

Partner Center

API Reference

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

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1 Change History

Description	Released On
This issue is the eighty-first official release. This release incorporates the following changes: • Changed the traffic quota of the V2 API for querying the price of a pay-per-use product from 10/1(s) to 20/1(s). • Added the auto_renew_times request parameter to the V2 API for enabling auto renewal for yearly/monthly resources. auto_renew_times indicates the number of auto renewals. Auto renewal will end after the specified number of auto renewals is reached. • Added the enumerated values 5 (Deleted resources), 6 (Supplement), 7 (Compensation), and 8 (Auto-created) to the response parameter source_type of the V2 APIs for querying orders and querying order details. • Added the enumerated value 18 (expenditure - monthly payment) to the bill type field in the API for querying customer resource usage.	2025-07-28

Description	Released On
This issue is the eightieth official release. This release incorporates the following changes: - Added the V2 API for querying customer budget adjustment records. This API can be used by partners to query customer budget adjustment records. - Added error code CBC.99003143: The product in this order is no longer available. to the V3 API for paying yearly/monthly orders. - Brought the V1 APIs for querying real-name authentication review results, querying customer budgets, and setting customer budgets as well as the V2 API for querying resource packages offline. - Added the frozen_operate_type request parameter to the V2 API for setting customer budgets. The request parameter determines whether to automatically freeze the account when the budget is exhausted.	2025-06-26
This issue is the eighty-sixth official release. This release incorporates the following changes: - Deleted the request parameter expire_policy (expiration policy) from the V2 API for renewing subscriptions to yearly/monthly resources. - Deleted the request parameter expire_mode (expiration policy) from the old API for renewing subscriptions to yearly/monthly resources.	2025-04-28
This issue is the eighty-fifth official release. This release incorporates the following change: The traffic quota of the V2 API for renewing yearly/monthly resources is changed from 10/1(s) to 20/1(s).	2025-03-24
This issue is the eighty-fourth official release. This release incorporates the following changes: Added the error code CBC.70600032 (The operation has failed due to abnormal identity information, which could result in non-compliance risks. If you have any questions, please submit a service ticket to the customer service.) to the V2 APIs for requesting an individual real-name authentication, requesting an enterprise real-name authentication, and requesting a real-name authentication change.	2025-02-24

Description	Released On
This issue is the eighty-third official release. This release incorporates the following changes: - Added the email field to the response of the V2 API for querying the customer list. This field indicates the customer email address. - Added the sub_order_infos field to the order_infos field in the response of the V2 API for querying the order list. - Added the sub_order_infos field to the order_infos field in the response of the V2 API for querying order details. Added the order_id field (order ID) to the order_line_items response field.	2024-01-20
This issue is the eighty-second official release. This release incorporates the following changes: - Added the update_time (resource update time) and enterprise_project (customer resource enterprise project details) response fields to the V2 API for querying customer's yearly/monthly resources. - Added response field consume_time (expenditure time, which is a UTC time) to the V2 API for querying customer resource usage.	2024-12-23
This issue is the eighty-first official release. This release incorporates the following changes: - Added response parameters product_spec_desc (product specifications), spec_size (product instance size), and spec_size_measure_id (unit of the product instance size) to the V2 API for querying yearly/monthly resources. - Added the pending_payment_end_time and base_product_info response parameters to the V2 API for querying order details. pending_payment_end_time indicates the payment end time of an unpaid order, and base_product_info indicates the product information in the order line before the change.	2024-11-26

Description	Released On
This issue is the eightieth official release. This release incorporates the following changes: • In section Querying Coupons: – Deleted the enumerated value Not activated from the status request parameter of the API. – Deleted the description For used, expired, and reclaimed coupons, data within 12 months after expiration can be queried. – Added the description that information about cash coupons and discount coupons that have expired for more than one year is not returned. • In sections Requesting an Individual Real-Name Authentication, Requesting an Enterprise Real-Name Authentication, and Requesting a Real-Name Authentication Change: – Added the error code CBC.99000099: The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed. – Added the error code CBC.99000100: Incorrect format of the certificate attachment the customer submitted for real-name authentication. • Added the enterprise_projects field to the response of the API in Querying Orders.	2024-10-29
This issue is the seventy-ninth official release. This release incorporates the following change: Creating an agency and granting permissions are not supported in Creating a Customer.	2024-10-14
This issue is the seventy-eighth official release. This release incorporates the following change: Starting from September 1, 2024 00:00:00 GMT+08:00, Huawei Cloud optimizes the billing cycle calculation rules based on the user agreement. After the optimization, the billing cycle will be associated with the expenditure time. For more details, see How Does Huawei Cloud Calculate the Billing Cycle?	2024-8-29

Description	Released On
This issue is the seventy-seventh official release. This release incorporates the following changes: • In the V2 API for freezing customer accounts, the description "If you need to change the freezing type for an already frozen account, you need to unfreeze the account first" was deleted; the error code CBC.70300007 and its description "If you need to change the freezing type for an already frozen account, you need to unfreeze the account first" were deleted; and the descriptions of the enumerated values ACCOUNT and ACCOUNT_AND_RESOURCE of the freeze_type parameter were modified. ACCOUNT: The account will be frozen. ACCOUNT_AND_RESOURCE: Both the account and resources in the account will be frozen. • In the V2 API for unfreezing customer accounts, the description of the enumerated values ACCOUNT and ACCOUNT_AND_RESOURCE of unfreeze_type were modified. ACCOUNT: The account will be unfrozen. ACCOUNT_AND_RESOURCE: Both the account and resources in the account will be unfrozen.	2024-8-29
This issue is the seventy-sixth official release. This release incorporates the following change: Added the V2 API for querying expenditure quotas.	2024-7-29

Description	Released On
This issue is the seventy-fifth official release. This release incorporates the following changes: - Added the description, "If you need to change the freezing type for an already frozen account, you need to unfreeze the account first", the request parameter, freeze_type, and the CBC.70300007 error code, "If you need to change the freezing type for an already frozen account, you need to unfreeze the account first", to the V2 API for freezing customer accounts. - Added the description, "To unfreeze an account, the unfreezing type must be consistent with the freezing type.", the request parameter, freeze_type, and the CBC.50000053 error code, "Unfreeze customer account failed. Selected object and the frozen object do not match", to the V2 API for unfreezing customer accounts. - Added the CBC.30010035 error code, "Resource deleted", and the CBC.30000067 error code, "Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC", to the V1 and V2 for unsubscribing from yearly/monthly resources. - Added the following description to the V2 API for querying prices of pay-per-use products: You can use the price calculator to determine product prices. You can also use the price calculator to get the value of the product_infos request parameter when you call the API for querying product prices. For more details, see price inquiry examples. - Added the following description to the V2 API for querying prices of yearly/monthly products: You can use the price calculator to determine product prices. You can also use the price calculator to get the value of the product_infos request parameter when you call the API for querying product prices. For more details, see price inquiry examples. - Added an enumeration (5: withdrawn) to the request parameter, status in the V2 API for querying coupons. - Added an enumeration (3: closed) to the request parameter, status_list in the V2 API for querying customers' yearly/monthly resources. - The V1 API for verifying customer registration information was taken offline.	2024-6-28

Description	Released On
This issue is the seventy-fourth official release. This release incorporates the following changes: - Added the request parameter, include_relative_resources (whether to include associated resources for the query), to the V2 API for querying the renewal price of a yearly/monthly resource. Added a description for the response parameter, RenewInquiryResultInfo.resource_id. This parameter indicates that if the request contains the include_relative_resources field, the renewal amount of the associated primary resource will be returned. - Added the request parameters, service_type_code (the ID of the cloud service type), to the V2 API for listing yearly/monthly resources. - Added the CBC.30010069 error code to the V2 API for renewing yearly/monthly subscriptions. This error code indicates that the renewal period does not exist. - Added the CBC.99003154 error code to the V1 API for renewing subscriptions to yearly/monthly resources. This error code indicates that the subscription period plus the renewal is too long, so a shorter renewal needs to be selected. - Added request parameter service_type_code_list to the V3 API for listing resource packages. This parameter is used to specify the IDs of cloud service types, and the values are case-insensitive.	2024-5-28
This issue is the seventy-third official release. This release incorporates the following changes: - The V1 API for creating customers was taken offline. - The V1 API for querying monthly bills was taken offline. - Deleted the error code, CBC.99003645 (Unsubscription not supported for this cloud service type), from the V2 API for 8.4.3 Unsubscribing from Yearly/Monthly Resources. - Deleted the error code, CBC.99003631 (The unsubscribed, deleted, or released resource cannot be renewed), from the V2 API for 8.4.2 Renewing Subscription to Yearly/Monthly Resources. - Deleted error code, 400 CBC.99006073 (Project does not exist), from the V2 API for 4.2.1 Querying the Price of a Pay-Per-Use Product. - Launched the V2 API for 8.1.2 Batch Querying Customer Budgets. - The time limit between order creation and order payment changed to one year for 8.3.1 Querying Orders and 12.3.1.1 Querying Orders (Old) APIs.	2024-4-28

Description	Released On
This issue is the seventy-second official release. This release incorporates the following change: Added the error code, CBC.99003647 (Unsubscription not supported for this pay-per-use package.), to the V2 API for renewing yearly/monthly subscriptions. "	2024-2-23
This issue is the seventy-first official release. This release incorporates the following changes: - Added the error code, CBC.99000092 (Incorrect subscription period.), to the V2 API for renewing yearly/monthly subscriptions. - The V1 API for canceling unpaid orders was taken offline. - Added the Product Type Name and Resource Type Name fields to the old API for querying customer resource usage details. - Added the Product Type Name and Resource Type Name fields to the API for querying customer resource usage details. - Added the response parameter, budget_type - budget mode, to the V2 API for querying customer budgets. - Added the request parameter, budget_type - budget mode, to the V2 API for setting customer budgets. Added the error code, CBC.50000030 (Setting budgets not supported. This reseller's budget quota is insufficient.). Added the error code, CBC.50000033 (Budget setting permissions have been revoked. This reseller cannot set budgets.).	2024-1-29
This issue is the seventieth official release. - The V1 API for paying yearly/monthly bills was taken offline. - The V1 API for querying refund details was taken offline. - The V1 API for sending verification codes was taken offline. - The V1 API for querying pay-per-use resource lists was taken offline.	2023-12-26
This issue is the sixty-ninth official release. This release incorporates the following change: Added the Action column in the API Access Permission (Partner) section.	2023-11-15
This issue is the sixty-eighth official release. This release incorporates the following change: Removed the API (V1) for querying prices by product specification.	2023-11-1

