": "CS170926155954NO7"
}
```

### Response

Response Parameters

**Table 6-24** Response parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 10 characters	Status code. For details, see <a href="#">Returned Values</a> .
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
```

### 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.99005010	Orders in this state cannot be canceled.
403	CBC.0151	Access denied.

HTTP Value	Error Code	Description
500	CBC.0999	Other errors.
400	CBC.99000089	Operation failed. Sub-orders of a combine order cannot be processed independently.

## 6.2.6 Querying the Amount of Unsubscription Orders

### Function

A customer can query the resources and original orders of the unsubscription amount for an unsubscription or degrade order on the partner sales platform.

#### NOTE

- After you invoke the API in [Unsubscribing from Yearly/Monthly Resources](#) to generate an unsubscription order ID, you can invoke this API to query the resources and amount of an unsubscription order. For example, after you invoke the API in [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 AK/SK or token of the customer.

### URI

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

**Table 6-25** Query parameters

Parameter	Mandatory	Type	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	Type	Description
error_code	String	Status code. For details, see <a href="#">Status Code</a> .
error_msg	String	Error description.
total_count	Integer	Total queries.
refund_info	List<OrderRefundInfoV2>	Resource list. For details, see <a href="#">Table 6-26</a> .

**Table 6-26** OrderRefundInfoV2

Parameter	Type	Description
id	String	Record ID.
amount	BigDecimal	Amount. <ul style="list-style-type: none"><li>A negative number indicates the unsubscription amount.</li><li>A positive number indicates the handling fee for unsubscription.</li></ul>
measure_id	String	Fee unit. <ul style="list-style-type: none"><li>1: 1 Yuan/Dollar</li></ul>
customer_id	String	Customer account ID.
resource_type_code	String	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> .
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
resource_type_name	String	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
region_code	String	Cloud service region code, for example, eu_west_101.

Parameter	Type	Description
base_order_id	String	ID of the original order corresponding to the unsubscription amount, consumption amount, or unsubscription handling fee.

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "total_count": 1,
  "refund_infos": [
    {
      "id": "ccefa7ff-****-****-99f5-bb25a2551217",
      "amount": -3,
      "measure_id": "1",
      "customer_id": "075a5d*****ffb75c20a82d228130",
      "resource_type_code": "hws.resource.type.volume",
      "service_type_code": "hws.service.type.ebs",
      "resource_type_name": "EVS",
      "service_type_name": "EVS",
      "region_code": "eu-west-101",
      "base_order_id": "CS2006*****1F8CI"
    }
  ]
}

```

### Status Code

#### 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.99005026	The order is not a degrade or unsubscription order.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

## 6.3 Managing Yearly/Monthly Resources

## 6.3.1 Querying Customer's Yearly/Monthly Resources

### Function

A customer can query one or all yearly/monthly resources on the self-built platform.

#### NOTE

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

### Constraints

- This API can be invoked only by the customer AK/SK or token.
- This API queries resources successfully provisioned only.
- If the parameter is left empty, for example, no parameter is transferred, the value is **null**, the value is an empty JSON array, or the value is an empty string, a specified number of resources (specified by **limit**, which is **10** by default) are returned for the user.

### URI

POST /v2/orders/suscriptions/resources/query

### Request

#### Request Parameters

**Table 6-27** Request parameters

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

Parameter	Mandatory	Type	Value Range	Description
only_main_resource	No	Integer	0, 1	<p>Whether to query only the primary resources. This parameter is invalid when <b>resource_ids</b> are IDs of attached resources. In this case, the system queries the attached resources.</p> <ul style="list-style-type: none"> <li>• <b>0</b>: Queries both the primary resources and attached resources.</li> <li>• <b>1</b>: Queries only the primary resources.</li> </ul> <p>The default value is <b>0</b>.</p> <p>If this parameter is not included in the request parameters or is set to <b>null</b>, the default value <b>0</b> is used.</p> <p><b>NOTE</b> A primary resource takes the primary position in the associated resources.</p> <ul style="list-style-type: none"> <li>• For ECS, ECS is the primary resource, and EVS is the attached resource.</li> <li>• 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.</li> </ul>
status_list	No	list<Integer>	[0-10]	<p>Resource status.</p> <p>Queries resources in a specified status. If there are multiple statuses, separate them using commas (,).</p> <ul style="list-style-type: none"> <li>• <b>2</b>: Provisioned</li> <li>• <b>4</b>: Frozen</li> <li>• <b>5</b>: Expired</li> </ul> <p>If this parameter is not included in the request parameters, is left empty, or is set to <b>null</b>, it cannot be used as a filter criterion. Resources in all statuses are returned.</p>



Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to 2147483646	<p>Offset, starting from <b>0</b>. The default value is <b>0</b>.</p> <p><b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b>, the second and subsequent data records are returned.</p> <p>For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b>, the second to the tenth records are returned.</p> <p>If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.</p>
limit	No	Integer	1 to 500	Number of records queried each time. The default value is <b>10</b> .
expire_time_begin	No	String	20	<p>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, <b>2019-05-06T08:05:01Z</b>. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.</p> <p>If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b>, it cannot be used as a filter criterion. Records that meet other search criteria are returned.</p>
expire_time_end	No	String	20	<p>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, <b>2019-05-06T08:05:01Z</b>. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.</p> <p>If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b>, it cannot be used as a filter criterion. Records that meet other search criteria are returned.</p>

Parameter	Mandatory	Type	Value Range	Description
service_type_code	No	String	64	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . You can call the <a href="#">Querying Cloud Service Types</a> API to query the type of a cloud service.  If this parameter is not included in the request parameters or is set to <b>null</b> , it cannot be used as a filter criterion. This parameter cannot be left empty or 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: MIIIPAgYJKoZlhvcNAQcCo...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

Parameter	Type	Description
error_code	String	Error code. For details, see <a href="#">Returned Values</a> .
error_msg	String	Error description.
data	List<OrderInstanceV2>	Resource list. For details, see <a href="#">Table 6-28</a> .
total_count	Integer	Total number of records

**Table 6-28** OrderInstanceV2

Parameter	Type	Description
id	String	Internal ID of the resource to be provisioned. The ID generated after the resource is provisioned is <b>resource_id</b> .
resource_id	String	Resource ID.
resource_name	String	Resource instance name.
region_code	String	Cloud service region code, for example, eu_west_101.
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
resource_type_code	String	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> .
resource_spec_code	String	Specification of a cloud service resource. For example, a VM resource specification is <b>s2.small.1.linux</b> (.win or .linux should be added at the end of the specification).
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
resource_type_name	String	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .
project_id	String	Resource project ID.
product_id	String	Product ID.
parent_resource_id	String	Parent resource ID

Parameter	Type	Description
is_main_resource	Integer	Primary resource or not. <ul style="list-style-type: none"> <li>0: Attached resource</li> <li>1: Primary resource</li> </ul>
status	Integer	Resource status. <ul style="list-style-type: none"> <li>2: Provisioned</li> <li>3: Closed (not visible to customers)</li> <li>4: Frozen</li> <li>5: Expired</li> </ul>
effective_time	String	Effective time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>
expire_time	String	Expiration time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as <b>2019-05-06T08:05:01Z</b>
expire_policy	Integer	Billing policy after a resource expires. <ul style="list-style-type: none"> <li>0: Entering the grace period upon expiration</li> <li>1: Yearly/monthly to pay-per-use</li> <li>2: Automatically deleted upon expiration (directly deleted from resources that take effect)</li> <li>3: Automatically renewed upon expiration</li> <li>4: Automatically frozen upon expiration</li> <li>5: Automatically deleted upon expiration (deleted from resources in the retention period)</li> </ul> <p><b>NOTE</b> Only 3 indicates that the resource is automatically renewed. In other cases, the expiration policy for non-automatic renewal is used.</p>

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "data": [
    {
      "id": "01154-54600027-0",
      "resource_id": "0A063A11905F42BC8548E65D0089A905",
      "resource_name": "0A063A11905F42BC8548E65D0089A905name",
      "region_code": "eu-west-101",
      "service_type_code": "hws.service.type.ebs",
      "resource_type_code": "hws.resource.type.volume",
      "resource_spec_code": "SSD",
    }
  ]
}

```

```

"project_id": "1dd89a5fe99e4cca80edca61e737477a",
"product_id": "2fd338aca5ae4a01aac81deaa900e441",
"parent_resource_id": "9ad02e1ad3394d1bb3da48890fbc4c06",
"is_main_resource": 1,
"status": 2,
"effective_time": "2020-05-03T09:11:10Z",
"expire_time": "2020-06-03T09:11:10Z",
"expire_policy": 0
}
],
"total_count": 1
}

```

## 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.

## 6.3.2 Renewing Subscription to Yearly/Monthly Resources

### Function

A customer can renew subscription to yearly/monthly resources on the self-built 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.

 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 [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 [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 [Support for Discounts or Coupons](#).

## Constraints

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

## URI

POST /v2/orders/subscriptions/resources/renew

## Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
resource_ids	Yes	List<String>	[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 <b>is_main_resource</b> in the response of the API described in <a href="#">Querying Customer's Yearly/Monthly Resources</a> .
period_type	Yes	Integer	2, 3	Period type. The value can be: <ul style="list-style-type: none"><li>• 2: month</li><li>• 3: year</li></ul>
period_num	Yes	Integer	1 to 11	Number of periods. <ul style="list-style-type: none"><li>• Month: 1 to 11</li><li>• Year: 1 to 3</li></ul>

Parameter	Mandatory	Type	Value Range	Description
expire_policy	No	Integer	0 to 3	Expiration policy. This field has been discarded. Do not use this field. This parameter will not take effect. <ul style="list-style-type: none"> <li>0: Entering a grace or retention period</li> <li>1: Yearly/monthly to pay-per-use</li> <li>2: Automatic unsubscription</li> <li>3: Automatic renewal</li> </ul>
is_auto_pay	No	Integer	0, 1	Whether enable automatic payment. <ul style="list-style-type: none"> <li>0: No</li> <li>1: Yes</li> </ul> <p>If this parameter is not included in the request parameters or is set to <b>null</b>, the default value is <b>0</b> indicating not to enable the automatic payment. The rules for auto payment are consistent with those for auto renewal. For details about the rules for auto payment, see <a href="#">Auto-Renewal Rules</a>.</p>

### 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 6-29 Response body parameters

Parameter	Type	Description
order_ids	List<String>	List of order IDs generated when resource subscription is renewed.

Parameter	Type	Description
fail_resource_infos	List<FailResourceInfo>	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 <a href="#">Table 6-30</a> . This parameter is reserved.

**Table 6-30** FailResourceInfo

Parameter	Type	Description
error_code	String	Error code. For details, see <a href="#">Error Codes</a> . 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 6-31** Response body parameters

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

**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.30010036	Renewal is only supported for primary resources.
400	CBC.30010069	The renewal period does not exist.
400	CBC.30050006	Automatic order payment failed.
400	CBC.99000092	Incorrect subscription period.
400	CBC.99003100	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.99003016	The resources have expired and been deleted or do not exist.
400	CBC.99003144	You have orders in progress and cannot perform the current operation.
400	CBC.99003154	The sum of the existing and renewal durations has exceeded the maximum allowed. Select another renewal duration.
400	CBC.99003634	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.

## 6.3.3 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 [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 [Querying Customer's Yearly/Monthly Resources](#) to obtain the details of the ECS primary resources and its attached ones.
- 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 want 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.

### URI

POST /v2/orders/subscriptions/resources/unsubscribe

### Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
resource_ids	Yes	List<String>	A maximum 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 <b>is_main_resource</b> in the response of the API described in <a href="#">Querying Customer's Yearly/Monthly Resources</a> .
unsubscribe_type	Yes	Integer	1, 2	Unsubscription type. The value can be: <ul style="list-style-type: none"> <li>• 1: Unsubscribe from the resource and its renewal periods.</li> <li>• 2: Unsubscribe from only the resource renewal periods.</li> </ul>
unsubscribe_reason_type	No	Integer	1 to 5	Unsubscription cause. The value can be: <ul style="list-style-type: none"> <li>• 1: The product is of poor usability.</li> <li>• 2: The product functions cannot meet the requirements.</li> <li>• 3: Customers do not know how to use the product, or the product operations are complex.</li> <li>• 4: Customers are not satisfied with the service.</li> <li>• 5: Others</li> </ul>
unsubscribe_reason	No	String	A maximum of 512 characters	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

Parameter	Type	Description
error_code	String	Status code. For details, see <a href="#">Returned Values</a> .
error_msg	String	Error description.
order_ids	List<String>	Unsubscription order IDs.
fail_resource_infos	List<FailResourceInfo>	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 <a href="#">#api_order_00019/table173001375312</a> . This parameter is reserved.