Description	Released On
This issue is the sixty-seventh official release. This release incorporates the following changes: Added the enumerations, 4: Savings plan-subscription and 5: Savings plan-hourly billing to the field, Billing Mode, in the bill details generated from the Querying Bill Details of Monthly Expenditures API. Added the enumeration, 11: Savings plan, to the field, Billing Mode and added the enumeration, 23: Expenditure-savings plans to the parameter, bill_type in the resource usage details generated from the API, Querying Customer Resource Usage. Added the enumeration, 11: Savings plan to the parameter, cycleType for the API, Querying coupons. Added the error code, CBC.99000088: Your payment is being processed, to the API, Paying a yearly/monthly order.	2023-6-29
This issue is the sixty-sixth official release. This release incorporates the following changes: - Added section 3.3 API Access Permission (Partner). An operator account of a partner needs to obtain permissions before accessing APIs. Roles that have according access permissions can be assigned to this account. - Added the error code "CBC.30050013: Renewal not supported to 4.2.3 Querying the Renewal Price of a Yearly/Monthly Resource. - The V1 API for synchronizing customer real-name authentication information is taken offline.	2023-4-18
This issue is the sixty-fifth official release. This release incorporates the following change: Added the API for querying the renewal price of a yearly/monthly resource. Customers can query the renewal price of yearly/monthly resources by criteria.	2023-3-30
This issue is the sixty-fourth official release. This release incorporates the following change: Deleted the enumerated value 7: International driver license of the verified_type field in the API for requesting an individual real-name authentication.	2023-2-28
This issue is the sixty-third official release. This release incorporates the following change: Added the response parameter fail_resource_infos to the 8.4.2 Renewing Subscription to Yearly/Monthly Resources API and the 8.4.3 Unsubscribing from Yearly/Monthly Resources API. This parameter provides resource information for query failures.	2023-2-9

Description	Released On
This issue is the sixty-second official release. This release incorporates the following change: Took the API for querying available discounts of an order offline.	2022-12-27
This issue is the sixty-first official release. This release incorporates the following changes: - Added the error codes CBC.50010085 - Customer association not allowed. The account of this partner has been restricted. and CBC.50010086 - Customer association not allowed. This partner is a Huawei Cloud reseller, and the account of its associated distributor has been restricted. to the V2 API for creating a customer and V1 API for creating a customer. - Added the error code CBC.70600026 - Sorry, Huawei Cloud cannot review your real-name authentication information. Please contact your account manager for assistance. to the APIs for requesting an individual real-name authentication, requesting an enterprise real-name authentication, and requesting a real-name authentication change.	2022-12-13
This issue is the sixtieth official release. This release incorporates the following changes: - Brought the V1 API for enabling automatic subscription renewal for yearly/monthly resources offline. - Brought the V1 API for disabling automatic subscription renewal for yearly/monthly resources offline.	2022-11-17
This issue is the fifty-ninth official release. This release incorporates the following changes: - Added the enumerated value 60: KooGallery product discounts in resales for Settlement Product Type in the Querying Bill Details of Monthly Expenditures API. - Brought the V1 API for enabling automatic subscription renewal offline. - Brought the V1 API for disabling automatic subscription renewal offline.	2022-10-31
This issue is the fifty-eighth official release. This release incorporates the following changes: Added the V3 API for paying yearly/monthly product orders, and moved the V2 API for paying yearly/monthly product orders to 12 API to Be Brought Offline.	2022-09-27

Description	Released On
This issue is the fifty-seventh official release. This release incorporates the following changes: - Added the request parameter indirect_partner_id to the API for querying orders. This parameter is used to query the orders of a Huawei Cloud reseller's customer. - Added the request parameter indirect_partner_id to the API for querying order details. This parameter is used to query order details of a Huawei Cloud reseller's customer. - Added the request parameter indirect_partner_id to the API for querying the pay-per-use resources of a customer. This parameter is used to query the pay-per-use resources of a Huawei Cloud reseller's customer. - Added error code CBC.99000037 to the API for querying orders. - Added error code CBC.99000037 to the API for querying order details. - Added error code CBC.99000037 to the API for querying customer's pay-per-use resources.	2022-08-30
This issue is the fifty-sixth official release. This release incorporates the following changes: - Added the request parameter indirect_partner_id to the API for creating customers to support creating customers for a Huawei Cloud reseller. - Added the request parameter indirect_partner_id to the API for querying customers to support querying the customers of a Huawei Cloud reseller. - Added the request parameter indirect_partner_id to the API for freezing customer accounts to support freezing the accounts of customers of a Huawei Cloud reseller. - Added the request parameter indirect_partner_id to the API for unfreezing customer accounts to support unfreezing the accounts of customers of a Huawei Cloud reseller. - Added the request parameter indirect_partner_id to the API for querying customers' budgets to support querying the budgets set for the customers of a Huawei Cloud reseller. - Added the request parameter indirect_partner_id to the API for setting budgets for customers to support setting budgets for customers of a Huawei Cloud reseller.	2022-08-16
This issue is the fifty-fifth official release. This release incorporates the following change: Changed Elite Service Provider to Huawei Cloud Reseller and Marketplace to KooGallery.	2022-08-10

Description	Released On
This issue is the fifty-fourth official release. This release incorporates the following changes: - Changed the length of the value for password in the V1 API for creating customers. The value can be a string of 8 to 32 characters. - Changed the length of the value for password in the V2 API for creating customers. The value can be a string of 8 to 32 characters.	2022-08-02
This issue is the fifty-third official release. This release incorporates the following changes: - Added the error code CBC.30010035 to the API for unsubscribing from yearly/monthly resources. - Added error code CBC.50010059 to the V1 API for creating a customer. - Added error code CBC.50010059 to the V2 API for creating a customer.	2022-07-19
This issue is the fifty-third official release. This release incorporates the following change: Added the following description for the API in 8.4.3 Unsubscribing from Yearly/Monthly Resources: 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.	2022-07-05
This issue is the fifty-second official release. This release incorporates the following change: Added the enumerated value 2: Account and resources and changed enumerated value 1: Yes to 1: Only account for the response parameter is_frozen in 5.3.1 Querying Customers.	2022-06-21

Description	Released On
This issue is the fifty-first official release. This release incorporates the following changes: - Added the API for querying cloud service types, and moved the old API for querying cloud service types to 12 API to Be Brought Offline. - Added the API for querying resource types, and moved the old API for querying resource types to 12 API to Be Brought Offline. - Added service_type_name, indicating the cloud service type, and resource_type_name, indicating the resource type, to the response parameters of the APIs for querying usage types, paying yearly/monthly product orders, querying the amount of unsubscription orders, querying customer's yearly/monthly resources, and querying customer's pay-per-use resources. - Added service_type_name, indicating the cloud service type, to the response parameters of the APIs for querying order details and querying resource packages.	2022-04-12
This issue is the fiftieth official release. This release incorporates the following change: The Prepayment model has been changed to the Authorized Distributor model. The transaction model name in Chinese for Referral has been changed, but the English name remains unchanged.	2022-03-25
This issue is the forty-ninth official release. This release incorporates the following change: Added error code CBC.99003605 in the response of the V2 API for canceling automatic renewal for yearly/monthly resources.	2022-03-15
This issue is the forty-eighth official release. This release incorporates the following changes: - Added error code CBC.30010036 in the response of the API for renewing subscription to yearly/monthly resources. - Added error code CBC.99003602 in the response of the API for enabling automatic subscription renewal for yearly/monthly resources. - Added the enumerated value 20: Refund - change for the bill type in the file exported through the API for querying customer resource usage. - Changed 11: Service cross-charging to 11: Special price request for the parameter Settlement Product Type in the file exported through the Querying Bill Details of Monthly Expenditures API. - Added section 13.5 File Subscription in 13 Appendix. Partners can subscribe to files in the Partner Center on HUAWEI CLOUD.	2022-01-25

Description	Released On
This issue is the forty-seventh official release. This release incorporates the following changes: - Added error code CBC.0250 to the response of the API for querying the price of a yearly/monthly product. - Added error code CBC.30050006 in the response of the API for renewing subscription to yearly/monthly resources. - Added error code CBC.99003115 to the response of the V2 API for paying yearly/monthly product orders. - Added error code CBC.99003156 to the response of the V2 API for paying yearly/monthly product orders. - Added error code CBC.99003156 to the response of the V1 API for paying yearly/monthly product orders.	2022-01-11
This issue is the forty-sixth official release. This release incorporates the following changes: - Changed the description of error code CBC.99000051 to Customer creation failed because this mobile number or email address has been preregistered by Huawei. for the API in 5.1.3 Creating a Customer. - Added error code CBC.99000051 to the old API for creating a customer.	2021-12-14
This issue is the forty-fifth official release. This release incorporates the following change: Deleted error code CBC.99003001 from the API in 8.4.2 Renewing Subscription to Yearly/Monthly Resources.	2021-11-30
This issue is the forty-fourth official release. This release incorporates the following changes: - Changed the description of error code CBC.99005030 returned by the API in 5.2.1 Requesting an Individual Real-Name Authentication to The partner did not complete real-name authentication or bucket authentication. - Added the description of the parameter related to the subscription duration for the API in 9.1.1 Querying Customer Resource Usage. This parameter can be a non-integer in the exported CSV file.	2021-11-16
This issue is the forty-third official release. This release incorporates the following change: Change the description of the error message for CBC.99003016 to "The resources have expired and been deleted or do not exist." in 8.4.2 Renewing Subscription to Yearly/Monthly Resources.	2021-11-02

Description	Released On
This issue is the forty-second official release. This release incorporates the following change: Added the description of anti-injection-reconstruction for input parameter values of Resource Name and Resource Tag in the file of the API for querying customer resource usage.	2021-10-19
This issue is the forty-first official release. This release incorporates the following changes: - Added the V3 API for querying resource packages and moved the V2 API for querying resource packages to 12 API to Be Brought Offline. - Added request parameters expire_time_begin and expire_time_end to the API in Querying Customer's Yearly/Monthly Resources. These two parameters are used to query the list of resources that expire in a specified period.	2021-09-28
This issue is the fortieth official release. This release incorporates the following changes: - Added error code CBC.30000010 to the API for paying yearly/monthly product orders. - Added a description for the Unit parameter in 9.1.1 Querying Customer Resource Usage to differentiate the unit of the linear products from that of non-linear products.	2021-08-31
This issue is the thirty-ninth official release. This release incorporates the following changes: - Added the API for querying customer resource usage. - Moved the old API 12.4.1 Querying Customer Resource Usage to 12 API to Be Brought Offline.	2021-08-13
This issue is the thirty-eighth official release. This release incorporates the following changes: - Deleted the old APIs for requesting an individual real-name authentication, requesting an enterprise real-name authentication, and requesting real-name authentication change, and the API for unsubscribing from yearly/monthly products that fail to be provisioned or changed. - Added user_name in the response parameters of the API in 8.3.2 Querying Order Details to specify the order creator returned by the API for querying order details.	2021-07-13

Description	Released On
This issue is the thirty-seventh official release. This release incorporates the following changes: - Added the API for querying the resource packages of a customer in Querying Resource Packages (Old). - Added the API for querying the resource package usage in 8.5.2 Viewing Resource Package Usage. - Added the field partnerPreferentialType and changed the calculation method of amount due in 9.2.2 Querying Bill Details of Monthly Expenditures. - Added response parameters salePrice, stepNum, stepNumMeasureId, and partnerPreferentialType in Querying Monthly Bills. These parameters are returned when partnerPreferentialType is set to 1.	2021-06-15
This issue is the thirty-sixth official release. This release incorporates the following change: Added Querying Available Discounts of an Order. You can invoke this API to query available discounts when paying an order.	2021-04-28
This issue is the thirty-fifth official release. This release incorporates the following change: Added fields Settlement Amount, Partner Coupon, Scene, Partner Amount Without Tax, Tax Amount, and Usage Type Name in 9.2.2 Querying Bill Details of Monthly Expenditures. These fields are not displayed for partners in the Asia Pacific region.	2021-02-08
This issue is the thirty-fourth official release. This release incorporates the following change: Modified 5.3.1 Querying Customers. Specifically, added fields xaccount_id, xaccount_type, and customer_level for returning the partner sales platform user ID, partner sales platform ID, and customer level, respectively.	2021-01-28
This issue is the thirty-third official release. This release incorporates the following changes: Added 4.1.5 Querying Measurement Units and 4.1.6 Querying the Measurement Unit Number System.	2020-12-30
This issue is the thirty-second official release. This release incorporates the following changes: - Added the V2 interface in 9.2.1 Querying Monthly Bills and moved the V1 interface in Querying Monthly Bills to 12 API to Be Brought Offline. - Added the parameter discount_infos and table DiscountSimpleInfo for the API that is used for paying yearly/monthly product orders to query available discounts that can be used for paying yearly/monthly orders.	2020-12-16

Description	Released On
This issue is the thirty-first official release. This release incorporates the following changes: Modified the old API for querying customer resource usage. The system generates the resource usage details from 12:00 to 20:00 (not later than 24:00) every day.	2020-12-01
This issue is the thirtieth official release. This release incorporates the following changes: - Added 4.1.4 Querying Usage Types for querying usage types. - Added 8.4.6 Enabling/Canceling the Change from Yearly/Monthly to Pay-per-Use upon Expiration for querying resource types. - Added the enumerated value "610: Discount amount" for parameter discount_type in 8.3.1 Querying Orders and 8.3.2 Querying Order Details, as well as 12.3.1.1 Querying Orders (Old) and 12.3.1.2 Querying Order Details (Old) to be brought offline.	2020-11-18
This issue is the twenty-ninth official release. This release incorporates the following changes: Added the API in Querying Cloud Service Types (Old). Added the API in Querying Resource Types (Old). Added 4.1.3 Querying Resources by Cloud Service Type for querying resource list by cloud service type.	2020-11-04
This issue is the twenty-eighth official release. This release incorporates the following changes: - Add parameter include_association_result in 5.1.3 Creating a Customer. When this parameter is called, the result of associating a partner and its sub-customer will be returned. - Moved 14.1.4.6.12 Querying Resource Provisioning Details of an Order to 12 API to Be Brought Offline.	2020-10-21
This issue is the twenty-seventh official release. This release incorporates the following changes: Added Table 8-46 to support query by language and response parameter product_spec_desc (indicating product specifications) in 8.6.1 Querying Customer's Pay-Per-Use Resources.	2020-09-28

Description	Released On
This issue is the twenty-sixth official release. This release incorporates the following changes: - Added response parameters product_owner_service and commercial_resource in 8.3.2 Querying Order Details. - Changed the default value of measure_id in the following APIs from cent to dollar. After this modification, the unit for the values of currency-related fields is also changed to dollar. Check the currency unit in use during an API call. 8.3.1 Querying Orders 8.3.2 Querying Order Details 8.3.5 Querying the Amount of Unsubscription Orders	2020-09-16
This issue is the twenty-fifth official release. This release incorporates the following changes: - Added the V2 interface in 5.3.2 Freezing a Customer Account and moved the V1 interface in 12.2.3 Freezing a Customer Account (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 5.3.3 Unfreezing a Customer Account and moved the V1 interface in 12.2.4 Unfreezing a Customer Account (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 8.1.1 Querying Customer Budgets and moved the V1 interface in Querying Customers' Budgets (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 8.1.3 Setting Customer Budgets and moved the V1 interface in Setting Customers' Budgets (Old) to 12 API to Be Brought Offline. - Added error codes CBC.99006006, CBC.99006055, and CBC.99006074 in 4.2.1 Querying the Price of a Pay-Per-Use Product and 4.2.2 Querying the Price of a Yearly/Monthly Product.	2020-09-02

Description	Released On
This issue is the twenty-fourth official release. This release incorporates the following changes: - Added the V2 interface in 8.3.5 Querying the Amount of Unsubscription Orders and moved the V1 interface in Querying the Amount of Unsubscription Orders to 12 API to Be Brought Offline. - Added the V2 interface in 8.4.1 Querying Customer's Yearly/Monthly Resources and moved the V1 interface in 12.3.2.1 Querying Customer's Yearly/Monthly Resources (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 8.4.4 Enabling Automatic Subscription Renewal for Yearly/Monthly Resources and moved the V1 interface in Enabling Automatic Subscription Renewal for Yearly/Monthly Resources to 12 API to Be Brought Offline. - Added the V2 interface in 8.4.5 Disabling Automatic Subscription Renewal for Yearly/Monthly Resources and moved the V1 interface in Disabling Automatic Subscription Renewal for Yearly/Monthly Resources to 12 API to Be Brought Offline. - Added the V2 interface in 8.6.1 Querying Customer's Pay-Per-Use Resources and moved the V1 interface in Querying Customer's Pay-Per-Use Resources to 12 API to Be Brought Offline.	2020-06-30

Description	Released On
This issue is the twenty-third official release. This release incorporates the following changes: - Added the V2 interface in 8.3.1 Querying Orders and moved the V1 interface in 12.3.1.1 Querying Orders (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 8.3.2 Querying Order Details and moved the V1 interface in 12.3.1.2 Querying Order Details (Old) to 12 API to Be Brought Offline. - Added the V2 API for paying yearly/monthly product orders. Moved the V1 API from Paying Yearly/Monthly Product Orders (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 8.3.4 Canceling Orders in the Pending Payment Status and moved the V1 interface in Canceling Orders in the Pending Payment Status to 12 API to Be Brought Offline. - Added the V2 interface in 8.4.2 Renewing Subscription to Yearly/Monthly Resources and moved the V1 interface in 12.3.2.2 Renewing Subscription to Yearly/Monthly Resources (Old) to 12 API to Be Brought Offline. - Added the V2 interface in 8.4.3 Unsubscribing from Yearly/Monthly Resources and moved the V1 interface in 12.3.2.3 Unsubscribing from Yearly/Monthly Resources (Old) to 12 API to Be Brought Offline.	2020-06-17
This issue is the twenty-second official release. This release incorporates the following changes: Added the V2 interface in 5.1.1 Verifying Customer Registration Information and moved the V1 interface in Verifying Customer Registration Information (Old) to 12 API to Be Brought Offline. Added the V2 API to 5.2.3 Requesting a Real-Name Authentication Change and moved the V1 APIs in 14.1.2.1.2 Sending a Verification Code to 12 API to Be Brought Offline.	2020-06-03

Description	Released On
This issue is the twenty-first official release. This release incorporates the following changes: Added the V2 API in 5.2.1 Requesting an Individual Real-Name Authentication, and moved the V1 API for requesting an individual real-name authentication to 12 API to Be Brought Offline. Added the V2 API in 5.2.2 Requesting an Enterprise Real-Name Authentication, and moved the V1 API for requesting an enterprise real-name authentication to 12 API to Be Brought Offline. Added the V2 API in 5.2.3 Requesting a Real-Name Authentication Change, and moved the V1 API for requesting a real-name authentication change to 12 API to Be Brought Offline. Added the V2 interface in 5.2.4 Querying the Real-Name Authentication Review Result and moved the V1 interface in Querying the Real-Name Authentication Review Result (Old) to 12 API to Be Brought Offline. Added the V2 interface in 5.3.1 Querying Customers. Added response parameter account_managers. Moved the V1 interface in Querying the Real-Name Authentication Review Result (Old) to 12 API to Be Brought Offline.	2020-05-20
This issue is the twentieth official release. This release incorporates the following changes: Added the V2 API in 5.1.3 Creating a Customer and brought the old API for creating a customer offline.	2020-04-22
This issue is the nineteenth official release. This release incorporates the following changes: Added 4.2.1 Querying the Price of a Pay-Per-Use Product and 4.2.2 Querying the Price of a Yearly/Monthly Product. Took the API for querying product prices based on specifications offline.	2020-03-25
This issue is the eighteenth official release. This release incorporates the following changes: Added 10.1.1 Querying the Invoice List.	2020-01-15
This issue is the seventeenth official release. This release incorporates the following changes: Added cooperationType to the request parameters of the old API for creating a customer. Modified the description of status codes CBC.4004 and CBC.4005 in 5.1.2 Sending a Verification Code.	2019-12-18

Description	Released On
This issue is the sixteenth official release. This release incorporates the following changes: Added error code CBC.3016 in 8.4.2 Renewing Subscription to Yearly/Monthly Resources. This error code indicates that expired resources exist.	2019-11-20
This issue is the fifteenth official release. This release incorporates the following changes: - Added 12.2.3 Freezing a Customer Account (Old). - Added 12.2.4 Unfreezing a Customer Account (Old). - Added response parameter isFrozen in 12.2.1 Querying Customers (Old). This parameter is used to indicate whether the customer account is frozen. - Added request parameter cancelPartnerFrozen in Setting Customers' Budgets (Old). This parameter is used to specify whether to unfreeze the customer account while setting the budget for the customer. - Added the Amount after Coupons and Amount Due fields in 9.2.2 Querying Bill Details of Monthly Expenditures.	2019-10-23
This issue is the fourteenth official release. This release incorporates the following changes: Added 11 Managing Service Tickets.	2019-09-25
This issue is the thirteenth official release. This release incorporates the following changes: - Added response parameter uplimit in 5.1.1 Verifying Customer Registration Information. The parameter indicates whether the number of verification code sending times reaches the upper limit. - Added the section "12.1.2.2.3-Requesting a Real-Name Authentication Change (Old)".	2019-09-17
This issue is the twelfth official release. This release incorporates the following changes: - Added response parameter customerType in 12.2.1 Querying Customers (Old). The parameter indicates the customer type. - Added the section "12.1.2.2.1-Requesting an Individual Real-Name Authentication (Old)". - Added the section "12.1.2.2.2-Requesting an Enterprise Real-Name Authentication (Old)". - Added Querying the Real-Name Authentication Review Result (Old). - Moved the API in Synchronizing Customer Real-Name Authentication Information to 12 API to Be Brought Offline.	2019-09-04

Description	Released On
This Issue is the eleventh official release. This release incorporates the following changes: - Added 8.3.5 Querying the Amount of Unsubscription Orders. - Added periodType, periodNum, and categoryCode to response messages of the API in Querying Monthly Bills.	2019-08-21
This issue is the tenth official release. This release incorporates the following changes: - Added 14.1.4.6.12 Querying Resource Provisioning Details of an Order. - Added parameters Project ID and Project Tag to the file in 12.4.1 Querying Customer Resource Usage.	2019-08-14
This issue is the ninth official release. This release incorporates the following changes: - Added error code CBC.0100 in 8.4.1 Querying Customer's Yearly/Monthly Resources. - Moved API in 12.2.2 Querying Customers (Old) to 12 API to Be Brought Offline. For details about the new API, see 12.2.1 Querying Customers (Old).	2019-07-24
This issue is the eighth official release. This release incorporates the following changes: - Added parameter categoryCode in response table Table 8-18 in 8.3.2 Querying Order Details. - Added Bill Type in table 3 in 9.2.2 Querying Bill Details of Monthly Expenditures. - Changed the API for querying customer credit limit to the API for querying customers' budgets in Querying Customers' Budgets (Old). - Changed the API for setting customer credit limit to the API for setting customers' budgets in Setting Customers' Budgets (Old).	2019-07-10