### Table FailResourceInfo

Parameter	Type	Description
error_code	String	Status code. For details, see <a href="#">Returned Values</a> . 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.99003012	The resource ID does not exist.
400	CBC.99003100	This operation is not allowed because some resources are included in your orders to be paid.
400	CBC.99003128	The resource does not have renewed periods or the renewed periods have taken effect, and the renewal periods cannot be unsubscribed.
400	CBC.99003185	The associated resources of a cloud service cannot be operated independently.
400	CBC.99003643	For cloud services for which invoices have been issued, unsubscription is not supported.
400	CBC.99003647	Unsubscription not supported for this pay-per-use package.
400	CBC.99003649	Unsubscription not supported for cloud services in trial use.
400	CBC.99003652	Unsubscription is not supported for DevCloud packages.
400	CBC.99003654	If there is a bandwidth add-on package, you cannot unsubscribe from the renewal period.
400	CBC.99003656	Operation not allowed. Your resource has been frozen.
400	CBC.99006066	An error occurred during the query of the fee information.
403	CBC.0151	Access denied.
400	CBC.99003651	Unsubscription not supported. An operation associated with this instance is in progress.
500	CBC.0999	Other errors.

## 6.3.4 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 [Auto-Renewal Rules](#).
- Before invoking this API, you can invoke the API described in [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 6-32** Path parameters

Parameter	Mandatory	Value Range	Description
resource_id	Yes	A maximum of 64 characters	<p>Resource ID.</p> <p>You can obtain the resource ID by invoking the API described in <a href="#">Querying Customer's Yearly/Monthly Resources</a>.</p> <p>The attached resource IDs will be configured together when you configure primary resource IDs.</p> <ul style="list-style-type: none"> <li>For example, ECS is the primary resource, and EVS is the attached resource.</li> <li>If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource.</li> <li>If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.</li> </ul> <p>If automatic renewal is enabled for the secondary resource, the primary resource will also be renewed.</p>

## 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: MIIPAgYJKoZlhcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response

Response Parameters

Parameter	Type	Description
error_code	String	Status code. For details, see <a href="#">Returned Values</a> .
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

### 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.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.

## 6.3.5 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 [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 [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 [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 6-33** Path parameters

Parameter	Mandatory	Value Range	Description
resource_id	Yes	A maximum of 64 characters	<p>Resource ID.</p> <p>You can obtain the resource ID by invoking the API described in <a href="#">Querying Customer's Yearly/Monthly Resources</a>.</p> <p>The attached resource IDs will be configured together when you configure primary resource IDs.</p> <ul style="list-style-type: none"> <li>For example, ECS is the primary resource, and EVS is the attached resource.</li> <li>If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource.</li> <li>If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.</li> </ul>

## 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: MIIPAgYJKoZihvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response

Response Parameters

Parameter	Type	Description
error_code	String	Status code. For details, see <a href="#">Returned Values</a> .
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

### 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.99003012	The resource ID does not exist.
400	CBC.99003605	Automatic renewal has been canceled and you cannot perform the current operation.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

## 6.3.6 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 pay-per-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 Pay-per-Use](#) to enable the change from yearly/monthly to pay-per-use upon expiration in Billing Center.

#### 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 [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 [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 [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

Parameter	Mandatory	Type	Value Range	Description
operation	Yes	String	A maximum of 64 characters	Used to enable or cancel the change from yearly/monthly to pay-per-use. <ul style="list-style-type: none"><li>• <b>SET_UP</b>: Enable</li><li>• <b>CANCEL</b>: Cancel</li></ul>

Parameter	Mandatory	Type	Value Range	Description
resource_ids	Yes	list<string>	[1-100]	<p>Resource ID.</p> <p>You can obtain the resource ID by invoking the API described in <a href="#">Querying Customer's Yearly/Monthly Resources</a>.</p> <p>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-per-use resources. This field is mandatory.</p> <p>You can refer to parameter <b>is_main_resource</b> in the response of the API described in <a href="#">Querying Customer's Yearly/Monthly Resources</a> to check whether the resource is primary.</p>

### Example Request

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

## Response

### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> .
error_msg	String	A maximum of 1000 characters	Error description.

Parameter	Type	Value Range	Description
error_details	List<Error Detail>	A maximum 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 <a href="#">Table 6-34</a> .

**Table 6-34** ErrorDetail

Parameter	Type	Value Range	Description
id	String	A maximum of 128 characters	ID of a batch processing message.
error_code	String	A maximum of 20 characters	Error code. For details, see <a href="#">Returned Values</a> .
error_msg	String	A maximum of 1000 characters	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.

## 6.4 Managing Resource Packages

### 6.4.1 Querying Resource Packages

#### Function

A customer can query resource packages on the self-built platform.

Customers can log in to Billing Center and go to [My packages](#). Click the **Resource Packages** tab to view the list of resource packages.

#### Constraints

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

 **CAUTION**

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

**URI**

POST /v3/payments/free-resources/query

**Table 6-35** Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"><li>• <b>zh_CN</b>: Chinese</li><li>• <b>en_US</b>: English</li></ul> Default value: <b>zh_CN</b>

**Request****Request Parameters**

Parameter	Mandatory	Type	Value Range	Description
region_code	No	String	A maximum of 64 characters	Cloud service region code. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
order_id	No	String	A maximum of 64 characters	Order ID. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
product_id	No	String	A maximum of 64 characters	Resource package ID. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
product_name	No	String	A maximum of 256 characters	Resource package name. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
enterprise_project_id	No	String	A maximum of 64 characters	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 <b>null</b> , the resources not included in the enterprise project are queried.
status	No	Integer	(0, 4)	Status: <ul style="list-style-type: none"> <li>● <b>0</b>: Not effective</li> <li>● <b>1</b>: In effect</li> <li>● <b>2</b>: Used up</li> <li>● <b>3</b>: Expired</li> <li>● <b>4</b>: Unsubscribed</li> </ul> If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
offset	No	Integer	(0, 999999)	Offset, starting from <b>0</b> . The default value is <b>0</b> . <b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b> , the second and subsequent data records are returned. For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b> , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.



Parameter	Mandatory	Type	Value Range	Description
limit	No	Integer	(1, 1000)	Number of records queried each time. The default value is <b>10</b> .
service_type_code_list	No	List<String>	[0-10]	<p>The ID of the cloud service type. The value is case-insensitive.</p> <p>For example, the cloud service type code of OBS is <b>hws.service.type.obs</b>. You can call the <a href="#">Querying Cloud Service Types</a> API to query the type of a cloud service.</p> <p>If this parameter is not included in the request, is left empty, or is set to <b>null</b>, it cannot be used as a filter criterion, and records that meet other search criteria are returned.</p>

### 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	Type	Value Range	Description
error_code	String	20	<p>Error code.</p> <p>For details, see <a href="#">Returned Values</a>. This parameter is returned only when the query failed.</p>

Parameter	Type	Value Range	Description
error_msg	String	1000	Error description. This parameter is returned only when the query failed.
free_resource_packages	List<FreeResourcePackage>	-	Resource package list. For details, see <a href="#">Table 6-36</a> .
total_count	Integer	-	Total number of records

**Table 6-36** FreeResourcePackage

Parameter	Type	Value Range	Description
order_instance_id	String	A maximum of 64 characters	Identifier of a subscribed resource package.
order_id	String	A maximum of 64 characters	Order ID. If the value of <b>source_type</b> is <b>1</b> , this parameter is left empty.
product_id	String	A maximum of 64 characters	Resource package ID.
product_name	String	A maximum of 256 characters	Resource package name.
enterprise_project_id	String	A maximum of 64 characters	Enterprise project ID.

Parameter	Type	Value Range	Description
enterprise_project_scope	Integer	(0, 1)	Enterprise projects for which resource packages are used: <ul style="list-style-type: none"> <li>• <b>0</b>: All enterprise projects</li> <li>• <b>1</b>: Specific enterprise projects</li> </ul>
effective_time	String	A maximum of 20 characters	Time when a resource package is purchased. The value is in UTC format.
expire_time	String	A maximum of 20 characters	Expiration time of a resource package. The value is in UTC format.
status	Integer	(0, 4)	Status: <ul style="list-style-type: none"> <li>• <b>0</b>: Not effective</li> <li>• <b>1</b>: In effect</li> <li>• <b>2</b>: Used up</li> <li>• <b>3</b>: Expired</li> <li>• <b>4</b>: Unsubscribed</li> </ul>
service_type_code	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
region_code	String	A maximum of 64 characters	Cloud service region code.

Parameter	Type	Value Range	Description
source_type	Integer	(0, 1)	Source of a resource package. The options are as follows: <ul style="list-style-type: none"> <li>• <b>0</b>: Order</li> <li>• <b>1</b>: Gifted by DevCloud</li> </ul>
bundle_type	String	[ATOMIC_PKG BUNDLE_PKG]	Bundle binding type. The options are as follows: <ul style="list-style-type: none"> <li>• <b>ATOMIC_PKG</b>: Atomic package</li> <li>• <b>BUNDLE_PKG</b>: Combined package</li> </ul>
quota_reuse_mode	Integer	(1,2)	Use model. The options are as follows: <ul style="list-style-type: none"> <li>• <b>1</b>: Resettable Indicates that the purchased pay-per-use 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 <b>quota_reuse_mode</b> set to <b>1</b> and <b>quota_reuse_cycle</b> to <b>4</b>, then the resource package will be reset each month (you will get 40 GB resource each month) within the year.</li> <li>• <b>2</b>: 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 <b>quota_reuse_mode</b> set to <b>2</b>, the resource package will not be reset, and you will get 40 GB resource within the year.</li> </ul>
free_resources	List<FreeResource>	-	For details about resource items (ID-specific) in a resource package, see <a href="#">Table 6-37</a> .

**Table 6-37** FreeResource

Parameter	Type	Value Range	Description
free_resource_id	String	A maximum of 64 characters	Resource ID. A resource package contains multiple resources, and each resource has a usage type.

Parameter	Type	Value Range	Description
usage_type_name	String	A maximum of 1024 characters	Usage type name.
amount	String	A maximum of 32 characters	Remaining resource quota of a package whose <b>quota_reuse_mode</b> is <b>Resettable</b> , that is, the remaining resource quota in the current reset period.
original_amount	String	A maximum of 32 characters	Original resource quota of a package whose <b>quota_reuse_mode</b> is <b>Resettable</b> , 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 <a href="#">Querying Measurement Units</a> 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

### 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.

## 6.4.2 Viewing Resource Package Usage

### Function

Customers can query the resource package usage on the self-built platform by resource.

Customers can log in to Billing center and go to [My Packages](#). Click the **Resource Packages** tab, and then the resource package name to view the resource usage.

### Constraints

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

---

#### CAUTION

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 6-38** Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"> <li><b>zh_CN</b>: Chinese</li> <li><b>en_US</b>: English</li> </ul> Default value: <b>zh_CN</b>

## Request

### Request Parameters

Parameter	Mandatory	Type	Value Range	Description
free_resource_ids	Yes	List<string>	A maximum 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 <a href="#">Querying Resource Packages</a> .

### 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	Type	Maximum Length of Characters	Description
error_code	String	20	Error code. For details, see <a href="#">Returned Values</a> . 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_resources	List<FreeResourceDetail>	-	Resource information (resource details) in a resource package. For details, see <a href="#">Table 6-39</a> .

**Table 6-39** FreeResourceDetail

Parameter	Type	Maximum Length of Characters	Description
free_resource_id	String	A maximum of 64 characters	Resource ID. A resource package contains multiple resources, and a resource has a usage type.
free_resource_type_name	String	-	Resource type name.
quota_reuse_cycle	Integer	-	Reset period. This parameter is valid only when <b>quota_reuse_mode</b> is set to <b>1</b> (Resettable). <ul style="list-style-type: none"> <li>• 1: Hour</li> <li>• 2: Day</li> <li>• 3: Week</li> <li>• 4: Month</li> <li>• 5: Year</li> </ul>



Parameter	Type	Maximum Length of Characters	Description
quota_reuse_cycle_type	Integer	-	<p>Reset period type. This field is valid only when <b>quota_reuse_mode</b> is set to <b>1</b> (Resettable).</p> <ul style="list-style-type: none"> <li>• 1: Reset by calendar period Indicates that the resource package is reset by calendar month or calendar year. For example, if you set <b>quota_reuse_cycle</b> to <b>4</b> (month) and <b>quota_reuse_cycle_type</b> to <b>1</b>, the resource package is reset on the first day of each month.</li> <li>• 2: Reset by order period Indicates that the resource package is reset by order period. For example, if you set <b>quota_reuse_cycle</b> to <b>4</b> (month), <b>quota_reuse_cycle_type</b> to <b>2</b>, 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.</li> </ul>
usage_type_name	String	-	Usage type name.
start_time	String	-	<p>Start time. The value is in UTC format.</p> <ul style="list-style-type: none"> <li>• If <b>quota_reuse_mode</b> is set to <b>1</b>, the value is the start time of the reset period for the current time.</li> <li>• If <b>quota_reuse_mode</b> is set to <b>2</b>, the value is the time when the purchased instance takes effect.</li> </ul>
end_time	String	-	<p>End time. The value is in UTC format.</p> <ul style="list-style-type: none"> <li>• If <b>quota_reuse_mode</b> is set to <b>1</b>, the value is the end time of the reset period for the current time.</li> <li>• If <b>quota_reuse_mode</b> is set to <b>2</b>, the value is the time when the purchased instance becomes invalid.</li> </ul>
amount	BigDecimal	-	Remaining resource quota of a package whose <b>quota_reuse_mode</b> is <b>Resettable</b> , that is, the remaining resource quota in the current reset period.