Description	Released On
This issue is the seventh official release. This release incorporates the following changes: • In 8.3.1 Querying Orders – Added parameters currencyOfficial, amountInfo, and serviceType in Table 8-9. – Added response parameter tables Table 8-10 and Table 8-11. – Added status code CBC.0100, CBC.0101, CBC.0151, and CBC.0155. • In 8.3.2 Querying Order Details – Added parameters offset and limit to Table 8-14. – Added response parameters currencyOfficial, amountInfo, currencyType, and serviceType in Table 8-17. – Added response parameter tables Table 8-18, Table 8-20, and Table 8-21. – Added status code CBC.0100, CBC.0101, CBC.0151, and CBC.0155. • Added the status code CBC.7254 to the old API for creating a customer.	2019-06-26
This issue is the sixth official release. This release incorporates the following changes: • Added isCloseMarketMs to the request parameters of the old API for creating a customer.	2019-06-14
This issue is the fifth official release. This release incorporates the following changes: • Added 9.1 Managing Customer Consumptions. • Added 13.8 Status Codes and Retry Policies. • Added 13.9 Error Codes.	2019-05-22
This issue is the fourth official release. This release incorporates the following changes: • Adjusted the sections in 5 Customer Management, 8 Transaction Management, and 9 Bill Management based on service scenarios in 2 Partner Operations Capability APIs (Reseller Model). • Added 8.3.2 Querying Order Details. • Added the API for paying yearly/monthly product orders. • Added 8.3.4 Canceling Orders in the Pending Payment Status. • Added 8.6.1 Querying Customer's Pay-Per-Use Resources.	2019-05-10

Description	Released On
This issue is the third official release. This release incorporates the following changes: - Added 2.1.2.1-Synchronizing Customer Real-Name Authentication Information. - Added 14.1.1.2.1 Querying Product Prices Based on the Product Specifications (Old). - Added 8.3.1 Querying Orders. - Added 8.4.1 Querying Customer's Yearly/Monthly Resources. - Added 8.4.2 Renewing Subscription to Yearly/Monthly Resources. - Added 8.4.3 Unsubscribing from Yearly/Monthly Resources. - Added 8.4.4 Enabling Automatic Subscription Renewal for Yearly/Monthly Resources. - Added 8.4.5 Disabling Automatic Subscription Renewal for Yearly/Monthly Resources.	2019-04-29
This issue is the second official release. This release incorporates the following changes: Added the APIs to be supported and their descriptions in 2 Partner Operations Capability APIs (Reseller Model).	2019-04-13
This issue is the first official release.	2019-03-22

2 Partner Operations Capability APIs (Reseller Model)

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

Table 2-1 APIs and descriptions

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

Scenario	Sub-Scenario	API Name	Description
	Product price query	Querying the Price of a Pay-per-Use Product	Partners can query the price of a pay-per-use product by criteria on the sales platform.
		Querying the Price of a Yearly/Monthly Product	Partners can use this API to query prices of yearly/monthly products for new subscriptions on their sales platforms.
		Querying the Renewal Price of a Yearly/Monthly Resource	Customers can query the renewal price of a yearly/monthly resource by criteria on the partner sales platform.
Customer management	Customer registration	Verifying Customer Registration Information	This API is used to check whether the account name, and mobile number or email address entered by the customer can be used for registration.
		Sending a Verification Code	If a customer enters an email address during registration, the system sends a registration verification code to the email address to verify the information.
		Creating a Customer	This API is used to create a Huawei Cloud account for a customer when the customer creates an account on your sales platform, and bind the customer account on the partner sales platform to the HUAWEI CLOUD account. In addition, the Huawei Cloud account is bound to the partner account.
	Real-name authentication	Requesting an Individual Real-name Authentication	This API can be used to submit an individual real-name authentication application.
		Requesting an Enterprise Real-name Authentication	This API can be used to submit an enterprise real-name authentication application.

Scenario	Sub-Scenario	API Name	Description
		Requesting a Real-Name Authentication Change	This API can be used to submit a real-name authentication change application.
		Querying the Real-Name Authentication Review Result	If the response to a real-name authentication application or real-name authentication change application indicates that manual review is required, this API can be used to query the review result.
	Customer management	Querying Customers	This API is used to query your customers.
		Freezing a Customer Account	A partner can freeze an account of a customer associated with the partner by reseller model.
		Unfreezing a Customer Account	A partner can unfreeze an account of a customer associated with the partner by reseller model.
Reseller management	Querying resellers	Querying Huawei Cloud Resellers	A Huawei Cloud distributor can query the list of its associated Huawei Cloud resellers.
Credit management	Managing credits	Querying Consumption Quota	Partners can query their expenditure quotas.
Transaction management	Customer budget management	Querying Customers' Budgets	This API is used to query the budget of a customer for the partner to determine whether to adjust the budget.
		8.1.2 Batch Querying Customer Budgets	This API is used to batch query budgets of multiple customers. You can decide whether to adjust budgets for your customers based on the query results.
		Setting Customer Budgets	This API is used to set or adjust a customer's budget. If the budget is set for the first time, and the freezing type is not specified for budget exhaustion, manual freezing is applied by default.

Scenario	Sub-Scenario	API Name	Description
		8.1.4 Querying Customer Budget Adjustment Records	This API is used by partners to query customer budget adjustment records.
	Coupon management	Querying Coupons	Partners can query information about their coupons.
	Yearly/monthly order management	Querying Orders	After a customer purchases yearly/monthly resources, it can query the orders in different statuses, such as in the pending approval, processing, canceled, completed, and pending payment statuses.
		Querying Order Details	Customers can view order details on the partner sales platform.
		Paying Yearly/Monthly Product Orders	A customer can invoke this API to pay yearly-monthly product orders in the pending payment status.
		Canceling Orders in the Pending Payment Status	A customer can invoke this API to cancel orders in the pending payment status.
		Querying the Amount of Unsubscription Orders	A customer can query the resource type and order of the refund amount of an unsubscription or specification downgrade order on the partner sales platform.
	Yearly/Monthly resource management	Querying Customer's Yearly/Monthly Resources	A customer can query one or all yearly/monthly resources on the partner sales platform.
		Renewing Yearly/Monthly Resources	A customer can renew subscription to yearly/monthly resources on the partner sales platform.

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

Scenario	Sub-Scenario	API Name	Description
Cloud service resource management	Cloud service resource management	Switching from the partner sales platform to the HUAWEI CLOUD portal	This API is used to switch from the partner sales platform to the HUAWEI CLOUD portal using a link to manage cloud service resources.
Bill management	Customer resource usage management	Querying Customer Resource Usage	This API is used to query customer resource usage.
	Partner bill management	9.2.1 Querying Monthly Bills	You can query your monthly bills that cover amount due, expenditures, refunds, and adjustments.
		9.2.2 Querying Bill Details of Monthly Expenditures	A partner can subscribe to the partner bill (customer resource usage) in the HUAWEI CLOUD Partner Center. For details, see File Subscription . Your sales platform will calculate the customer expenditures and generate the customer bills based on this bill and then you can perform reconciliation with HUAWEI CLOUD.
Invoice management	Invoice management	Querying the Invoice List	Partners can query the invoice list.
Managing service tickets	Managing service tickets	Service ticket management APIs	Partners and customers can submit HUAWEI CLOUD service tickets on the partner sales platform. When receiving the service tickets, the HUAWEI CLOUD after-sales service team will assist the customers to handle the problems related to HUAWEI CLOUD usage.

3 API Invoking Methods

3.1 RESTful API

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

3.1.1 Constructing Requests

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

Request URI

A request URI consists of the following:

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

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

Table 3-1 URI parameter description

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

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

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

`https://bss-intl.myhuaweicloud.com/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.
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-intl.myhuaweicloud.com/v2/partners/sub-customers

Request Header

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

Table 3-3 Common request header fields

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

Field	Description	Mandatory	Example
Content-Type	Specifies the request body MIME type. You are advised to use the default value application/json . For an object or image upload API, the value varies depending on the flow type.	Yes	application/json
Content-Length	Length of the request body. The unit is byte.	No	3495
X-Auth-Token	Specifies the user token. For details about how to obtain a token, see Token Authentication .	No This field is mandatory only when the token is used for authentication.	The following is part of an example token: MIIPAgYJKoZIhvcNAQc- ColIO8zCCDu8CAQExDTA 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-intl.myhuaweicloud.com/v2/partners/sub-customers
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

(Optional) Request Body

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

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

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

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

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

{
  "domain_name": "test",
  "email": "xxx@huawei.com",
  "verification_code": "253xxx",
  "domain_area": "HK",
  "xaccount_id": "35reyxxx",
  "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.

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

Token Authentication

NOTE

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

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

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

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

- For details about how to obtain a partner token, see [Obtaining a User Token](#).

- For details about how to obtain a customer token, see [Obtaining a User Token with the assume_role Method](#).

AK/SK Authentication

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) ⓘ	
Body	Cookies
Headers (12)	Test Results
Status: 200 OK	Time: 1994ms
Size: 476 B	Save Response ▼
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 Web UI Mode

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

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

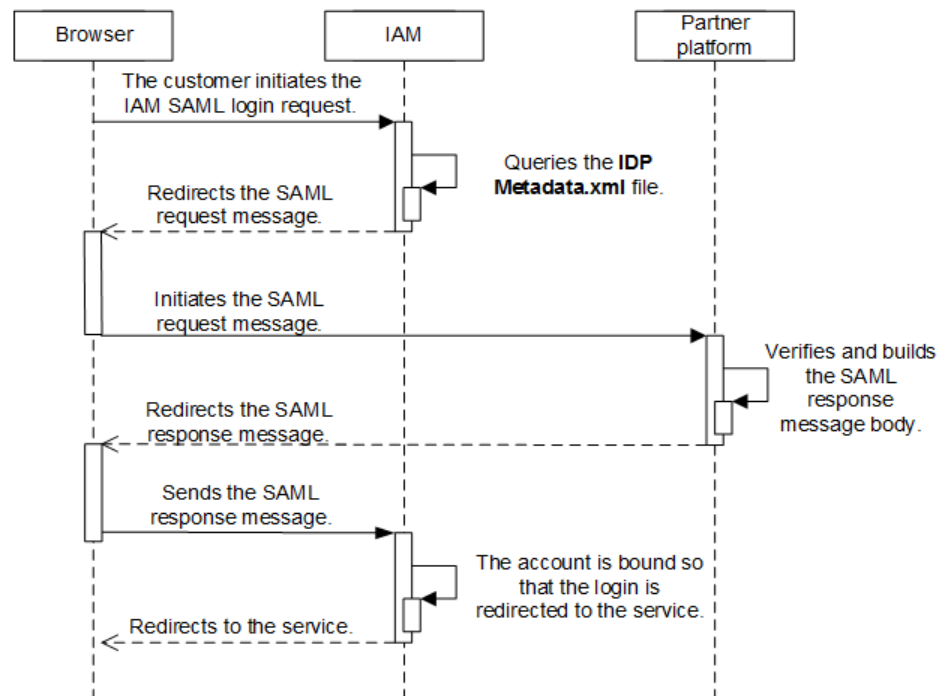
Prerequisites

The partner has performed steps in [Access Configuration](#).