Parameter	Type	Maximum Length of Characters	Description
original_amount	BigDecimal	-	Original resource quota of a package whose <b>quota_reuse_mode</b> is <b>Resettable</b> , 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 <a href="#">Querying Measurement Units</a> to obtain the value.

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "free_resources": [
    {
      "free_resource_id": "d4463497-991b-439d-9ab6-23f9ed197fe9",
      "free_resource_type_name": "test1",
      "quota_reuse_cycle": 4,
      "quota_reuse_cycle_type": 1,
      "usage_type_name": "Duration",
      "start_time": "2021-04-30T03:30:56Z",
      "end_time": "2021-05-31T15:59:59Z",
      "amount": 100,
      "original_amount": 100,
      "measure_id": 37
    }
  ]
}

```

### 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 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.

## 6.4.3 Querying Resource Package Usage Details

### Function

Customers can query the resource usage details on their self-built 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 6-40 Request parameters

Parameter	Mandatory	Type	Value Range	Description
free_resource_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 <a href="#">Querying Resource Packages</a> . If this parameter is not included in the request parameters or is left empty, it cannot 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 in the request parameters or is left empty, it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
resource_type_code	No	String	A maximum of 64 characters	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> . To obtain a specific resource type, call the API in <a href="#">Querying Resource Types</a> .  If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
deduct_time_begin	Yes	String	A maximum of 10 characters	Start time of resources deduction, which is in <i>YYYY-MM-DD</i> format (GMT+08:00).
deduct_time_end	Yes	String	A maximum of 10 characters	End time of resource deduction, which is in <i>YYYY-MM-DD</i> format (GMT+08:00). <b>NOTE</b> The gap between the start time and end time must be less than or equal to 90 days.
offset	No	Integer	0 to maximum integer	Offset, starting from <b>0</b> . The default value is <b>0</b> . <b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b> , the second and subsequent data records are returned.  For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b> , the second to the tenth records are returned.  If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> 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 <b>10</b> .

## 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	Type	Value Range	Description
error_code	String	20	Error code. For details, see <a href="#">Returned Values</a> . 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_resource_records	List<FreeResourceRecord>	Maximum number: 1000	Resource package usage details. For details, see <a href="#">Table 6-41</a> .
total_count	Integer	-	Total number of records that meet the conditions.

**Table 6-41** FreeResourceRecord

Parameter	Type	Value Range	Description
deduct_time	String	A maximum of 20 characters	Time when a resource is deducted. UTC time. The format is <i>yyyy-MM-ddT'HH:mm:ss'Z</i> , for example, 2021-10-13T10:01:49Z.

Parameter	Type	Value Range	Description
free_resource_id	String	A maximum of 64 characters	Resource ID. A resource package contains multiple resources, and a resource has a usage type.
resource_id	String	A maximum of 64 characters	Resource ID.
resource_type_code	String	A maximum of 64 characters	Resource type code. For example, the resource type code of VM is <b>hws.resource.type.vm</b> .
resource_type_name	String	A maximum of 200 characters	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .
resource_tag	String	A maximum of 10,240 characters	Resource tag.
product_id	String	A maximum of 64 characters	Product ID, that is, resource package ID.
product_name	String	A maximum of 256 characters	Product name, that is, resource package name.

Parameter	Type	Value Range	Description
usage_type_code	String	A maximum of 64 characters	Usage type
available_amount	String	A maximum of 64 characters	Available resources before deduction
remaining_amount	String	A maximum of 64 characters	Available resources after deduction.
used_amount	String	A maximum of 64 characters.	Deducted resource amount.
measure_id	Integer	-	Measurement unit of the quota of a free resource package. Call the API in <a href="#">Querying Measurement Units</a> to obtain the value.
effective_time	String	A maximum of 20 characters	Start time of using a resource (UTC time).
expire_time	String	A maximum of 20 characters	End time of resource usage (UTC time).

### Example Response

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

```

Content-Length: length
Date: response time
{
  "free_resource_records": [
    {
      "deduct_time": "2021-10-19T08:04:25Z",
      "free_resource_id": "43248428-8409-47cd-b115-6a5872e2200b",
      "resource_id": "resourceInstanceId_north1_obs_10120001112",
      "resource_type_code": "",
      "resource_tag": "--",
      "product_id": "90301-247012-0--0",
      "product_name": "OBS storage package 10 TB Monthly subscription Beijing7",
      "usage_type_code": "",
      "available_amount": "10190",
      "remaining_amount": "10140",
      "used_amount": "50",
      "measure_id": 10,
      "effective_time": "2021-10-13T10:01:49Z",
      "expire_time": "2021-10-13T11:00:00Z"
    }
  ],
  "total_count": 1
}

```

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



# 7 Managing Bills

---

## 7.1 Querying Summary Bills

### NOTE

You can query data from the past three years.

### Function

This API can be used to query the expenditure summary bills of a customer on the self-built platform. The bills summarize the summary data by month.

Postpaid customers who have enabled the monthly settlement can log in to Billing Center to query their expenditure summary bills by referring to [here](#).

### Constraints

- This API can be invoked using the customer AK/SK or token only.
- If **cloud\_service\_type\_code** is not specified in the request, the obtained bill is the monthly expenditure bill generated by cloud service type. That is, the total number of records (**total\_count**) is calculated by cloud service type. Each record contains the expenditure summary of a cloud service type. In this case, **resource\_type\_code** in the response is **null**.
- If **cloud\_service\_type\_code** is specified in the request, the obtained bill is the monthly expenditure bill generated by resource type for a cloud service. That is, the total number of records (**total\_count**) is calculated by resource type. Each record contains the expenditure summary of a resource type for the cloud service. In this case, **resource\_type\_code** in the response is the resource type.

### URI

GET /v1.0/{domain\_id}/customer/account-mgr/bill/monthly-sum

The following table describes the parameters.

**Table 7-1** Path parameters

Parameter	Mandatory	Maximum Length	Description
domain_id	Yes	64	Customer account ID.

**Table 7-2** Query parameters

Parameter	Mandatory	Type	Maximum Length	Description
cycle	Yes	String	10	Billing cycle of the expenditure summary bill, which is in YYYY-MM format (GMT+08:00 ).
cloud_service_type_code	No	String	256	<p>Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b>. To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a>.</p> <ul style="list-style-type: none"> <li>If this parameter is not specified, the obtained bill is a monthly expenditure bill generated by cloud service.</li> <li>If this parameter is not specified, the obtained bill is a monthly expenditure bill generated by resource type of a cloud service.</li> </ul>

Parameter	Mandatory	Type	Maximum Length	Description
type	No	String	[0 1]	<ul style="list-style-type: none"> <li>0: HUAWEI CLOUD account</li> <li>1: Account for which the partner set a budget. This type of account is available only when a customer is associated with a partner in the reseller model.</li> </ul> <p>If this parameter is not specified, the expenditure summary of the HUAWEI CLOUD account is queried by default.</p> <p>This parameter cannot be left empty or set to "" or <b>null</b>.</p>
enterpriseProjectId	No	String	-	<p>Enterprise project ID.</p> <ul style="list-style-type: none"> <li>0: ID of a default project</li> <li>- 1: The service does not support enterprise project management.</li> </ul> <p>If this parameter is not included in the request or is left empty, it cannot be used as a filter criterion. If this parameter is set to <b>null</b>, it cannot be used as a filter criterion. This parameter cannot be set to "".</p>

## Request Message

Request Parameters

None

### Example Request

```
GET https://bss.myhuaweicloud.eu/v1.0/{domain_id}/customer/account-mgr/bill/monthly-sum?
cycle=2018-05&type=0 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZihvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response Message

### Response Parameters

Parameter	Type	Description
error_code	String	Status code. For details, see <a href="#">Status Code</a> . This parameter is returned only when a failure occurs.
error_msg	String	Error description. This parameter is returned only when a failure occurs.
currency	String	Currency. USD If the parameter is left blank, USD is used.
total_count	Integer	Number of the total records. The value must be greater than or equal to 0.
bill_sums	List<BillSumRecordInfo>	Record information. For details, see <a href="#">Table 7-3</a> .
total_amount	BigDecimal	Total amount (tax included).
debt_amount	BigDecimal	Total debt.
coupon_amount	BigDecimal	Cash coupon amount.
cashcoupon_amount	BigDecimal	Flexi-purchase coupon amount (reserved).
storedcard_amount	BigDecimal	Stored-value card amount (reserved).
debit_amount	BigDecimal	Balance in the cash account.
credit_amount	BigDecimal	Balance in the credit account.
measure_id	Integer	Unit. <ul style="list-style-type: none"> <li>1: Yuan/Dollar</li> <li>3: Fen/Cent</li> </ul>

**Table 7-3** BillSumRecordInfo

Parameter	Type	Description
customer_id	String	Customer account ID.

Parameter	Type	Description
resource_type_code	String	Resource type code. For example, the resource type code of ECS is <b>hws.resource.type.vm</b> . <b>NOTE</b> If the request does not contain the <b>cloud_service_type_code</b> parameter, the value <b>null</b> is returned.
region_code	String	Cloud service region. This parameter is reserved.
cloud_service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
consume_time	String	Expenditure data collection period. GMT+08:00 and format: YYYY-MM Example: 2018-05
pay_method	String	Expenditure type. <ul style="list-style-type: none"> <li>If the request does not contain the parameter, <b>cloud_service_type_code</b>, and value <b>0</b> is returned, all resources of the service are billed in yearly/monthly mode. If value <b>1</b> is returned, all resources are billed in pay-per-use mode. If value <b>4</b> is returned, all resources are billed in savings plan-subscription mode. If the value <b>5</b> is returned, all resources are billed in savings plan-hourly billing mode. If value <b>6</b> is returned, all resources are billed in savings plan-discount mode. If an empty string is returned, all resources are billed in other-expenses mode.</li> <li>If the request contains the parameter, <b>cloud_service_type_code</b>, and value <b>0</b> is returned, all resources of the service are billed in yearly/monthly mode. If value <b>1</b> is returned, all resources are billed in pay-per-use mode. If value <b>4</b> is returned, all resources are billed in savings plan-subscription mode. If the value <b>5</b> is returned, all resources are billed in savings plan-hourly billing mode. If value <b>6</b> is returned, all resources are billed in savings plan-discount mode.</li> </ul>

Parameter	Type	Description
consume_amount	BigDecimal	Consumption amount, that is, the amount deducted from the customer's account. It includes the amount paid using cash coupons.
debt	BigDecimal	Outstanding amount, that is, the amount due generated when fees are deducted from the customer account and the account balance is insufficient.
discount	BigDecimal	Discounted amount.
measure_id	Integer	Unit. <ul style="list-style-type: none"> <li>• 1: Yuan/Dollar</li> <li>• 3: Fen/Cent</li> </ul>
bill_type	Integer	Bill type. <ul style="list-style-type: none"> <li>• 0: Expenditure</li> <li>• 1: Unsubscription</li> </ul>
account_details	List<BalanceTypePay>	Total payment amount distinguished by expenditure type and payment method of an account. For details, see <a href="#">Table 7-4</a> .
discount_detail_infos	List<DiscountDetailInfo>	Discounted amount details. For details, see <a href="#">Table 7-5</a> . This parameter is not returned when <b>bill_type</b> is <b>1</b> .
enterpriseProjectId	String	Enterprise project ID. <ul style="list-style-type: none"> <li>• <b>0</b>: ID of a default project</li> <li>• <b>null</b>: The service does not support enterprise project management.</li> </ul> If <b>enterpriseProjectId</b> is specified in the request, the <b>bill_sums</b> value in the response is the records by enterprise project ID.

**Table 7-4** BalanceTypePay

Parameter	Type	Description
balance_type_id	String	Account type. <ul style="list-style-type: none"><li>● BALANCE_TYPE_DEBIT: Cash account</li><li>● BALANCE_TYPE_CREDIT: Credit account</li><li>● BALANCE_TYPE_BONUS: Bonus account (already offline)</li><li>● BALANCE_TYPE_COUPON: Cash coupon account</li><li>● BALANCE_TYPE_DEBIT_RATE: Discount account</li></ul>
deduct_amount	BigDecimal	Deducted amount. Unit.

**Table 7-5** DiscountDetailInfo

Parameter	Type	Description
promotion_type	String	Discount type. 500: Specified discount for agent subscription 501: Specified exemption for agent subscription 502: Specified buy-it-now price for agent subscription 600: Contract discount rebate (commercial discount) 601: Discount specified in the channel frame contract 602: Discount specified in the designated-purpose fund contract (special commercial contract discount) 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 608: Featured product discount 610: Discount amount 700: Promotion discount (for promotion, available only in yearly/monthly billing scenarios) 800: Bonus
discount_amount	BigDecimal	Discounted amount.
promotion_id	String	Discount type ID. It can be a contract ID or a commerce ID.
measure_id	Integer	Unit. <ul style="list-style-type: none"> <li>● 1: Yuan/Dollar</li> <li>● 3: Fen/Cent</li> </ul> The default value is 3.

**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",
  "currency": "USD",
  "total_count": 1,
  "total_amount": 10212,
  "debt_amount": 56,
  "coupon_amount": 0,
  "cashcoupon_amount": 0,
  "storedcard_amount": 0,
  "debit_amount": 10156,
  "credit_amount": 0,
  "measure_id": 3,
  "bill_sums": [
    {
      "customer_id": "7b47a4c7ec764e1a94c5c2eb1a578e77",
      "resource_type_code": "",
      "region_code": null,
      "cloud_service_type_code": "hws.service.type.ebs",
      "consume_time": "2019-12",
      "pay_method": "",
      "consume_amount": 10212,
      "debt": 56,
      "discount": 0,
      "measure_id": 3,
      "bill_type": 0,
      "account_details": [
        {
          "balance_type_id": "BALANCE_TYPE_DEBIT",
          "deduct_amount": 10156
        },
        {
          "balance_type_id": "BALANCE_TYPE_CREDIT",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_BONUS",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_COUPON",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_DEBIT_RATE",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_FOREGIFT",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_BE_AVAILABLE",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_OTHER",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "BALANCE_TYPE_RCASH_COUPON",
          "deduct_amount": 0
        },
        {
          "balance_type_id": "WRITEOFFDEBT",
          "deduct_amount": 0
        }
      ]
    }
  ]
}
```

```
{
  {
    "balance_type_id": "BALANCE_TYPE_STORED_VALUE_CARD",
    "deduct_amount": 0
  }
],
"discount_detail_infos": [],
"enterpriseProjectId": "0"
}
]
```

## Status Code

### 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.

Status Code	Description
CBC.0000	Success.
CBC.0999	Other errors.
CBC.0151	Access denied.
CBC.0100	Parameter error.
CBC.0154	Token authentication failed.

## 7.2 Viewing Resource Usage Details

### Function

This API can be used to query usage details of each resource for a customer on the self-built platform.

Postpaid customers who have enabled the monthly settlement can log in to Billing Center to query their resource usage details by referring to [Resource Bill](#).

### NOTE

- After a customer associates with an enterprise master in the unified accounting model, bill queries will return both bills before and after the association.
- You can query data from the past three years.

### Constraints

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

## URI

POST /v2/bills/customer-bills/res-records/query

**Table 7-6** Header parameters

Parameter	Mandatory	Maximum Length	Description
X-Language	No	10	Language. <ul style="list-style-type: none"><li>• <b>zh_CN</b>: Chinese</li><li>• <b>en_US</b>: English</li></ul> The default value is en_US.

## Request Message

**Request Parameters**

Parameter	Mandatory	Type	Maximum Length	Description
cycle	Yes	String	8	Billing cycle of the queried resource usage details, which is in YYYY-MM format (GMT +08:00). Example: 2019-01
cloud_service_type	No	String	64	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a> . If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Maximum Length	Description
resource_type	No	String	64	Resource type code. For example, the VM resource type code of ECS is <b>hws.resource.type.vm</b> . To obtain a specific resource type, call the API in <a href="#">Querying Resource Types</a> . If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
region	No	String	64	Cloud service region code, for example, eu-west-101. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
res_instance_id	No	String	64	Resource instance ID. If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b> , it cannot be used as a filter criterion.
charge_mode	No	Integer	-	Billing mode. The options are as follows: <ul style="list-style-type: none"> <li>• 1: Yearly/monthly</li> <li>• 3: Pay-per-use</li> <li>• 10: Reserved instances</li> </ul> If this parameter is not included in the request parameters or is set to <b>null</b> , usage details of resources of all billing modes are returned.

Parameter	Mandatory	Type	Maximum Length	Description
bill_type	No	Integer	-	<p>Bill type:</p> <ul style="list-style-type: none"> <li>● 1: expenditure-purchase</li> <li>● 2: expenditure-renewal</li> <li>● 3: expenditure-change</li> <li>● 4: refund-unsubscription</li> <li>● 5: expenditure-use</li> <li>● 8: expenditure-auto-renewal</li> <li>● 9: adjustment-compensation</li> <li>● 14: expenditure-month-end deduction for support plan</li> <li>● 15: expenditure-tax</li> <li>● 16: adjustment-deduction</li> <li>● 17: expenditure-difference amount (min. guaranteed-actual)</li> </ul> <p><b>NOTE</b> 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.</p> <ul style="list-style-type: none"> <li>● 20: refund-change</li> <li>● 24: refund-changing to Pay-Per-Use</li> <li>● 100: refund-unsubscription tax</li> <li>● 101: adjustment-tax compensation</li> <li>● 102: adjustment-tax deduction</li> </ul> <p>If this parameter is not included in the request parameters or is set to <b>null</b>, usage details of resources of all bill types are returned.</p>

Parameter	Mandatory	Type	Maximum Length	Description
enterprise_project_id	No	String	64	<p>Enterprise project ID.</p> <ul style="list-style-type: none"> <li>• 0: ID of a default project</li> <li>• - 1: The service does not support enterprise project management.</li> </ul> <p>If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b>, it cannot be used as a filter criterion.</p>
include_zero_record	No	Boolean	-	<p>Whether to return records for which the amount due is 0.</p> <ul style="list-style-type: none"> <li>• true: Yes</li> <li>• false: No</li> </ul> <p>If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b>, it cannot be used as a filter criterion.</p>
method	No	String	64	<p>Query method.</p> <ul style="list-style-type: none"> <li>• <b>oneself</b>: Query the resource usage details of an enterprise itself.</li> <li>• <b>sub_customer</b>: Query the resource usage details of enterprise's sub-customers.</li> <li>• <b>all</b>: Query the resource usage details of an enterprise and its sub-customers.</li> </ul> <p>If this parameter is not included in the request parameters, is set to "", or is set to <b>null</b>, the default value is <b>all</b>. If this parameter is set to <b>all</b> and an enterprise has no customers, the enterprise queries its own resource usage details.</p>

Parameter	Mandatory	Type	Maximum Length	Description
sub_customer_id	No	String	64	Enterprise member account ID. <b>NOTE</b> <ul style="list-style-type: none"> <li>This parameter is invalid if <b>method</b> is not set to <b>sub_customer</b>.</li> <li>If <b>method</b> is set to <b>sub_customer</b>, this parameter must be specified.</li> </ul>
offset	No	Integer	0- Maximum integer	Offset, which starts from 0. The default value is <b>0</b> . <b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b> , the second and subsequent data records are returned. For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b> , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-1000]	Page limit. The default value is <b>10</b> .
statistic_type	No	Integer	[1-2]	Statistics type. The default value is <b>1</b> . <ul style="list-style-type: none"> <li><b>1</b>: By billing cycle</li> <li><b>2</b>: By day</li> </ul> If this parameter is not included in the request parameters or is set to <b>null</b> , the default value <b>1</b> is used. It cannot be set to "".

Parameter	Mandatory	Type	Maximum Length	Description
query_type	No	String	[0-9]	<p>Type of information to be queried. The default value is <b>BILLCYCLE</b>.</p> <ul style="list-style-type: none"> <li>• BILLCYCLE: By month</li> <li>• DAILY: By day</li> </ul> <p>The information type, DAILY, is returned only when the statistic_type is set to 2.</p> <p>If this parameter is not included in the request or is set to <b>null</b> or "", the information type, BILLCYCLE, is returned by default.</p>
bill_cycle_begin	No	String	[0-10]	<p>The start time of a billing cycle. Format: YYYY-MM-DD.</p> <p>This parameter is mandatory when query_type is set to DAILY.</p> <p>If this parameter is not included in the request or is set to <b>null</b> or "", it cannot be used as a filter criterion.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• This parameter is invalid if <b>query_type</b> is not set to <b>DAILY</b>.</li> <li>• If <b>query_type</b> is set to <b>DAILY</b>, this parameter cannot be left empty and the month must be the same with the billing cycle.</li> </ul>
bill_cycle_end	No	String	[0-10]	<p>The end time of a billing cycle. Format: YYYY-MM-DD.</p> <p>This parameter is mandatory when query_type is set to DAILY.</p> <p>If this parameter is not included in the request or is set to <b>null</b> or "", it cannot be used as a filter criterion.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• This parameter is invalid if <b>query_type</b> is not set to <b>DAILY</b>.</li> <li>• If <b>query_type</b> is set to <b>DAILY</b>, this parameter cannot be left empty.</li> </ul>



### Example Request

```
POST https://bss.myhuaweicloud.eu/v2/bills/customer-bills/res-records/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
X-Language:en_US
{
  "cycle": "2018-12",
  "cloud_service_type": "hws.service.type.ec2",
  "resource_type": "hws.resource.type.vm",
  "region": "eu-west-101",
  "res_instance_id": "76****7f",
  "charge_mode": 1,
  "bill_type": 1,
  "enterprise_project_id": "6***f3-3**4-4**2-9a3e-a****c24",
  "include_zero_record": "true",
  "method": "sub_customer",
  "sub_customer_id": "05b5fef62300d2ad0f98c00befba72c0",
  "offset": 1,
  "limit": 10
}
```

### Response Message

#### Response Parameters

Parameter	Type	Maximum Length	Description
error_code	String	16	Status code. For details, see <a href="#">Status Code</a> . This parameter is returned only when a failure occurs.
error_msg	String	1024	Error description. This parameter is returned only when a failure occurs.
monthly_records	List<Monthly BillRes>	-	Resource records. For details, see <a href="#">Table 7-7</a> .
total_count	Integer	-	Number of result sets. This parameter is returned only when the query is successful.
currency	String	3	Currency. USD

**Table 7-7** MonthlyBillRes

Parameter	Type	Maximum Length	Description
cycle	String	8	Billing cycle of resource data, which is in YYYY-MM format (GMT+08:00). Example: 2020-01
bill_date	String	10	Consumption date, which is in the YYYY-MM-DD format (GMT +08:00) <b>NOTE</b> This parameter has a value only when <b>statistic_type</b> is set to <b>2</b> . Otherwise, <b>null</b> is returned.

Parameter	Type	Maximum Length	Description
bill_type	Integer	-	<p>Bill type.</p> <ul style="list-style-type: none"> <li>• 1: expenditure-purchase</li> <li>• 2: expenditure-renewal</li> <li>• 3: expenditure-change</li> <li>• 4: refund-unsubscription</li> <li>• 5: expenditure-use</li> <li>• 8: expenditure-auto-renewal</li> <li>• 9: adjustment-compensation</li> <li>• 14: expenditure-month-end deduction for support plan</li> <li>• 15: expenditure-tax</li> <li>• 16: adjustment-deduction</li> <li>• 17: expenditure-difference amount (min. guaranteed-actual)</li> </ul> <p><b>NOTE</b> 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.</p> <ul style="list-style-type: none"> <li>• 20: refund-change</li> <li>• 24: refund-changing to Pay-Per-Use</li> <li>• 100: refund-unsubscription tax</li> <li>• 101: adjustment-tax compensation</li> <li>• 102: adjustment-tax deduction</li> </ul>

Parameter	Type	Maximum Length	Description
customer_id	String	64	ID of the account that has consumption records. <ul style="list-style-type: none"> <li>If a common account or enterprise member account is used to query consumption records, only the ID of the customer itself is displayed.</li> <li>If an enterprise master account is used to query consumption records, the consumption records of its own and its member accounts can be queried. The ID of a master or member account will be displayed.</li> </ul>
region	String	64	Cloud service region code, for example, eu-west-101.
region_name	String	64	Region name, for example, EU-Ireland. .
cloud_service_type	String	256	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
resource_Type_code	String	64	Resource type code. For example, the resource type code of ECS is <b>hws.resource.type.vm</b> .
cloud_service_type_name	String	200	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
resource_type_name	String	200	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .
res_instance_id	String	256	Resource instance ID.
resource_name	String	-	Resource name. When creating a resource, a customer can enter the resource name. Some resource names can also be changed during resource management.
root_resource_id	String	-	Root resource ID

Parameter	Type	Maximum Length	Description
parent_resource_id	String	-	Parent resource ID
resource_tag	String	-	Resource tag. Customers can set tags when managing resources.
sku_code	String	64	SKU code, which uniquely identifies the resource specification in a bill.
enterprise_project_id	String	-	Enterprise project ID. <ul style="list-style-type: none"> <li>0: ID of a default project</li> <li><b>null</b>: The service does not support enterprise project management.</li> </ul>
enterprise_project_name	String	-	Enterprise project name.
charge_mode	Integer	-	Billing mode. The options are as follows: <ul style="list-style-type: none"> <li>1: Yearly/monthly</li> <li>3: Pay-per-use</li> <li>10: Reserved instances</li> </ul>
consume_amount	BigDecimal	-	Consumption amount of a cloud service, including the amount of cash coupons and that of flexi-purchase coupons, accurate to eight decimal places. <b>NOTE</b> The value of <b>consume_amount</b> is equal to the sum of the values of <b>cash_amount</b> , <b>credit_amount</b> , <b>coupon_amount</b> , <b>flexipurchase_coupon_amount</b> , <b>stored_card_amount</b> , <b>bonus_amount</b> , <b>debt_amount</b> , and <b>adjustment_amount</b> .
cash_amount	BigDecimal	-	Amount paid in cash.
credit_amount	BigDecimal	-	Amount paid using the credit.
coupon_amount	BigDecimal	-	Amount paid using the cash coupon.
flexipurchase_coupon_amount	BigDecimal	-	Amount paid using the flexi-purchase coupon.

Parameter	Type	Maximum Length	Description
stored_card_amount	BigDecimal	-	Amount paid using the values-stored card.
bonus_amount	BigDecimal	-	Bonus payment amount (used for the bonus that is not cleared on the live network).
debt_amount	BigDecimal	-	Monthly-paid user: monthly settlement (For details about monthly settlement, click <a href="#">here</a> .) Non-monthly-paid subscriber: outstanding amount
adjustment_amount	BigDecimal	-	Adjustment amount.
official_amount	BigDecimal	-	Standard price.
discount_amount	BigDecimal	-	Discount amount (based on the standard price).
measure_id	Integer	-	Unit. <ul style="list-style-type: none"> <li>1: Yuan/Dollar</li> </ul>
period_type	Integer	-	Period type. The value can be: <ul style="list-style-type: none"> <li>19: Year</li> <li>20: Month</li> <li>24: Day</li> <li>25: Hour</li> <li>5: One-off</li> </ul>
trade_id	String	-	Order ID or transaction ID. <ul style="list-style-type: none"> <li>If the value of <b>bill_type</b> is <b>1</b>, <b>2</b>, <b>3</b>, <b>4</b>, or <b>8</b>, this field indicates the order ID.</li> <li>In other scenarios, it indicates the transaction ID (this parameter represents bills when fees are deducted at the end of a month. Otherwise, this parameter represents receivables.)</li> </ul>
id	String	256	Unique ID. This parameter is reserved.
product_spec_desc	String	-	Product specification description.

Parameter	Type	Maximum Length	Description
sub_service_type_code	String	64	Service type code of a child service that is attached to an ECS.
sub_service_type_name	String	200	Service type of a child service that is attached to an ECS.
sub_resource_type_code	String	64	Resource type code of a child resource that is attached to an ECS.
sub_resource_type_name	String	200	Resource type name of a child resource that is attached to an ECS.
sub_resource_id	String	64	Resource ID of a child resource that is attached to an ECS. If the resource is a reserved instance, this parameter indicates a reserved instance ID.
sub_resource_name	String	256	Resource name of a child resource that is attached to an ECS. If the resource is a reserved instance, this parameter indicates a reserved instance name.
pre_order_id	String	64	Original order ID
az_code_infos	List<AzCodeInfo>	-	AZ information list For details, see <a href="#">Table 7-8</a> .

**Table 7-8** AzCodeInfo

Parameter	Type	Maximum Value Length	Description
az_code	String	64	AZ code

### Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "monthly_records": [{
    "cycle": "2022-05",
    "bill_date": null,
```

```

"bill_type": 4,
"customer_id": "05f2*****00d50d0f2bc002c46e3020",
"region": "eu-west-101",
  "region_name": "EU-Ireland",
"cloud_service_type": "hws.service.type.ebs",
"resource_Type_code": "hws.resource.type.volume",
  "cloud_service_type_name": "Elastic Volume Service",
  "resource_type_name": "Elastic Volume Service",
"res_instance_id": "220523_dbc6ee4a02964e04adaa0e01b7a1e8e4",
"resource_name": "hws.resource.type.volumename",
"resource_tag": null,
"sku_code": "SATA",
"enterprise_project_id": null,
  "enterprise_project_name": "Non-project"
"charge_mode": 1,
"consume_amount": 0.0,
"cash_amount": 0.0,
"credit_amount": 0.0,
"coupon_amount": 0.0,
"flexipurchase_coupon_amount": 0.0,
"stored_card_amount": 0.0,
"bonus_amount": 0.0,
"debt_amount": 0.0,
"adjustment_amount": null,
"official_amount": 0.0,
"discount_amount": 0,
"id": "037e8a2b*****01-5f9eb5153cba_1",
"measure_id": 1,
  "sub_service_type_code": null,
  "sub_service_type_name": null,
  "sub_resource_type_code": null,
  "sub_resource_type_name": null,
  "sub_resource_id": null,
  "sub_resource_name": null,
"period_type": 20,
"root_resource_id": null,
"parent_resource_id": null,
"trade_id": "CSYD*****214V3CC02",
"product_spec_desc": "Common I/O|200GB",
  "pre_order_id": "CS23*****54B1AEW4J",
"az_code_infos": [{
  "az_code": "cn-north-1c"
}]
}],
"total_count": 7,
"currency": "USD"
}