SAML Authentication

[Figure 3-2](#) shows the SAML authentication process.

Figure 3-2 SAML authentication process



1. A partner's customer uses a browser to call the HUAWEI CLOUD login link. IAM sends the SAML request.
 - a. The customer uses a browser to call the HUAWEI CLOUD login link.
<https://auth-intl.huaweicloud.com/authui/saml/login?xAccountType=ZX7&isFirstLogin=false&service=https%3a%2f%2fconsole-intl.huaweicloud.com%2fiam%2f>

Parameter	Mandatory	Description	Example
xAccountType	Yes	Indicates the identifier of the partner sales platform, which is globally unique. The value is provided by Huawei. After the partner configures the access parameters on the Partner Center page, the partner ID is generated. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?	ZXT
isFirstLogin	No	If no HUAWEI CLOUD account is bound, this parameter is mandatory and must be set to true . Otherwise, the value can be left empty or set to false . After the account creation API is successfully called to create a customer account, HUAWEI CLOUD CBC has bound the customer account on the partner sales platform with the customer HUAWEI CLOUD account.	false
service	Yes	Indicates the redirection address after login. The encodeURIComponent function is used for coding.	https%3a%2f%2fconsole-intl.huaweicloud.com%2fiam%2f

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

```

Query String Parameters  view source  view URL encoded
SAMLRequest: jVLLbtsuEPlvlgnc978guVTJmYUQ10eapqTQ58F5K4kJR5p8K2/vpRtswkKGLnuY2222hFvzq8d9AWzLDSrhJ87Kpissmwi/1bTDH1BuFoZ1Ie73ytpvbeHfgLPkL8p85J8N056Ko4Y2I2oEh1pF19ei0p0ffHeq2YkpgtD1k
0B4g4ftXXZba3Dooq58NQTha2Jf8WkFafTHmKmyctqKhsXg08EYDu3+QK29PCSpH086o/KqDuWuQ0Z+fcABkY0NvH8E11abH1Sp1N1uIe0u10Ym271img80e3u6fzh8X0TTP7Uu5n+q0Mmhh7gu+vx27tWpHmeagK5JqfG683BuzbduL
Jg01cJyHvNSPTqCep98yK92felYdW1b38ehuz5XZ25M8XJ0uP5zJ9AD6FR0Z2/Tq1y8007CteV+YRfSa60/PFPXIZm3u8G6/BuoItb/RQK23k0uHo8sdtZa1DBvE8F45qym0CQqfHmC/0Sp42UG/94dwtDyffTy28=
RelayState: _glnzak3sg5bypjdcuInbzenfqq44ft3o5d
SigAlg: http://www.w3.org/2001/04/xmldsig-more#rsa-sha256
Signature: fuTq+f1y6XQJAccHqTF3GhLgVYU1qdx8X2j025xXFA226a8AYoIFPHH1dc8p07yt3PhvXvBHX70HE112c4L18R9YluR6ZrGeD0a0G5x9FN0GVAVH8PBHRQ1gu3e1ac1IdYethC2X07Lr2us134repcr6hyn8rqYt1+Ac=

```

Parameter	Description
SAMLRequest	Indicates the response message body. The response message is in XML format. IAM then compresses the message, encodes the message using Base64, and URL encodes the message. • If the partner uses the SAML toolkits, this parameter can be directly used. The partner does not need to parse the XML file. • If the partner needs to parse the XML file, the partner needs to URL decode the message, decode the message using Base64, and decompress the message (zip.inflate). For details, see Sample Code for Parsing the SAMLRequest.
RelayState	Indicates the response parameters for SAML.
SigAlg	Indicates the signature algorithm. Huawei uses SHA256 for signatures by default. HTTP://WWW.W3.ORG/2001/04/XMLDSIG-MORE#RSA-SHA256
Signature	Indicates the signature. The signature is used to verify the initiator of a request. When initiating a request, HUAWEI CLOUD uses the private key to sign <i>SAMLRequest={ SAMLRequest }&RelayState={ RelayState } &SigAlg={ SigAlg }</i> in request <i>https://www.test.com/saml/login?</i> <i>SAMLRequest={SAMLRequest }&RelayState={ RelayState } &SigAlg={ SigAlg }&Signature={ Signature }</i> and then performs Base64 coding to obtain the signature value. The signature algorithm is specified by the SigAlg field. When receiving the request, the receiver verifies the signature value using the public key provided by HUAWEI CLOUD (the value in the <ds:X509Certificate></ds:X509Certificate> tag in the SP Metadata.xml file). If the signature verification succeeds, the request is sent by HUAWEI CLOUD, and the follow-up operations can be performed. Otherwise, the request is invalid.

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

file. For details, see [Example, Public Key, and Response Path in Obtaining the SP Metadata File](#).

- b. The partner sales platform generates the SAML response message.
The response message body is in XML format. For the correct response message body and its parameter description, see the following displayed content.

NOTICE

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

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the SAML request message. -->
<!-- Parameter Destination needs to be the same as the Location value in the
AssertionConsumerService tag in the SP Metadata.xml file. -->
<saml2p:Response Consent="urn:oasis:names:tc:SAML:2.0:consent:unspecified"
ID="_d794dc393ae6724e236003bf0b917cf0" Destination="https://auth.huaweicloud.com/authui/
saml/SAMLAAssertionConsumer"
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
xmlns:saml2p="urn:oasis:names:tc:SAML:2.0:protocol">
  <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
  <saml2:Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-format:entity"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion">https://www.test.com</saml2:Issuer>
  <saml2p:Status>
    <saml2p:StatusCode Value="urn:oasis:names:tc:SAML:2.0:status:Success" />
    <saml2p:StatusMessage>urn:oasis:names:tc:SAML:2.0:status:Success</saml2p:StatusMessage>
  </saml2p:Status>
  <saml2:Assertion ID="_2320c40ac7b5e857b2d0d4ea0c8758c3"
  IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
  xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
    <saml2:Issuer>https://www.test.com</saml2:Issuer>
    <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
      <ds:SignedInfo>
        <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
        <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
      <!-- The value after "URI #" must be the same as the ID in the Assertion tag. -->
      <ds:Reference URI="#_2320c40ac7b5e857b2d0d4ea0c8758c3">
        <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
          <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
            <ec:InclusiveNamespaces PrefixList="xsd"
            xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#" />
          </ds:Transform>
        </ds:Transforms>
        <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig#sha256" />
      <!-- The value of DigestValue is the digest of the Assertion tag object. The digest
algorithm is the same as that of DigestMethod. -->
      <ds:DigestValue>rFxrycznfGNYOnprZIFJou4ro0Mz65+43MIR5F0+H4=</ds:DigestValue>
    </ds:Reference>
  </ds:SignedInfo>
  <!-- Partner signature value. For details about how to obtain the value, see the
following description. -->
  <ds:SignatureValue>
```