```

## Status Code

### 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.



HTTP Value	Error Code	Description
500	CBC.0999	Unknown error occurred.

## 7.3 Viewing Resource Expenditures

### Function

This API can be used to query expenditures of each resource for a customer on the self-built platform.

Postpaid customers who have enabled the monthly settlement can log in to Billing Center to query their resource usage details by referring to [Resource Bill](#).

#### NOTE

- You can query data from the past three years.

### Constraints

- This API can be invoked using the customer AK/SK or token only.
- This API can be used to query resource expenditure records generated in the same month.
- The data queried for the current month cannot be used for reconciliation. The final bill of the current month can be viewed and exported after 10:00 on the fourth day of the following month. Situations, such as, bill delay, refunds, bill adjustment, and outstanding amount write-off, may occur during a month.

### URI

GET /v2/bills/customer-bills/res-fee-records

The following table describes the parameters.

**Table 7-9** Message header parameter

Parameter	Mandatory	Type	Maximum Length	Description
X-Language	No	String	10	Language. en_US: English zh_CN: Chinese

**Table 7-10** Request parameters

Parameter	Mandatory	Type	Maximum Length	Description
cycle	Yes	String	10	Billing cycle of the queried resource consumption records, which is in YYYY-MM format (GMT+08:00).
charge_mode	No	String	4	Billing mode. The options are as follows: <ul style="list-style-type: none"> <li>• 1: Yearly/monthly</li> <li>• 3: Pay-per-use</li> <li>• 10: Reserved instances</li> </ul> If this parameter is not included in the request parameters, it cannot be used as a filter criterion. It cannot be left empty or set to "" or <b>null</b> .
cloud_service_type	No	String	64	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> . To obtain a specific service type, call the API in <a href="#">Querying Cloud Service Types</a> . If this parameter is not included in the request parameters, it cannot be used as a filter criterion. If this parameter is left empty or is set to "", it can be used as a filter criterion.
region	No	String	64	Cloud service region code, for example, eu-west-101. If this parameter is not included in the request parameters, it cannot be used as a filter criterion. If this parameter is left empty or is set to "", it can be used as a filter criterion.

Parameter	Mandatory	Type	Maximum Length	Description
bill_type	No	Integer	-	<p>Bill type.</p> <ul style="list-style-type: none"> <li>● 1: expenditure-purchase</li> <li>● 2: expenditure-renewal</li> <li>● 3: expenditure-change</li> <li>● 4: refund-unsubscription</li> <li>● 5: expenditure-use</li> <li>● 8: expenditure-auto-renewal</li> <li>● 9: adjustment-compensation</li> <li>● 12: Expenditure-hourly billing</li> <li>● 13: expenditure--unsubscription service charge</li> <li>● 14: expenditure-month-end deduction for support plan</li> <li>● 15: expenditure-tax</li> <li>● 16: adjustment-deduction</li> <li>● 17: expenditure-difference amount (min. guaranteed-actual)</li> </ul> <p><b>NOTE</b> 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.</p> <ul style="list-style-type: none"> <li>● 20: refund-change</li> <li>● 24: refund-changing to Pay-Per-Use</li> <li>● 100: refund-unsubscription tax</li> <li>● 101: adjustment-tax compensation</li> <li>● 102: adjustment-tax deduction</li> </ul> <p>If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.</p>

Parameter	Mandatory	Type	Maximum Length	Description
offset	No	Integer	0 to maximum integer	<p>Offset, which starts from 0. The default value is <b>0</b>.</p> <p><b>NOTE</b> This parameter is used for pagination. Retain its default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to <b>1</b>, the second and subsequent data records are returned.</p> <p>For example, if there 10 records that meet query conditions, when you set limit to <b>10</b> and <b>offset</b> to <b>1</b>, the second to the tenth records are returned.</p> <p>If there are 20 records that meet query conditions, when you set offset to <b>0</b> and limit to <b>10</b> for the first page and set offset to <b>10</b> and limit to <b>10</b> for the second page, then each page will respectively have 10 records.</p>
limit	No	Integer	[1-1000]	<p>Maximum number of records in each query. The default value is <b>10</b>.</p>
resource_id	No	String	64	<p>Resource ID.</p> <p>If this parameter is not included in the request parameters, it cannot be used as a filter criterion. If this parameter is left empty or is set to "", it can be used as a filter criterion.</p>
enterprise_project_id	No	String	64	<p>Enterprise project ID.</p> <ul style="list-style-type: none"> <li>• 0: ID of a default project</li> <li>• - 1: The service does not support enterprise project management.</li> </ul> <p>If this parameter is not included in the request, is left empty, or is set to "" or <b>null</b>, it cannot be used as a filter criterion.</p>

Parameter	Mandatory	Type	Maximum Length	Description
include_zero_record	No	Boolean	-	<p>Whether to return records for which the amount due is 0.</p> <ul style="list-style-type: none"> <li>• true: Yes</li> <li>• false: No</li> </ul> <p>If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.</p>
method	No	String	64	<p>Method of querying resource consumption records.</p> <ul style="list-style-type: none"> <li>• <b>oneself</b>: Query the resource consumption records of an enterprise itself.</li> <li>• <b>sub_customer</b>: Query the resource consumption records of enterprise's sub-customers.</li> <li>• <b>all</b>: Query the resource consumption records of an enterprise and its sub-customers.</li> </ul> <p>If this parameter is not included in the request parameters or is left empty, the default value is <b>all</b>. If this parameter is set to <b>all</b> and an enterprise has no customers, the enterprise queries its own resource usage details.</p>
sub_customer_id	No	String	64	<p>Enterprise member account ID.</p> <p>If this parameter is set to "", it cannot be used as a filter criterion.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• This parameter is invalid if <b>method</b> is not set to <b>sub_customer</b>.</li> <li>• If <b>method</b> is set to <b>sub_customer</b>, this parameter must be specified.</li> </ul>

Parameter	Mandatory	Type	Maximum Length	Description
trade_id	No	String	64	<p>Order or transaction ID.</p> <ul style="list-style-type: none"> <li>This parameter indicates an order ID if the bill type is 1, 2, 3, 4, or 8.</li> <li>For other bill types, this parameter indicates a transaction ID that uniquely identifies a fee deduction dimension. For example, this parameter represents bills when fees are deducted at the end of a month. Otherwise, this parameter represents receivables.</li> </ul> <p>If this parameter is not included in the request parameters, it cannot be used as a filter criterion. If this parameter is left empty or is set to "", it can be used as a filter criterion.</p> <p><b>NOTE</b> This field does not take effect when statistics are collected by billing cycle type.</p>
bill_date_begin	No	String	20	<p>Start date for querying the resource consumption records, which is in YYYY-MM-DD format (GMT+08:00).</p> <p>If this parameter is not included in the request parameters, is left empty, or is set to "", the first day of the billing cycle is used.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>This parameter value must be in the month specified by parameter <b>cycle</b>.</li> <li><b>bill_date_begin</b> and <b>bill_date_end</b> must be set at the same time. Otherwise, resources are queried only by <b>cycle</b>.</li> <li>This field does not take effect when statistics are collected by billing cycle type.</li> </ul>

Parameter	Mandatory	Type	Maximum Length	Description
bill_date_end	No	String	20	<p>End date for querying the resource consumption records, which is in YYYY-MM-DD format (GMT+08:00).</p> <p>If this parameter is not included in the request parameters, is left empty, or is set to "", the last day of the billing cycle is used.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>This parameter value must be in the month specified by parameter <b>cycle</b>.</li> <li><b>bill_date_begin</b> and <b>bill_date_end</b> must be set at the same time. Otherwise, resources are queried only by <b>cycle</b>.</li> <li>This field does not take effect when statistics are collected by billing cycle type.</li> </ul>
statistic_type	No	Integer	-	<p>Statistics type. The default value is <b>3</b>.</p> <ul style="list-style-type: none"> <li><b>1</b>: By billing cycle</li> <li><b>3</b>: By details</li> </ul> <p>If this parameter is not included in the request or is set to <b>null</b>, the default value <b>3</b> is used.</p>

## Request Message

### Request Parameters

None

### Example Request

```
GET https://bss.myhuaweicloud.eu/v2/bills/customer-bills/res-fee-records?
cycle=2020-09&charge_mode=1&method=sub_customer&sub_customer_id=05b5fef62300d2ad0f98c00befba
72c0&trade_id=
CS1908201442ZLEPW476&bill_date_begin=2020-09-01&bill_date_end=2020-09-30&statistic_type=1
HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZihvcNAQcCo...ggg1BBIINPXsidG9rZ
```

## Response Message

### Response Parameters

Parameter	Type	Maximum Length	Description
error_code	String	16	Status code. For details, see <a href="#">Status code</a> . This parameter is returned only when a failure occurs.
error_msg	String	1024	Error description. This parameter is returned only when a failure occurs.
fee_records	List<ResFeeRecordV2>	-	Resource usage record. For details, see <a href="#">Table 7-11</a> .
total_count	Integer	-	Number of result sets. This parameter is returned only when the query is successful.
currency	String	3	Currency. USD

**Table 7-11** ResFeeRecordV2

Parameter	Type	Maximum Length	Description
bill_date	String	20	Date when a resource consumption is recorded. Format: YYYY-MM-DD. The value is based on the GMT+08:00 time zone.



Parameter	Type	Maximum Length	Description
bill_type	Integer	-	<p>Bill type.</p> <ul style="list-style-type: none"> <li>● 1: expenditure-purchase</li> <li>● 2: expenditure-renewal</li> <li>● 3: expenditure-change</li> <li>● 4: refund-unsubscription</li> <li>● 5: expenditure-use</li> <li>● 8: expenditure-auto-renewal</li> <li>● 9: adjustment-compensation</li> <li>● 12: Expenditure-hourly billing</li> <li>● 13: expenditure--unsubscription service charge</li> <li>● 14: expenditure-month-end deduction for support plan</li> <li>● 15: expenditure-tax</li> <li>● 16: adjustment-deduction</li> <li>● 17: expenditure-difference amount (min. guaranteed-actual)</li> </ul> <p><b>NOTE</b> 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.</p> <ul style="list-style-type: none"> <li>● 20: refund-change</li> <li>● 24: refund-changing to Pay-Per-Use</li> <li>● 100: refund-unsubscription tax</li> <li>● 101: adjustment-tax compensation</li> <li>● 102: adjustment-tax deduction</li> </ul>

Parameter	Type	Maximum Length	Description
customer_id	String	64	Account ID of the customer who has consumption records. <ul style="list-style-type: none"> <li>If a common account or enterprise member account is used to query consumption records, only the ID of the customer itself is displayed.</li> <li>If an enterprise master account is used to query consumption records, the consumption records of its own and its member accounts can be queried. The ID of a master or member account will be displayed.</li> </ul>
region	String	64	Cloud service region code, for example, eu-west-101.
region_name	String	64	Region name, for example, EU-Ireland. .
cloud_service_type	String	64	Cloud service type code. For example, the cloud service type code of OBS is <b>hws.service.type.obs</b> .
resource_type	String	64	Resource type code. For example, the resource type code of ECS is <b>hws.resource.type.vm</b> .
cloud_service_type_name	String	200	Cloud service type. For example, the cloud service type of ECS is <b>Elastic Cloud Server</b> .
resource_type_name	String	200	Resource type. For example, the resource type of ECS is <b>Cloud Host</b> .
effective_time	String	32	Start time of using the resource corresponding to the fee. This field is valid only when the resource is billed on a pay-per-use basis. It is reserved for resources billed on a yearly/monthly basis.

Parameter	Type	Maximum Length	Description
expire_time	String	32	End time of using the resource corresponding to the fee. This field is valid only when the resource is billed on a pay-per-use basis. It is reserved for resources billed on a yearly/monthly basis.
resource_id	String	128	Resource ID.
resource_name	String	256	Resource name.
resource_tag	String	1024	Resource tag.
product_id	String	64	Product ID.
product_name	String	256	Product name.
product_spec_desc	String	512	Product specification description.
sku_code	String	64	SKU code, which uniquely identifies the resource specification in a bill.
spec_size	BigDecimal	-	Product size, which is available only for linear products. <b>NOTE</b> 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.
spec_size_measure_id	Integer	-	Product size unit, which is available only for linear products. To obtain the unit, call the API in <a href="#">Querying Measurement Units</a> .
trade_id	String	64	Order or transaction ID, which is the unique identifier of a fee deduction dimension.
id	String	256	Unique ID This value of the unique ID will not be returned when statistics are collected by billing cycle type.
trade_time	String	32	Transaction time

Parameter	Type	Maximum Length	Description
enterprise_project_id	String	128	Enterprise project ID. <ul style="list-style-type: none"> <li>0: ID of a default project</li> <li><b>null</b>: The service does not support enterprise project management.</li> </ul>
enterprise_project_name	String	256	Enterprise project name.
charge_mode	String	32	Billing mode. The options are as follows: <ul style="list-style-type: none"> <li>1: Yearly/monthly</li> <li>3: Pay-per-use</li> <li>10: Reserved instances</li> </ul>
order_id	String	64	Order ID. <b>NOTE</b> This parameter is available only for yearly/monthly resources.
period_type	String	-	Period type. The value can be: <ul style="list-style-type: none"> <li>19: Year</li> <li>20: Month</li> <li>24: Day</li> <li>25: Hour</li> <li>5: One-off</li> </ul>
usage_type	String	-	Usage type, which can be obtained by calling the API described in <a href="#">Querying Usage Types</a> .
usage	BigDecimal	-	Resource usage. <b>NOTE</b> If the resource type is yearly/monthly resources, resource usage is not returned.
usage_measurement_id	Integer	-	Resource usage measurement unit, which can be obtained by calling the API described in <a href="#">Querying Measurement Units</a> . <b>NOTE</b> If the resource type is yearly/monthly resources, the resource usage measurement unit is not returned.
free_resource_usage	BigDecimal	-	Package usage.

Parameter	Type	Maximum Length	Description
free_resource_measure_id	Integer	-	Usage measurement unit in a package, which can be obtained by calling the API described in <a href="#">Querying Measurement Units</a> .
ri_usage	BigDecimal	-	Reserved instance usage.
ri_usage_measure_id	Integer	-	Unit (reserved instance usage).
unit_price	BigDecimal	-	<p>Unit price.</p> <ul style="list-style-type: none"> <li>Unit price of a pay-per-use product is returned only in the simple pricing scenario.</li> <li>Unit price of a yearly/monthly product is returned only in the following scenarios: <ul style="list-style-type: none"> <li>Yearly/monthly subscription, renewal, specification downsizing, specification upgrade, and capacity expansion</li> <li>Simple pricing</li> </ul> </li> <li>Unit price of a reserved instance is returned only in the following scenarios: <ul style="list-style-type: none"> <li>Subscription, renewal, specification downsizing, specification upgrade, capacity expansion, and pay-per-use</li> <li>Simple pricing</li> </ul> </li> </ul>
unit	String	64	<p>The unit of unit price.</p> <ul style="list-style-type: none"> <li>The unit of linear products is USD/{<i>linear unit</i>}/month or USD/{<i>linear unit</i>}/hour.</li> <li>The unit of non-linear products is USD/month or USD/hour.</li> </ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>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.</li> </ul>

Parameter	Type	Maximum Length	Description
official_amount	BigDecimal	-	List price, which is the sales price of a product with no commercial discounts and promotion discounts used on the HUAWEI CLOUD official website.
discount_amount	BigDecimal	-	Discount, which is offered to customers when they use cloud services, for example, commercial discounts, partner-granted discounts, and promotional discount.
amount	BigDecimal	-	Amount, which is the money a customer should pay for used cloud services after discounts (including cash coupons) are used. It is accurate to eight decimal places. <b>NOTE</b> The value of <b>amount</b> is equal to the sum of the values of <b>cash_amount</b> , <b>credit_amount</b> , <b>coupon_amount</b> , <b>flexipurchase_coupon_amount</b> , <b>stored_card_amount</b> , <b>bonus_amount</b> , <b>debt_amount</b> , and <b>adjustment_amount</b> .
cash_amount	BigDecimal	-	Amount paid in cash.
credit_amount	BigDecimal	-	Amount paid using the credit.
coupon_amount	BigDecimal	-	Amount paid using the cash coupon.
flexipurchase_coupon_amount	BigDecimal	-	Amount paid using the flexi-purchase coupon.
stored_card_amount	BigDecimal	-	Amount paid using the values-stored card.
bonus_amount	BigDecimal	-	Bonus payment amount (used for the bonus that is not cleared on the live network).
debt_amount	BigDecimal	-	Debt.
adjustment_amount	BigDecimal	-	Adjustment amount.

Parameter	Type	Maximum Length	Description
measure_id	Integer	-	Unit. <ul style="list-style-type: none"><li>• 1: Dollar</li></ul>

Parameter	Type	Maximum Length	Description
formula	String	2048	<p>Formula for calculating the actual payment amount. Currently, only the following scenarios are involved:</p> <ul style="list-style-type: none"> <li>• Non-linear pricing for pay-per-use resources  <math>\frac{\{Usage\}[\{Usage\}]}{\{Unit\}[\{Unit\}]} \times \{Unit\}[\{Unit\}] \times \{Unit\}[\{Unit\}] \times \{Unit\}[\{Unit\}] - \{Discounted\}[\{Discounted\}] - \{Truncated\}[\{Truncated\}] - \{Cash\}[\{Cash\}]</math> </li> <li>• Linear pricing for pay-per-use resources  <math>\frac{\{Usage\}[\{Usage\}]}{\{Unit\}[\{Unit\}]} \times \{Unit\}[\{Unit\}] \times \{Linear\}[\{Linear\}] \times \{Unit\}[\{Unit\}] - \{Discounted\}[\{Discounted\}] - \{Truncated\}[\{Truncated\}] - \{Cash\}[\{Cash\}]</math> </li> <li>• Non-linear pricing for yearly/monthly subscriptions and renewals  <math>\frac{\{Number\}[\{Number\}]}{\{Period\}[\{Period\}]} \times \{Unit\}[\{Unit\}] - \{Discounted\}[\{Discounted\}] - \{Cash\}[\{Cash\}]</math> </li> <li>• Linear pricing for yearly/monthly subscriptions and renewals  <math>\frac{\{Number\}[\{Number\}]}{\{Period\}[\{Period\}]} \times \{Linear\}[\{Linear\}] \times \{Unit\}[\{Unit\}] - \{Discounted\}[\{Discounted\}] - \{Cash\}[\{Cash\}]</math> </li> </ul>



Parameter	Type	Maximum Length	Description
			<ul style="list-style-type: none"> <li>Non-linear pricing for yearly/monthly subscriptions (one-off) and renewals  {Unit price}[Unit price] - {Discounted amount}[Discounted amount] - {Cash coupon used}[Cash coupon used]</li> <li>Linear pricing for yearly/monthly subscriptions (one-off) and renewals  {Linear size}[Specifications] x {Unit price}[Unit price] - {Discounted amount}[Discounted amount] - {Cash coupon used}[Cash coupon used]</li> </ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>The actual payment amount is equal to the difference between <b>amount</b> and <b>coupon_amount</b>.</li> <li>When <b>statistic_type</b> is set to <b>1</b> (by billing cycle type), the formula for calculating the actual payment amount will not be returned.</li> </ul>
sub_service_type_code	String	64	Service type code of a child service that is attached to an ECS.
sub_service_type_name	String	200	Service type name of a child service that is attached to an ECS.
sub_resource_type_code	String	64	Resource type code of a child resource that is attached to an ECS.
sub_resource_type_name	String	200	Resource type name of a child resource that is attached to an ECS.
sub_resource_id	String	64	Resource ID of a child resource that is attached to an ECS. If the resource is a reserved instance, this parameter indicates a reserved instance ID.
sub_resource_name	String	256	Resource name of a child resource that is attached to an ECS. If the resource is a reserved instance, this parameter indicates a reserved instance name.

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "fee_records": [
    {
      "bill_date": "2020-12-21",
      "bill_type": 3,
      "customer_id": "8caf348df5fa4529aba5aea760608845",
      "region": "eu-west-101",
      "region_name": "EU-Dublin",
      "cloud_service_type": "hws.service.type.ebs",
      "resource_type": "hws.resource.type.volume",
      "effective_time": "2020-12-21T07:34:32Z",
      "expire_time": "2022-12-21T15:59:59Z",
      "resource_id": null,
      "resource_name": null,
      "resource_tag": null,
      "product_id": "90301-686007-0--0",
      "product_name": "",
      "product_spec_desc": "",
      "sku_code": "SAS",
      "spec_size": 300.0,
      "spec_size_measure_id": 17,
      "trade_id": "CS2012211533IQJR1",
      "id": "037e8a2b-bde9-48*****9eb5153cba_1",
      "trade_time": "2020-06-10T19:03:28Z",
      "enterprise_project_id": "0",
      "enterprise_project_name": "default",
      "charge_mode": "1",
      "order_id": "CS2012211533IQJR1",
      "period_type": "19",
      "usage_type": null,
      "usage": null,
      "usage_measure_id": null,
      "free_resource_usage": null,
      "free_resource_measure_id": null,
      "ri_usage": null,
      "ri_usage_measure_id": null,
      "unit_price": null,
      "unit": null,
      "official_amount": 2516.0,
      "discount_amount": 452.88,
      "amount": 2063.12,
      "cash_amount": 2063.12,
      "credit_amount": 0.0,
      "coupon_amount": 0.0,
      "flexipurchase_coupon_amount": 0.0,
      "stored_card_amount": 0.0,
      "bonus_amount": 0.0,
      "debt_amount": 0.0,
      "adjustment_amount": null,
      "measure_id": 1,
      "formula": "(1 year)[Number of periods]/(1)[Period conversion] x (100 GB)[Resource specifications] x (1.08 dollars/GB/year)[Unit price] - 21.60 [Discount] - 0.00[Cash coupon used]"
    },
    {
      "bill_date": "2020-12-21",
      "bill_type": 1,
      "customer_id": "8caf348df5fa4529aba5aea760608845",
      "region": "eu-west-101",
      "region_name": "EU-Dublin",
      "cloud_service_type": "hws.service.type.ebs",
      "resource_type": "hws.resource.type.volume",
      "effective_time": "2020-12-21T07:28:12Z",
    }
  ]
}

```