```

YqTWQngAPfGqQmWa610PM7LeefqWdKuveUVINrql67NoHJIDa2WxLwdVzoJIUh64QiNPr6+ndm
L DCMglC5F/9ijuzhICZcc6IHNIjy6EsPkKRjfo9oeoVAqLgG/kmVQYeHLBID0y11RNXXpAVY4nhJ
26KiIVGt7ywyKAhhichE+eW/UYAGiOI5vkfgD2gZUGV+yPkv64k7xK4yAH3mL2NaCPuw/90e4enm
iUx0YuazDwM5FIRUSMpcIsOrcNmS6clWAUcCzbOx+y2vJGtTjHb7k3UsmpnTop5eYNp94+sDPEat
8FaV4SgafMEL5z54gpe8+//9yOWEvIBs1b0RYg==
</ds:SignatureValue>
<ds:KeyInfo>
  <ds:X509Data>
    <!-- Partner public key certificate. The certificate must be the one specified in the IDP
Metadata.xml file. -->
    <ds:X509Certificate>
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAAhK3L160NjP9EhBGQOC2s4r
+Wc62bkrKc nUxfhiZwCwldQCYkzuLOAoATnfoEamV5W25xtSS5kFs+4OC0mYVpKcl3SWoydX
+UE5Qik5Ufj8Dt G1AvSEKhSluyO9axrV5Uv089jMxBnlm/R+xND73WcZM11yIbKJEZSTCEDfh
+KnFbMw108umFMden RZCrNWUJoSp/90XeG0V2Nmj7Fkq72skSifwIASLRq9KqLbmh1QwUX
+AoWpHK/jRUBustMBmG1n1i
AqpD4EBjBOB27k1wXZ30+loJt8IZmfSZRFoNn5VFWXNeEmZ1aQvGSvd3Tyyw2/Wr+w/
8Mags69C mpeX6QIDAQAB
    </ds:X509Certificate>
  </ds:X509Data>
</ds:KeyInfo>
</ds:Signature>
<saml2:Subject>
  <!-- The value of NameQualifier must be the same as the entityID value in the SP
Metadata.xml file. -->
  <saml2:NameID Format="urn:oasis:names:tc:SAML:2.0:nameid-format:transient"
NameQualifier="https://auth.huaweicloud.com/">Some NameID value</saml2:NameID>
  <saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:bearer">
    <!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the samlRequest message. -->
    <saml2:SubjectConfirmationData
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
NotBefore="2018-10-28T08:21:41.740Z" NotOnOrAfter="2018-11-01T08:21:41.740Z"
Recipient="https://auth.huaweicloud.com/authui/saml/SAMLAAssertionConsumer" />
    </saml2:SubjectConfirmation>
  </saml2:Subject>
  <saml2:Conditions NotBefore="2018-10-28T08:21:41.740Z"
NotOnOrAfter="2018-11-01T08:21:41.740Z">
    <saml2:AudienceRestriction>
      <!-- Must be the same as the entityID value in the SP Metadata.xml file. -->
      <saml2:Audience>https://auth.huaweicloud.com/</saml2:Audience>
    </saml2:AudienceRestriction>
    </saml2:Conditions>
    <saml2:AttributeStatement>
      <!-- For values between<saml2:AttributeValue> and </saml2:AttributeValue>, see the
following table. -->
      <saml2:Attribute FriendlyName="xUserId" Name="xUserId"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
        <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
      </saml2:Attribute>
      <!-- The values of xAccountId and xUserId must be the same. -->
      <saml2:Attribute FriendlyName="xAccountId" Name="xAccountId"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
        <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
      </saml2:Attribute>
      <saml2:Attribute FriendlyName="bpId" Name="bpId"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
        <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
      </saml2:Attribute>
      <saml2:Attribute FriendlyName="email" Name="email"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
        <saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string" />
      </saml2:Attribute>
      <saml2:Attribute FriendlyName="name" Name="name"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">

```

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

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

The signature procedure is as follows.

i. Obtain the signature object (**Assertion**).

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

ii. Obtain the tag object (**Signature**).

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

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

The signature is displayed as follows.

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

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

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

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

NOTE

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

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

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

<pre>TQUq1IFJ7%2FFNMHF1KQgbK1jySZ1M8uQqb%2FKSFxN%2B9S6dvm%2BAatPgbxX9hj0pFR%2BHEXEPzRNndS wX6LQaPQ%2F%2Bc4Ijufmvz7Rue%2FAA%3D%3D&RelayState=_lidh2rjxc81dnuc72qmpbs1f4bm16r9fgt n8rNI5twTosXm0NhZDj%2BGnfV8fG9T4X5nisoK843vRqzY1JCPmb0swQwb%2FFHryetP9deoceE8kTgf81xM] HCPUJ%2BNSZc5aUinPUDIn9gxGsEMosv8f%2FcYPe1GL%2F9iMS1ChGelk18Rmj6Y5F3SVrFEsVVYmckzPPAzf L2Ts%2B4Bw8YbdqeUyfIKJwruVfX8KoHdC8xCl8bRN5mOHqAjqMYTQAjRcm%2BBGJVxUXit0gYeakYH6dYkVfH BgDXY1GUeOQqdkhgT36AiZ2GCZwK7lpvhAEFi2xMZGZU4x1KVZNY1yzfjMB164pmsyd3JDrzZfcbraPnTBa: Upgrade-Insecure-Requests: 1 User-Agent: Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko)</pre>		
Form Data	view source	view URL encoded
<pre>SAMLResponse: PD94bWwgdmVyc2l1b2Vj0iMS4wIi81bmNvZGluZz0iVVRGLTgiPz4KPHNhbWwycDpSZXNwb25 MDAzYmYwYjkxN2NmMCIgSW5SZXNwb25ZVRvPSJfZGNrNG1tMDhxbWRoYzhrNG51aXlwN2hnaGV0ZHFxZzh1bH 1lc2p0YzptQU1MOjIuMDpwc90b2NvbCI+PHNhbWwycDpSZXNwb25ZVRvPSJfZGNrNG1tMDhxbWRoYzhrNG51aXlwN2hnaGV0ZHFxZzh1bH Pmh0dHBzOi8vaWwRwLm1zZXNvbC5jb20vaWwRwL3NoaWJib2xldGg8L3NhbWwycDpSZXNwb25ZVRvPSJfZGNrNG1tMDhxbWRoYzhrNG51aXlwN2hnaGV0ZHFxZzh1bH RhdHVzTWVzc2FnZT51cm46b2FzaXN6bmFtZXN6dG6dG6U0FNTDoyLjA6c3RhdHVzO1N1Y2Nlc3M8L3NhbWwycDpT IElzc3VlSW5zZdGFudD0iMjAxOC0xMjC0ZMFQwODoyMT0MS43ND8aIi8wZXJzaW4uPSIyLjAiIHhtbG5zOnNhbWwycDpT</pre>		

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

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

3.3 API Access Permission (Partner)

Partner operators can call APIs after being authorized. You can assign roles with required permissions to operators in the Partner Center. For details, see [Assigning a Custom Role to a User](#). Supported actions of APIs are listed in the following table. The API can be accessed as long as one of its actions is supported.

NOTE

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

- For more details, visit:
 - [Partner Operation Capability API \(Reseller Model\)](#)

Table 3-5

Scenario	Sub-Scenario	API Description	URL	Action	Path
Customer management	Customer registration	Verifying customer registration information	POST /v2/partners/sub-customers/users/check-identity	BPC_ITEM_SUBCUSTSERV_010118	Sales > Customers > Customer Management > Customer List > Create Partner Customer
		Sending a verification code	POST /v2/bases/verificationcode/send	BPC_ITEM_SUBCUSTSERV_010118	Sales > Customers > Customer Management > Customer List > Create Partner Customer

Scenario	Sub-Scenario	API Description	URL	Action	Path
		Creating a customer	POST /v2/partners/sub-customers	BPC_ITEM_SUBCUSTSERV_010118	Sales > Customers > Customer Management > Customer List > Create Partner Customer
	Real-name authentication	Requesting individual real-name authentication	POST /v2/customers/realname-auths/individual	BPC_ITEM_SUBCUSTSERV_010119	Sales > Customers > Customer Management > Customer List > Real-name Authentication Synchronization
		Requesting enterprise real-name authentication	POST /v2/customers/realname-auths/enterprise	BPC_ITEM_SUBCUSTSERV_010119	Sales > Customers > Customer Management > Customer List > Real-name authentication synchronization
		Requesting real-name re-authentication	PUT /v2/customers/realname-auths/enterprise	BPC_ITEM_SUBCUSTSERV_010119	Sales > Customers > Customer Management > Customer List > Real-name authentication synchronization
		Querying the real-name authentication review result	GET /v2/customers/realname-auths/result	BPC_ITEM_SUBCUSTSERV_010119	Sales > Customers > Customer Management > Customer List > Real-name authentication synchronization
	Customer management	Querying customers	POST /v2/partners/sub-customers/query	BPC_ITEM_SUBCUSTSERV_010100 BPC_ITEM_SUBCUSTSERV_010500	- Sales > Customers > Customer Management > Customer List > View Customer List - Sales > Customers > Customer Management > Reseller Customers > View Customers

Scenario	Sub-Scenario	API Description	URL	Action	Path
		Freezing a customer account	POST /v2/partners/sub-customers/freeze	BPC_ITEM_SUBCUSTSERV_010501 BPC_ITEM_SUBCUSTSERV_010115	- Sales > Customers > Customer Management > Reseller Customers > Freeze/Unfreeze Accounts - Sales > Customers > Customer Management > Customer List > Freeze/Unfreeze Accounts
		Unfreezing a customer account	POST /v2/partners/sub-customers/unfreeze	BPC_ITEM_SUBCUSTSERV_010501 BPC_ITEM_SUBCUSTSERV_010115	- Sales > Customers > Customer Management > Reseller Customers > Freeze/Unfreeze Accounts - Sales > Customers > Customer Management > Customer List > Freeze/Unfreeze Accounts
Reseller management	Querying resellers	Querying the list of resellers	POST /v2/partners/indirect-partners/query	BPC_ITEM_SALES_020100	Sales > Resellers > Reseller Management > My Resellers > View Resellers
Credit management	Managing credits	Querying balance	GET /v2/partners/credit/consumption-quota	BPC_ITEM_ACCOUNT_010500	Partner Information > Basic Information > Consumption Quota > View Quota

Scenario	Sub-Scenario	API Description	URL	Action	Path
Transaction Management	Coupon management	Querying coupons	GET /v2/promotions/benefits/coupons	BPC_MENU_FINANCE_100100 BPC_ITEM_SUBCUSTSERV_050101	- Partner Information > Basic Information > Consumption Quota > View Quota - Sales > Customers > Customer Orders > Order Payments > Pay for Orders
	Yearly / monthly order management	Querying orders	GET /v2/orders/customer-orders	BPC_ITEM_SUBCUSTSERV_060100 BPC_ITEM_SUBCUSTSERV_060200	- Sales > Customers > Customer Orders > Customer Orders > View Orders - Sales > Customers > Customer Orders > Reseller Customer Orders > View Orders
		Querying order details	GET /v2/orders/customer-orders/details/{order_id}	BPC_ITEM_SUBCUSTSERV_060100 BPC_ITEM_SUBCUSTSERV_060200	- Sales > Customers > Customer Orders > Customer Orders > View Orders - Sales > Customers > Customer Orders > Reseller Customer Orders > View Orders
	Managing Pay-Per-Use Resources	Querying customer's pay-per-use resources	POST /v2/partners/sub-customers/on-demand-resources/query	BPC_ITEM_SUBCUSTSERV_010105	Sales > Customers > Customer Management > Customer List > View Customer Resources

Scenario	Sub-Scenario	API Description	URL	Action	Path
	Managing Customers' Budgets	Querying customer budgets	GET /v2/partners/sub-customers/budget	BPC_ITEM_SUBCUSTSERV_010111 BPC_ITEM_SUBCUSTSERV_010503	- Sales > Customers > Customer Management > Customer List > Adjust Credit Limit - Sales > Customers > Customer Management > Reseller Customers > Set Monthly Budgets
		Batch querying customer budgets	POST /v2/partners/sub-customers/budget/query	BPC_ITEM_SUBCUSTSERV_010111 BPC_ITEM_SUBCUSTSERV_010503	- Sales > Customers > Customer Management > Customer List > Adjust Credit Limit - Sales > Customers > Customer Management > Reseller Customers > Set Monthly Budgets
		Setting customer budgets	POST /v2/partners/sub-customers/budget	BPC_ITEM_SUBCUSTSERV_010111 BPC_ITEM_SUBCUSTSERV_010503	- Sales > Customers > Customer Management > Customer List > Adjust Credit Limit - Sales > Customers > Customer Management > Reseller Customers > Set Monthly Budgets
		Querying customer budget adjustment records	GET /v2/partners/sub-customers/budget/records	BPC_ITEM_SUBCUSTSERV_010111 BPC_ITEM_SUBCUSTSERV_010503	- Sales > Customers > Customer Management > Customer List > Adjust Credit Limit - Sales > Customers > Customer Management > Reseller Customers > Set Monthly Budgets

Scenario	Sub-Scenario	API Description	URL	Action	Path
Bill Management	-	Querying monthly bills of a customer	GET /v2/bills/partner-bills/postpaid-bill-summary	BPC_ITEM_FINANCE_090100	Sales > Financial Information > Partner Bills > Partner Bill > View Partner Bill
Invoice Management	Invoice Management	Querying the invoice list	GET /v1.0/{domain_id}/payments/intl-invoices	BPC_ITEM_FINANCE_060100	Sales > Financial Information > Invoices > Invoice Center > View Invoice Requests

3.4 Request Throttling

What Is Request Throttling?

Request throttling is a method used by Huawei Cloud to control the frequency of calling open APIs. A quota refers to the maximum number of calls made to a single API within a specified time window.

Request Throttling for Partner Operations Capability APIs

NOTE

Traffic quota: 10/1(s); API request throttling dimensions: source IP address, API, and ParentUid, indicating that a single user or source IP address can send up to 10 requests to the API every second.

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
Product Management	Querying product information	Querying Cloud Service Types	GET /v2/products/service-types	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
		Querying Resource Types	GET /v2/products/resource-types	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying Resources by Cloud Service Type	GET /v2/products/service-resources	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying Usage Types	GET /v2/products/usage-types	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying Measurement Units	GET /v2/bases/measurements	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying the Measurement Unit Number System	GET /v2/bases/conversions	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Querying product price	Querying the Price of a Pay-per-Use Product	POST /v2/bills/ratings/on-demand-resources	20/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying the Price of a Yearly/Monthly Product	POST /v2/bills/ratings/period-resources/subscribe-rate	30/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
		Querying the Renewal Price of a Yearly/Monthly Resource	POST /v2/bills/ratings/period-resources/renew-rate	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
Customer Management	Registering a customer	Verifying Customer Registration Information	POST /v2/bills/ratings/on-demand-resources	5/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Sending a Verification Code	POST /v2/bills/ratings/period-resources/subscribe-rate	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Creating a Customer	POST /v2/bills/ratings/period-resources/renew-rate	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Requesting real-name authentication	Requesting an Individual Real-name Authentication	POST /v2/customers/realname-auths/individual	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Requesting an Enterprise Real-name Authentication	POST /v2/customers/realname-auths/enterprise	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
		Requesting a Real-Name Authentication Change	PUT /v2/customers/realname-auths/enterprise	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying the Real-Name Authentication Review Result	GET /v2/customers/realname-auths/result	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Managing customers	Querying Customers	POST /v2/partners/sub-customers/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Freezing a Customer Account	POST /v2/partners/sub-customers/freeze	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Unfreezing a Customer Account	POST /v2/partners/sub-customers/unfreeze	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
Reseller Management	Querying resellers	Querying Huawei Cloud Resellers	POST /v2/partners/indirect-partners/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
Credit Management	Managing credits	Querying Consumption Quota	GET /v2/partners/credit/consumption-quota	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
Transaction Management	Managing customer budgets	Querying Customers' Budgets	GET /v2/partners/sub-customers/budget	25/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Batch Querying Customer Budgets	POST /v2/partners/sub-customers/budget/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Setting Customer Budgets	POST /v2/partners/sub-customers/budget	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		8.1.4 Querying Customer Budget Adjustment Records	GET /v2/partners/sub-customers/budget/records	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Managing coupons	Querying Coupons	POST /v2/partners/indirect-partners/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
	Managing yearly / monthly orders	Querying Orders	GET /v2/orders/customer-orders	20/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying Order Details	GET /v2/orders/customer-orders/details/{order_id}	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Paying Yearly/Monthly Product Orders	POST /v3/orders/customer-orders/pay	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Canceling Orders in the Pending Payment Status	PUT /v2/orders/customer-orders/cancel	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying the Amount of Unsubscription Orders	GET /v2/orders/customer-orders/refund-orders	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Managing yearly / monthly resources	Querying Customer's Yearly/Monthly Resources	POST /v2/orders/subscriptions/resources/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Renewing Yearly/Monthly Resources	POST /v2/orders/subscriptions/resources/renew	20/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
		Unsubscribing from Yearly/Monthly Resources	POST /v2/orders/subscriptions/resources/unsubscribe	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Configuring Automatic Renewal for Yearly/Monthly Resources	POST /v2/orders/subscriptions/resources/autorenew/{resource_id}	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Canceling Automatic Renewal for Yearly/Monthly Resources	DELETE /v2/orders/subscriptions/resources/autorenew/{resource_id}	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Enabling/Canceling the Change from Yearly/Monthly to Pay-per-Use upon Expiration	POST /v2/orders/subscriptions/resources/to-on-demand	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Managing resource packages	Querying Resource Packages	POST /v3/payments/free-resources/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
		Querying the Resource Usage	POST /v2/payments/free-resources/usages/details/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Scenario	Sub-Scenario	API	URL	Traffic Quota	Quota Dimension
		Querying the Resource Usage	GET /v2/bills/customer-bills/free-resources-usage-records	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
	Managing pay-per-use resources	Querying Customer's Pay-Per-Use Resources	POST /v2/partners/sub-customers/on-demand-resources/query	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
Bill Management	Managing partner bills	Querying Monthly Bills	GET /v2/bills/partner-bills/postpaid-bill-summary	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid
Invoice Management	Managing invoices	Querying the Invoice List	GET /v1.0/{domain_id}/payments/intl-invoices	10/1(s)	API request throttling dimensions: Source IP address, API, and ParentUid

Troubleshooting for Request Throttling Failure

The following is an example of error returned by an API:

```
{"status_code":429,"request_id":"7e6c1*****c610","error_code":"APIGW.0308","error_message":"The throttling threshold has been reached: policy user over ratelimit,limit:10,time:1 second","encoded_authorization_message":""}
```

Troubleshooting

Huawei Cloud provides default traffic quotas for partner operations capability APIs. Users can increase the quota based on their service requirements. They can monitor status code 429 and construct a retry mechanism. The retry mechanism should follow an exponential backoff plan to reduce the number of requests if necessary. They can also establish some randomness in the backoff timesheets to avoid severe herd mentality.

Adjusting Quotas

If the traffic quota cannot meet your service requirements and concurrency scenarios, submit a Huawei Cloud service ticket with the service scenario

description attached. After receiving the service ticket, the Huawei Cloud after-sales service team will adjust the quota based on your requirements.

4 Product Management

4.1 Querying Product Information

4.1.1 Querying Cloud Service Types

Function

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

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

KooGallery services are not included.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 4-2 Query parameters

Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to 1000000000	Offset, which starts from 0. The default value is 0. If this parameter is not included in the request, is left empty, or is set to null, the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-1000]	Number of records queried each time. The default value is 10. If this parameter is not included in the request, is left empty, or is set to null, the value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/products/service-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 Returned Values . 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 Table 4-3 .

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 partner sales platform.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 4-5 Query parameters

Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to 1000000000	Offset, which starts from 0. The default value is 0. If this parameter is not included in the request, is left empty, or is set to null, the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-1000]	Number of records queried each time. The default value is 10. If this parameter is not included in the request, is left empty, or is set to null, the value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/products/resource-types?offset=0&limit=10 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIIlNPXsidG9rZ
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 Returned Values . 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 Table 4-6 .

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 hws.resource.type.vm .

Parameter	Type	Value Range	Description
resource_type_name	String	A maximum of 200 characters	Resource type name.
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: hws.service.type.offline .

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.

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

4.1.3 Querying Resources by Cloud Service Type

Function

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

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

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

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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. • zh_CN: Chinese • en_US: English Default value: zh_CN

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 hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
offset	No	Integer	0 to 1000000	Offset, which starts from 0. The default value is 0 . If this parameter is not included in the request, is left empty, or is set to null , the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-100]	Number of records queried each time. The default value is 10 . If this parameter is not included in the request, the value 10 is used. This parameter cannot be set to "" or null and cannot be left empty.

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/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: MIIIPAgYJKoZlIhvcNAQcCo...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 Returned Values . 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 Table 4-9 .

Table 4-9 ServiceResourceInfo

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

Table 4-10 ResourceBasicInfo

Parameter	Type	Value Range	Description
resource_type_code	String	A maximum of 64 characters	Resource type code. Example: hws.resource.type.general .

Parameter	Type	Value Range	Description
product_owner_service	String	A maximum of 64 characters	Code of the service where a resource belongs. Example: hws.service.type.offline .
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 partner sales platform.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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. • zh_CN: Chinese • en_US: English Default value: zh_CN

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 hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types . If this parameter is not included or is left empty, it will not be used as a filter criterion. If this parameter is set to "" or null , it will be used as a filter criterion.
offset	No	Integer	0 to 100000000	Offset, which starts from 0. The default value is 0 . If this parameter is not included in the request, is left empty, or is set to null , the value 0 is used. This parameter cannot be set to "". NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.

Parameter	Mandatory	Type	Value Range	Description
limit	No	Integer	1 to 100	Number of records queried each time. The default value is 10 . If this parameter is not included in the request, is left empty, or is set to null , the value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/products/usage-types?offset=0&limit=3 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 Returned Values . 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 Table 4-13 .

Table 4-13 UsageType

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

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.cdfl",
  "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 partner sales platform.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/bases/measurements

Table 4-14 Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/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 Returned Values . 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<MeasurementUnitRest>	-	Measurement unit information. For details, see Table 4-15 .

Table 4-15 MeasureUnitRest

Parameter	Type	Value Range	Description
measure_id	Integer	-	Measurement unit ID. For example, 10 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 G .
measure_type	Integer	-	Measurement type. • 1: Currency • 2: Duration • 3: Traffic • 4: Quantity • 7: Capacity • 9: Number of lines • 10: Period • 11: Frequency • 12: Count • 16: Bandwidth • 19: Bandwidth (1000) • 20: Performance test usage • 27: Number of cores x Duration • 28: Memory x Duration • 29: IOPS x Duration • 30: Throughput x Duration • 31: Number/Duration • 40: Traffic (1000) • 41: 1K tokens • 108: Quantity × Duration

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 partner sales platform.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/bases/conversions

Table 4-16 Request parameters

Parameter	Mandatory	Type	Value Range	Description
measure_type	No	Integer	1–2147483647	Measurement type. 1: Currency 2: Duration 3: Traffic 4: Quantity 7: Capacity 9: Number of lines 10: Period 11: Frequency 12: Count 16: Bandwidth 19: Bandwidth (1000) 20: Performance test usage 27: Number of cores x Duration 28: Memory x Duration 29: IOPS x Duration 30: Throughput x Duration 31: Number/Duration 40: Traffic (1000) 41: 1K tokens 108: Quantity × Duration If this parameter is not included in the request parameters, is left empty, or is set to null , it cannot be used as a filter criterion. It cannot be set to "".

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/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 Returned Values . 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<Conversion>	-	Measurement unit conversion information. For details, see Table 4-17 .

Table 4-17 Conversion

Parameter	Type	Value Range	Description
measure_id	Integer	-	Measurement unit ID. For example, 10 indicates GB.
ref_measure_id	Integer	-	Measurement unit ID after conversion. For example, 11 indicates MB.
conversion_ratio	Long	-	Conversion ratio. Example: If the measurement unit is GB and the target unit is MB, the conversion ratio is 1024 (1 GB = 1024 MB).

Parameter	Type	Value Range	Description
measure_type	Integer	1–2147483647	Measurement type. • 1: Currency • 2: Duration • 3: Traffic • 4: Quantity • 7: Capacity • 9: Number of lines • 10: Period • 11: Frequency • 12: Count • 16: Bandwidth • 19: Bandwidth (1000) • 20: Performance test usage • 27: Number of cores x Duration • 28: Memory x Duration • 29: IOPS x Duration • 30: Throughput x Duration • 31: Number/Duration • 40: Traffic (1000) • 41: 1K tokens • 108: Quantity × Duration

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

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

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

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

CAUTION

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

Constraints

This API can be called using the token of a cloud solution provider or a distributor. Before using their token to call this API, they need to [request authorization from the customer](#) or [ask the customer to create an agency for them](#).

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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. NOTE - If the customer token is used, invoke the API for obtaining a user token with the assume_role method to obtain the project ID of the target region. For details, see Step 2 in How Can I Replace a Partner Token with a Customer Token. - To call this API, an IAM member account must be authorized by the IAM master account. For details, see Creating a User Group and Assigning Permissions.
product_info	Yes	List<DemandProductInfo>	A maximum of 100 values	Indicates the product information list. For details, see Table 4-18 .

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

Table 4-18 DemandProductInfo

Parameter	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 hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .

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 hws.resource.type.vm. To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types. The relationship between ResourceType and CloudServiceType is as follows: A resource type represents a resource contained in the cloud service type, and the cloud service type is a combination of multiple resource types.

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

Parameter	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, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
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: - Cloud server: Duration - Cloud disk: Duration - EIP: Duration - Bandwidth: Duration or upflow - Marketplace image: Duration You can call the API in 4.1.4 Querying Usage Types to obtain the value of parameter code in Table 4-13. The value indicates the billing factor of each cloud service.
usage_value	Yes	BigDecimal	-	Usage value. For example, if you want to inquire a product price by hour, set usageValue to 1 and usageMeasureID to 4 (hour).
usage_measure_id	Yes	Integer	A maximum of 4 characters	Usage unit. You can call the API in 4.1.5 Querying Measurement Units to obtain the value. For example, if you want to inquire a product price by hour, set usageValue to 1 and usageMeasureID to 4 (hour).
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 null , 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 null , it cannot be used as a filter criterion.
size_measure_id	No	Integer	A maximum of 4 characters	Resource capacity measurement ID. The options are: ● 15: Mbit/s (used when the bandwidth is subscribed) ● 17: GB (used when an EVS disk is subscribed to) ● 14: amount (times) This field should be filled together with resource_size or left blank. Linear products are those whose size must be specified during a subscription, such as hard disks and bandwidth. For example, you can select 10 GB or 20 GB during a disk subscription. For non-linear products, if this parameter is not included in the request parameters or is set to null , it cannot be used as a filter criterion.

Example Request

POST <https://bss-intl.myhuaweicloud.com/v2/bills/ratings/on-demand-resources> HTTP/1.1
Content-Type: application/json