```

    "expire_time": null,
    "resource_id": null,
    "resource_name": null,
    "resource_tag": null,
    "product_id": "90301-526111-0--0",
    "product_name": "EVS_SATA_5 years",
    "product_spec_desc": "EVS_SATA_LXH01|100.0 GB",
    "sku_code": "SATA_LXH01",
    "spec_size": 100.0,
    "spec_size_measure_id": 17,
    "trade_id": "CS2012211528IP5Q1",
    "id": "037e8a2b-bde9-48*****9eb5153cba_1",
    "trade_time": "2020-06-10T17:03:28Z",
    "enterprise_project_id": "0",
    "enterprise_project_name": "default",
    "charge_mode": "1",
    "order_id": "CS2012211528IP5Q1",
    "period_type": "19",
    "usage_type": null,
    "usage": null,
    "usage_measure_id": null,
    "free_resource_usage": null,
    "free_resource_measure_id": null,
    "ri_usage": null,
    "ri_usage_measure_id": null,
    "unit_price": null,
    "unit": null,
    "official_amount": 4.0,
    "discount_amount": 0,
    "amount": 4.0,
    "cash_amount": 4.0,
    "credit_amount": 0.0,
    "coupon_amount": 0.0,
    "flexipurchase_coupon_amount": 0.0,
    "stored_card_amount": 0.0,
    "bonus_amount": 0.0,
    "debt_amount": 0.0,
    "adjustment_amount": null,
    "measure_id": 1,
    "sub_service_type_code": null,
    "sub_service_type_name": null,
    "sub_resource_type_code": null,
    "sub_resource_type_name": null,
    "sub_resource_id": null,
    "sub_resource_name": null,
    "formula": "(1 year)[Number of periods]/(1)[Period conversion] x (100 GB)[Resource
specifications] x (1.08 dollars/GB/year)[Unit price] - 21.60 [Discount] - 0.00[Cash coupon used]"
  }
],
"total_count": 40,
"currency": "USD"
}

```

## Status code

### 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	Unknown error occurred.

# 8 Cost Management

## 8.1 Querying Cost Data

### Function

This API is used to query the cost data on the self-built platform.

### Note:

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

The data of the previous month is available after the bill is generated.

### URI

POST /v4/costs/cost-analysed-bills/query

**Table 8-1** Header parameters

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. <ul style="list-style-type: none"><li>• <b>zh_CN</b>: Chinese</li><li>• <b>en_US</b>: English</li></ul> Default value: <b>zh_CN</b>

### Request

#### Request Parameters

Parameter	Mandatory	Type	Value Range	Description
time_condition	Yes	TimeCondition Object	-	Time condition. For details, see <a href="#">Table 8-2</a> .
groupby	Yes	List<GroupBy>	A maximum of 2 values	Search dimension. For details, see <a href="#">Table 8-3</a> . <b>NOTE</b> If there are two values for this parameter, the values must be a combination of <b>tag</b> , <b>cost_unit</b> , and <b>dimension</b> , or both of these two values are set to <b>dimension</b> .
cost_type	Yes	String	A maximum of 256 characters	Cost type. <ul style="list-style-type: none"> <li>ORIGINAL_COST: Original cost</li> <li>AMORTIZED_COST: Amortized cost</li> </ul>
amount_type	Yes	String		Amount type. <ul style="list-style-type: none"> <li>PAYMENT_AMOUNT</li> <li>NET_AMOUNT.</li> </ul>
filters	No	List<Filter>	Minimum length: 0 characters Maximum length: 100 characters	Filter. For details, see <a href="#">Table 8-4</a> . If this parameter is not included in the request parameters, is left empty, or is set to <b>null</b> , it cannot be used as a filter criterion.
offset	No	Integer	[0-200000]	Offset, starting from <b>0</b> . The default value is <b>0</b> . <b>NOTE</b> This parameter is used for pagination. Use the default value <b>0</b> if pagination is not required. <b>offset</b> indicates the offset relative to the first data record that meets the conditions. If you set <b>offset</b> to <b>1</b> , the second and subsequent data records will be returned.  For example, there are 10 data records, and if you set <b>limit</b> to <b>10</b> and <b>offset</b> to <b>1</b> , the second to the tenth data records will be returned.

Parameter	Mandatory	Type	Value Range	Description
limit	No	Integer	[1,1000]	Number of records queried each time. The default value is <b>10</b> .

**Table 8-2** TimeCondition

Parameter	Mandatory	Type	Value Range	Description
time_measure_id	Yes	Integer	[1,2]	Time unit. <ul style="list-style-type: none"> <li>1: Day</li> <li>2: Month</li> </ul>
begin_time	Yes	String	32	Start date (GMT+08:00). <ul style="list-style-type: none"> <li>If the value for <b>time_measure_id</b> is <b>1</b>, the date is in YYYY-MM-DD format.</li> <li>If the value for <b>time_measure_id</b> is <b>2</b>, the date is in YYYY-MM format.</li> </ul>
end_time	Yes	String	32	End date (GMT+08:00). <ul style="list-style-type: none"> <li>If the value for <b>time_measure_id</b> is <b>1</b>, the date is in YYYY-MM-DD format.</li> <li>If the value for <b>time_measure_id</b> is <b>2</b>, the date is in YYYY-MM format.</li> </ul> <p><b>NOTICE</b> Only the cost data within 18 months can be queried.</p>

**Table 8-3** GroupBy

Parameter	Mandatory	Type	Value Range	Description
type	Yes	String	A maximum of 64 characters	<ul style="list-style-type: none"> <li><b>tag</b>: Grouped by cost tags</li> <li><b>cost_unit</b>: Grouped by cost categories</li> <li><b>dimension</b>: Default value</li> </ul>

Parameter	Mandatory	Type	Value Range	Description
key	Yes	String	A maximum of 128 characters	<ul style="list-style-type: none"> <li>If <b>type</b> is set to <b>tag</b>, the value for this parameter is the key of the tag.</li> <li>If <b>type</b> is set to <b>cost_unit</b>, set this parameter to the key of <b>cost_unit</b>.</li> <li>If <b>type</b> is set to <b>dimension</b>, the value options are as follows: <ul style="list-style-type: none"> <li>- CLOUD_SERVICE_TYPE: Service type</li> <li>- ASSOCIATED_ACCOUNT: Linked account</li> </ul> <p><b>NOTE</b> An enterprise master account that has the permission to view the expenditure data of its associated member accounts can view the cost data of the member accounts.</p> <ul style="list-style-type: none"> <li>- REGION_CODE: Region</li> <li>- RES_SPEC_CODE: Specification code</li> <li>- USAGE_TYPE: Usage type</li> <li>- ENTERPRISE_PROJECT_ID: Enterprise project</li> <li>- RESOURCE_ID: Resource</li> <li>- CHARGING_MODE: Billing mode</li> <li>- BILL_TYPE: bill type</li> <li>- RESOURCE_TYPE: Resource type</li> <li>- AZ_CODE: AZ</li> <li>- BE_ID: Business entity</li> <li>- PAYER_ACCOUNT_ID: Payer account</li> </ul> </li> </ul>



**Table 8-4 Filter**

Parameter	Mandatory	Type	Value Range	Description
operator	Yes	Integer	[0-1]	Operator. <ul style="list-style-type: none"> <li>• 0: Only contains</li> <li>• 1: Only excludes</li> </ul>
filter_factor	Yes	FilterFactor Object	-	Filter factor. For details, see <a href="#">Table 8-5</a> .

**Table 8-5 FilterFactor**

Parameter	Mandatory	Type	Value Range	Description
key	Yes	String	A maximum of 256 characters	Grouping conditions. <ul style="list-style-type: none"> <li>• CLOUD_SERVICE_TYPE: Service type</li> <li>• ASSOCIATED_ACCOUNT: Linked account</li> </ul> <p><b>NOTE</b> Set this parameter to the HUAWEI ID of the associated account. An enterprise master account that has the permission to view the expenditure data of its associated member accounts can view the cost data of the member accounts.</p> <ul style="list-style-type: none"> <li>• REGION_CODE: Region</li> <li>• RES_SPEC_CODE: Specification code</li> <li>• USAGE_TYPE: Usage type</li> <li>• ENTERPRISE_PROJECT_ID: Enterprise project</li> <li>• RESOURCE_ID: Resource</li> <li>• CHARGING_MODE: Billing mode</li> <li>• BILL_TYPE: bill type.</li> <li>• RESOURCE_TYPE: Resource type</li> <li>• AZ_CODE: AZ</li> <li>• BE_ID: Business entity</li> <li>• PAYER_ACCOUNT_ID: Payer account</li> <li>• RESOURCE_TAG: Cost tag</li> <li>• COST_UNIT: Cost category</li> </ul>

Parameter	Mandatory	Type	Value Range	Description
value	Yes	List<String>	Minimum count: 1 Maximum count: 100	Filter value.

### Example Request

```
POST https://bss.myhuaweicloud.eu/v4/costs/cost-analysed-bills/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo..ggg1BBIINPXsidG9rZ
{
  "amount_type": "PAYMENT_AMOUNT",
  "offset": 0,
  "cost_type": "ORIGINAL_COST",
  "limit": 10,
  "groupby": [{
    "type": "dimension",
    "key": "CLOUD_SERVICE_TYPE"
  }],
  "filters": [{
    "filter_factor": {
      "value": ["cn-north-1"],
      "key": "REGION_CODE"
    },
    "operator": 0
  }],
  "time_condition": {
    "end_time": "2021-07-15",
    "begin_time": "2021-07-14",
    "time_measure_id": 1
  }
}
```

### Response Message

#### Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Returned value. For details, see <a href="#">Returned Values</a> . This parameter is returned only when the query failed.

Parameter	Type	Value Range	Description
error_msg	String	A maximum of 1000 characters	Error description. This parameter is returned only when the query failed.
currency	String	A maximum of 8 characters	Currency. <ul style="list-style-type: none"> <li>• USD</li> </ul>
total_count	Integer	-	Total number of records.
cost_data	List<CostDataByDimension>	-	Cost details by day or month. For details, see <a href="#">Table 8-6</a> .

**Table 8-6** CostDataByDimension

Parameter	Type	Value Range	Description
dimensions	List<DimensionGroup>	A maximum of 1 value	Dimensions. For details, see <a href="#">Table 8-7</a> .
costs	List<Cost>	Max Count: 10000	Cost value. For details, see <a href="#">Table 8-8</a> .
amount_by_costs	String	A maximum of 64 characters	Total cost in a period.
official_amount_by_costs	String	A maximum of 64 characters	Total expenditures based on list prices in a period.

**Table 8-7** DimensionGroup

Parameter	Type	Value Range	Description
key	String	A maximum of 128 characters	Grouping conditions <ul style="list-style-type: none"> <li>• CLOUD_SERVICE_TYPE: Service type</li> <li>• ENTERPRISE_PROJECT_ID: Enterprise project</li> <li>• USAGE_TYPE: Usage type</li> <li>• RESOURCE_TYPE: Resource type</li> <li>• AZ_CODE: AZ</li> <li>• BILL_TYPE: Bill type</li> <li>• ASSOCIATED_ACCOUNT: Linked account</li> <li>• RES_SPEC_CODE: Specification Code</li> <li>• BE_ID: Business entity</li> <li>• REGION_CODE: Region</li> <li>• CHARGING_MODE: Billing mode</li> <li>• PAYER_ACCOUNT_ID: Payer account</li> <li>• RESOURCE_TAG: Resource tag</li> <li>• RESOURCE_ID: Resource ID</li> <li>• COST_UNIT: Cost category</li> </ul>
value	String	-	Dimension.

**Table 8-8** Cost

Parameter	Type	Value Range	Description
time_dimension_value	String	A maximum of 20 characters	Time dimension. <ul style="list-style-type: none"> <li>• <b>yyyy-mm-dd</b> indicates that data is filtered by day.</li> <li>• <b>yyyy-mm</b> indicates that data is filtered by month.</li> </ul>
time_measure_id	Int	-	Time unit. <ul style="list-style-type: none"> <li>• 1: Day</li> <li>• 2: Month</li> </ul>
amount	String	A maximum of 64 characters	One of the following cost types: original costs, net original costs, amortized costs, and net amortized costs.

Parameter	Type	Value Range	Description
official_amount	String	A maximum of 64 characters	List price.

### Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "currency": "USD",
  "total_count": 1,
  "cost_data": [
    {
      "dimensions": [
        {
          "key": "tag",
          "value": "Group:noTagKey"
        }
      ],
      "costs": [
        {
          "time_dimension_value": "2021-08",
          "time_measure_id": 2,
          "amount": "13225.00",
          "official_amount": "13225.00"
        }
      ],
      "amount_by_costs": "13225.00",
      "official_amount_by_costs": "13225.00"
    }
  ]
}

```

### 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	Invalid parameter.
400	CBC.18000014	Cost Center not enabled.

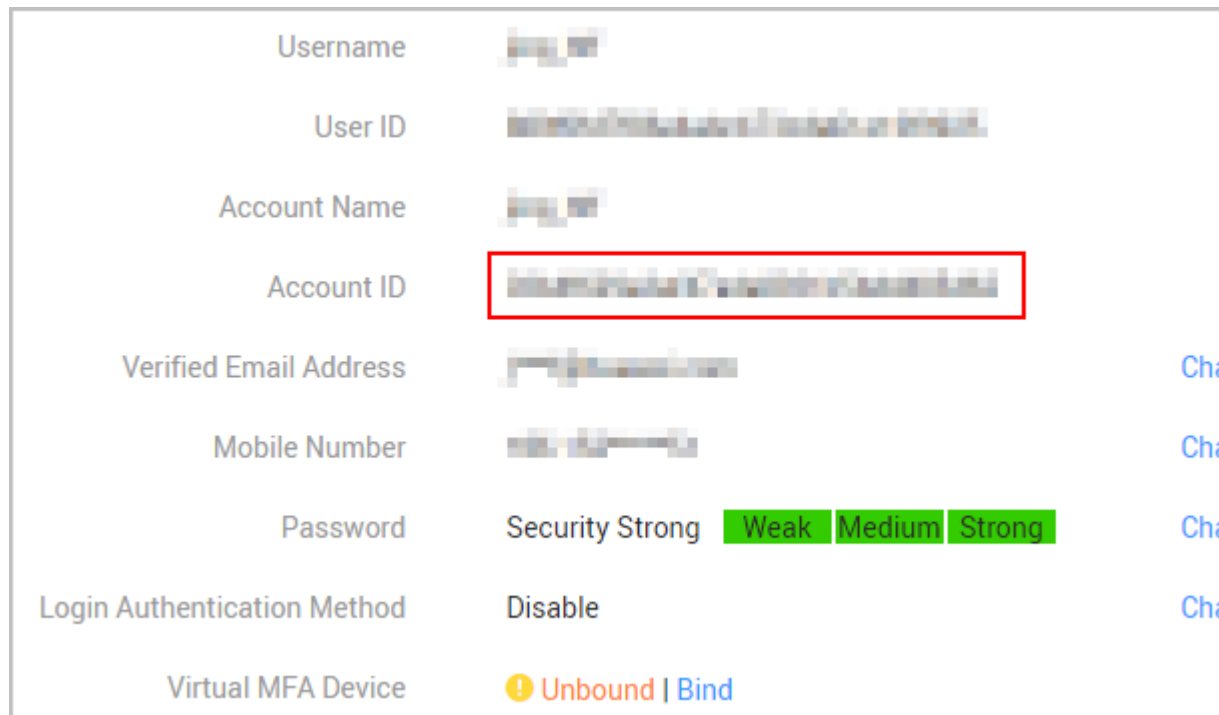
HTTP Value	Error Code	Description
400	CBC.18000016	Insufficient permissions. Contact your partner.
400	CBC.18000030	The cost data of accounts that are not associated with an enterprise master account cannot be queried.
500	CBC.0999	Other errors.
400	CBC.18000048	Too many independent accounting members. Specify a member account for query.

# 9 Appendix

## 9.1 How Do I Obtain customer\_id or domain\_id?

You can sign in to Huawei Cloud and obtain **customer\_id** from the **My Credential** page.

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



## 9.2 Support for Discounts or Coupons

When a customer invokes the interface described in [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 .

## 9.3 Status Code

**Table 9-1** lists the HTTP response status code.

**Table 9-1** HTTP response status code

Status Code	Coding	Description
100	Continue	The client continues sending the request. This interim response is used to inform the client that the initial part of the request has been received and has not yet been rejected by the server.
101	Switching Protocols	Switching protocols. The target protocol must be more advanced than the source protocol. For example, the current HTTP protocol is switched to a later version.
201	Created	The request for creating a resource or task has been fulfilled.
202	Accepted	The request has been accepted, but the processing has not been completed.
203	Non-Authoritative Information	The server successfully processed the request, but is returning information that may be from another source.
204	NoContent	The server has successfully processed the request, but has not returned any content. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server has fulfilled the request, but the requester is required to reset the content.
206	Partial Content	The server has processed certain GET requests.
300	Multiple Choices	There are multiple options for the location of 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.



Status Code	Coding	Description
301	Moved Permanently	The requested resource has been assigned a new permanent URI, and the new URI is contained in the response.
302	Found	The requested resource resides temporarily under a different URI.
303	See Other	Retrieve a location. The response to the request can be found under a different URI and should be retrieved using a GET or POST method.
304	Not Modified	The requested resource has not been modified. In such a case, there is no need to retransmit the resource since the client still has a previously-downloaded copy.
305	Use Proxy	The requested resource must be accessed through a proxy.
306	Unused	The HTTP status code is no longer used.
400	BadRequest	Invalid request. The client should not repeat the request without modifications.
401	Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.
402	Payment Required	This status code is reserved for future use.
403	Forbidden	The server understood the request, but is refusing to fulfill it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should not repeat the request without modifications.
405	MethodNotAllowed	The method specified in the request is not supported for the requested resource. The client should not repeat the request without modifications.
406	Not Acceptable	The server cannot fulfill the request according to the content characteristics of the request.

Status Code	Coding	Description
407	Proxy Authentication Required	This status code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The request timed out. The client may repeat the request without modifications at any later time.
409	Conflict	The request could not be processed due to a conflict. This status code indicates that 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.
410	Gone	The requested resource is no longer available. The status code indicates that the requested resource has been deleted permanently.
411	Length Required	The server refuses to process the request without a defined Content-Length.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The request is larger than that a server is able to process. The server may close the connection to prevent the client from continuing the request. If the server cannot process the request temporarily, the response will contain a Retry-After header field.
414	Request-URI Too Large	The URI provided was too long for the server to process.
415	Unsupported Media Type	The server is unable to process the media format in the request.
416	Requested range not satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the Expect request-header field.
422	UnprocessableEntity	The request is well-formed but is unable to be processed due to semantic errors.

Status Code	Coding	Description
429	TooManyRequests	The client has sent more requests than its rate limit is allowed within a given amount of time, or the server has received more requests than it is able to process within a given amount of time. In this case, it is advisable for the client to re-initiate requests after the time specified in the Retry-After header of the response expires.
500	InternalServerError	The server is able to receive the request but it could not understand the request.
501	Not Implemented	The server does not support the requested function.
502	Bad Gateway	The server is acting as a gateway or proxy and receives an invalid request from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should not repeat the request without modifications.
504	ServerTimeout	The request cannot be fulfilled within a given time. This status code is returned to the client only when the <b>Timeout</b> parameter is specified in the request.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

## 9.4 Error Codes

### Function description

When a customer invokes an operation API provided by HUAWEI CLOUD, the response body contains the error code and error code description.

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#### 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": "xxx",
  "error_msg": "xxx"
}
```

## Error Codes

**Table 9-2** Error codes

Status Code	Error Code	Error Message	Description
200	CBC.0000	Success.	Succeeded.
403	CBC.0150	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.
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.

Status Code	Error Code	Error Message	Description
200	CBC.30050010	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.30050011	The resources are being unsubscribed from or changed.	Resources are being unsubscribed from or changed.
200	CBC.30050013	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.
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.

Status Code	Error Code	Error Message	Description
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.5023	The account type does not match the association type.	The account type does not match the association type.
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 riInstanceid 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.
400	CBC.0100	parameter error.	Invalid parameter.

Status Code	Error Code	Error Message	Description
400	CBC.0101	Invalid parameter.	Invalid parameter.
400	CBC.180000 14	Inactive Cost Management.	Cost Center not enabled.
400	CBC.180000 30	Cost data query is not supported when associated accounts are unbound.	The cost data of accounts that are not associated with an enterprise master account cannot be queried.
500	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 52	The resource or account has been already frozen.	Operation not allowed. Your resource has been frozen.
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.
400	CBC.5003	Insufficient balance.	Insufficient balance.
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.

Status Code	Error Code	Error Message	Description
400	CBC.50010086	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.
400	CBC.70600026	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.70900002	You can only create an enterprise member account through the HIS platform.	You can only create an enterprise member account through the HIS platform.
400	CBC.99000004	An exception occurred when the customer authorized rights to the partner.	An exception occurred when the customer authorized rights to the partner.
400	CBC.99000026	Incorrect verification code.	Incorrect verification code.
400	CBC.99000027	Expired verification code.	Expired verification code.
400	CBC.99000028	The email address already exists.	Invalid email address. Email already in-use.
400	CBC.99000031	Invalid DomainName.	Invalid DomainName.
400	CBC.99000032	Invalid email address.	Invalid email address.



Status Code	Error Code	Error Message	Description
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 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 can not be resale.	The customer associated in Reseller model has no account balance.
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.

Status Code	Error Code	Error Message	Description
400	CBC.99003004	The resource has dependencies.	The resource has dependencies.
400	CBC.99003012	The resource ID does not exist.	The resource ID does not exist.
400	CBC.99003016	The resources have expired and been deleted or do not exist.	The resources have expired and been deleted or do not exist.
400	CBC.99003100	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.99003106	The order status has changed and no payment can be made.	The order status has changed and no payment can be made.
400	CBC.99003108	Unavailable discount.	Unavailable discount.
400	CBC.99003110	The order has not been paid before the expiration time. Please re-submit the order.	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.	The coupon or stored-value card has been used.
400	CBC.99003115	An error occurred. Try again later.	An error occurred. Try again later.
400	CBC.99003116	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 17	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 44	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.99003151	This discount cannot be used together with other discounts.	This discount cannot be used together with other discounts.
400	CBC.99003154	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.99003155	Insufficient enterprise project fund quota, or invalid project.	Insufficient enterprise project fund quota, or invalid project.
400	CBC.99003156	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.99003162	The payment time must be earlier than the specified effective time.	The payment time must be earlier than the specified effective time.
400	CBC.99003185	The cloud service can only be unsubscribed from as a whole.	The cloud service can only be unsubscribed from as a whole.
400	CBC.99003198	Insufficient organization budget.	Insufficient budget of the organization.
400	CBC.99003602	Automatic renewal is not supported for expired or frozen resources.	Automatic renewal is not supported for expired or frozen resources.
400	CBC.99003605	The automatic 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.99003609	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.99003610	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.99003611	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.99003622	The billing mode of solutions cannot be converted into pay-per-use.	The billing mode of solutions cannot be converted into pay-per-use.
400	CBC.99003623	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.99003624	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.99003626	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.99003631	Unsubscribed,deleted, 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.99003634	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.99003638	Subscription to bandwidth add-on packages cannot be renewed.	Subscription to bandwidth add-on packages cannot be renewed.
400	CBC.99003643	Unsubscription is not allowed for cloud services that have been invoiced.	For cloud services for which invoices have been issued, unsubscription is not supported.
400	CBC.99003645	Unsubscription not supported for the service type of the resource.	Unsubscription not supported for this cloud service type.
400	CBC.99003647	Unsubscription not supported for this pay-per-use package.	Unsubscription not supported for this pay-per-use package.
400	CBC.99003649	Unsubscription not supported for cloud services in trial use.	Unsubscription not supported for cloud services in trial use.
400	CBC.99003650	Unsubscription not supported for this cloud service from the KooGallery.	Unsubscription not supported for this cloud service from the KooGallery.
400	CBC.99003651	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.99003652	Unsubscription is not supported for DevCloud packages.	Unsubscription is not supported for DevCloud packages.

Status Code	Error Code	Error Message	Description
400	CBC.99003654	This renewal period cannot be canceled because it includes an add-on bandwidthpackage.	If there is a bandwidth add-on package, you cannot unsubscribe from the renewal period.
400	CBC.99003656	Operation not allowed. Your account has been frozen.	Operation not allowed. Your resource has been frozen.
400	CBC.99004008	Invalid verification code.	Invalid verification code.
400	CBC.99004009	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.99004010	The verification code entered is incorrect.	The verification code entered is incorrect.
400	CBC.99005003	Your balance is insufficient.	Insufficient balance.
400	CBC.99005010	Orders in this state cannot be canceled.	Orders in this state cannot be canceled.
400	CBC.99005036	The customer does not support payment via interface.	The customer does not support payment via interface.
400	CBC.99005026	The order is not a degrade or unsubscription order.	The order is not a degrade or unsubscription order.
400	CBC.99005042	The resource cannot be found or unsubscribed from.	The resource cannot be found or unsubscribed from.
400	CBC.99006006	Product not found.	Product not found.

Status Code	Error Code	Error Message	Description
400	CBC.99006016	Failed to query coupon information.	Failed to query coupon information.
400	CBC.99006017	Failed to query customer details.	Failed to query customer information.
400	CBC.99006024	Failed to query product information.	Failed to query product information.
400	CBC.99006050	Incorrect usage measurement unit.	Incorrect usage unit
400	CBC.99006055	The queried amount exceeds the upper limit.	The queried amount exceeds the upper limit.
400	CBC.99006066	An error occurred during the query of the fee information.	An error occurred during the query of the fee information.
400	CBC.99006073	Project not found.	Project not found.
400	CBC.99006074	The billing item does not exist.	The billing item does not exist.
400	CBC.99006093	Failed to obtain tax rate information.	Failed to obtain the tax rate.
400	CBC.99008040	Too many attempts.	Too many attempts.
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.
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.



Status Code	Error Code	Error Message	Description
500	CBC.0999	Other errors.	Other errors.
500	CBC.7001	Failed to allocate money to the member account because the primary account is not associated with the sub-account.	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.
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.7228	Invalid password.	Invalid password.