```
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "project_id": "06488a*****832f55c016b0e337d7",
  "product_infos": [
    {
      "id": "1",
      "cloud_service_type": "hws.service.type.ec2",
      "resource_type": "hws.resource.type.vm",
      "resource_spec": "c3.3xlarge.2.linux",
      "region": "ap-southeast-1",
      "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": "ap-southeast-1",
      "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": "ap-southeast-1",
      "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": "ap-southeast-1",
      "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 Returned Values . 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 Table 4-19 .

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 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
discount_rating_results	List<DemandDiscountRatingResult>	-	Discount details, including the product promotion information and commercial or partner discount information. For details, see Table 4-20 .

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. - Commercial Discounts: 605: Contract commercial discount for transaction with Huawei Cloud. - Partner Discounts: 606: Contract commercial discount for transaction with distributors. - Discounts Set by Partner 607: Discounts set by partners
amount	BigDecimal	-	Discounted amount.

Parameter	Type	Value Range	Description
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

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

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

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

CAUTION

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

Constraints

This API can be called using the token of a cloud solution provider or a distributor. Before using their token to call this API, they need to [request authorization from the customer](#) or [ask the customer to create an agency for them](#).

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug SDK code samples.

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. NOTE • If the customer token is used, invoke the API for obtaining a user token with the assume_role method to obtain the project ID of the target region. For details, see Step 2 in How Can I Replace a Partner Token with a Customer Token. • To call this API, an IAM member account must be authorized by the IAM master account. For details, see Creating a User Group and Assigning Permissions.
product_infos	Yes	List<PeriodProductInfo>	A maximum of 100 values	Product information list. For details, see Table 4-21 .

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 hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
resource_type	Yes	String	A maximum of 400 characters	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types . 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	Resource specifications. For details, see related cloud service documentation. The following provides examples of services and resource specifications: • ECS Add .win or .linux to the end of the ECS flavor ID based on the OS type, for example, s2.small.1.linux. Call the API for querying details about flavors and extended flavor information to obtain the flavor IDs. • Bandwidth – 12_bgp: dynamic BGP bandwidth billed by traffic – 12_sbgp: static BGP bandwidth billed by traffic – 19_bgp: dynamic BGP bandwidth billed by bandwidth – 19_sbgp: Static BGP bandwidth billed by bandwidth – 19_share: Shared bandwidth billed by bandwidth • IP address: – 5_bgp: dynamic BGP public IP address – 5_sbgp: static BGP public IP address • RDS: You can call the API for querying database specifications to obtain the RDS specifications. • DCS: You can call the API for querying service specifications to obtain the DCS specifications. • EVS: – SATA: Common I/O – SAS: High I/O

Parameter	Mandatory	Type	Value Range	Description
				- GPSSD: General-purpose SSD - SSD: Ultra-high I/O - ESSD: Extreme SSD - GPSSD2.storage: General-purpose SSD V2 storage (the disk type is GPSSD2)
region	Yes	String	A maximum of 64 characters	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
period_type	Yes	Integer	[0-4]	Period type of a yearly/monthly product order. 0: Day 2: Month 3: Year 4: Hour
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, cn-north-1a . AZ identifiers are case-insensitive. Obtain the value from the Availability Zone (AZ) column in Regions and Endpoints . If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.

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

Example Request

POST https://bss-intl.myhuaweicloud.com/v2/bills/ratings/period-resources/subscribe-rate HTTP/1.1

Content-Type: application/json

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

```
{
  "project_id": "84c53ec51e794a4888fb0f5c0cfb2420",
  "product_infos": [
    {
      "id": "1",
      "cloud_service_type": "hws.service.type.ec2",
      "resource_type": "hws.resource.type.vm",
      "resource_spec": "s3.medium.4.linux",
      "region": "ap-southeast-1",
```

```
"available_zone": "ap-southeast-1a",
"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": "ap-southeast-1",
  "available_zone": null,
  "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": "ap-southeast-1",
  "available_zone": "ap-southeast-1a",
  "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": "ap-southeast-1",
  "available_zone": "ap-southeast-1a",
  "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 Returned Values . 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 Table 4-22 .
optional_discount_rating_results	List<OptionalDiscountRatingResult>	-	Rating results by discount if optional discounts exist. Each optional discount has a rating result. For details, see Table 4-24 .
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 Table 4-23 .

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. • 1: USD

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. - Commercial Discounts: 605: Contract commercial discount for transaction with Huawei Cloud. - Partner Discounts: 606: Contract commercial discount for transaction with distributors. - Discounts Set by Partner 607: Discounts set by partners
discount_name	String	A maximum of 256 characters	Discount name.
best_offer	Integer	-	Optimal discount. 0: No (default value) 1: Yes Optimal discount: The system selects a discount from the commercial discount and partner discount. The discount with the maximum discount amount is the optimal discount. If the discount amounts are the same, the system uses the commercial discount first. The promotional discount and coupon are not in the calculation of the optimal discount.
product_rating_results	List<PeriodProductRatingResult>	-	Product price query result. For details, see Table 4-25 .

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": 623.78,
    "installment_official_website_amount": null,
    "installment_period_type": null,
    "measure_id": 1,
    "product_rating_results": [
      {
        "id": "1",
        "product_id": "00301-18008-0--0",
        "official_website_amount": 27.2,
        "measure_id": 1,
        "installment_official_website_amount": null,
        "installment_period_type": null
      },
      {
        "id": "2",
        "product_id": "00301-03001-0--0",
```

```
    "official_website_amount": 0,  
    "measure_id": 1,  
    "installment_official_website_amount": null,  
    "installment_period_type": null  
  },  
  {  
    "id": "3",  
    "product_id": "00301-170006-0--0",  
    "official_website_amount": 5.28,  
    "measure_id": 1,  
    "installment_official_website_amount": null,  
    "installment_period_type": null  
  },  
  {  
    "id": "4",  
    "product_id": "00301-34543-0--0",  
    "official_website_amount": 591.3,  
    "measure_id": 1,  
    "installment_official_website_amount": null,  
    "installment_period_type": null  
  }  
]  
},  
"optional_discount_rating_results": [],  
"currency": "USD"  
}
```

Returned Values

 NOTE

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

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

4.2.3 Querying the Renewal Price of a Yearly/Monthly Resource

Function

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

NOTE

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used. Currently, cloud solution providers and distributors are unable to purchase products directly, which means they do not have yearly/monthly products.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug SDK code samples.

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 is_main_resource , a response parameter described in 8.4.1 Querying Customer's Yearly/Monthly Resources .

Parameter	Mandatory	Parameter Type	Value Range	Description
period_type	Yes	Integer	[2 3]	Period type: 2: Month 3: Year
period_num	Yes	Integer	[1-11]	Number of periods: - Month: 1 to 11 - Year: 1 to 3
include_relative_resources	No	Boolean	-	Specifies whether to include associated resources for renewal price querying. - false: Not included. - true: Included. If this parameter is not included in the request or is set to "", the default value false is used.

Request Sample

```
POST https://bss-intl.myhuaweicloud.com/v2/bills/ratings/period-resources/renew-rate HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...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 Status Codes .
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 Table 4-26 .
official_website_rating_result	OfficialWebsiteRatingResult Object	--	For list price of a primary resource and its attached resources, see Table 4-27 .
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 Table 3 OptionalDiscountRating-Result .
fail_resource_infos	List<FailResourceInfo>	--	Resource information for a failed query. For details, see resource information for a failed query .

Table 4-26 RenewInquiryResultInfo

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

Table 4-27 OfficialWebsiteRatingResult

Parameter	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 - Commercial Discounts: 605: Contract commercial discount for transaction with Huawei Cloud. - Partner Discounts: 606: Contract commercial discount for transaction with distributors. - Discounts Set by Partner 607: Discounts set by partners

Parameter	Parameter Type	Value Range	Description
discount_name	String	A maximum of 256 characters	Discount name
best_offer	Integer	-	Optimal discount or not 0: No (default value) 1: Yes Optimal discount is a discount selected from the commercial discount and partner discount. The discount with the maximum discount amount is the optimal discount. If the discount amounts are the same, the system uses the commercial discount first. The promotional discount and coupon are not in the calculation of the optimal discount.

Resource information for a failed query

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

Status code: 200

Response Sample

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "currency": "CNY",
  "renew_inquiry_results": [{
    "resource_id": "230221_169ee*****9d5b8af6a38f099abea",
    "amount": "800.0"
  }],
  "official_website_rating_result": {
    "official_website_amount": "800.0",
    "installment_official_website_amount": null,
    "installment_period_type": null
  },
  "optional_discount_rating_results": [],
```

```
"fail_resource_infos": []  
}
```

Status Codes

 NOTE

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

HTTP Status Code	Error Code	Description
200	CBC.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

HTTP Status Code	Error Code	Description
400	CBC.99006073	Project not found.
400	CBC.30050012	There are duplicate resource IDs.
403	CBC.0151	Access denied
403	CBC.0154	Invalid or expired token
500	CBC.0999	Other errors

5 Customer Management

5.1 Customer Registration

5.1.1 Verifying Customer Registration Information

Function

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

NOTE

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

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

Request

Request parameters

Parameter	Mandatory	Type	Value Range	Description
search_type	Yes	String	[email mobile name]	The options are email, mobile, or name.
search_value	Yes	String	A maximum of 64 characters	Mobile number, email address, or account name. - The mobile number must comply with the regular expression "<code>^\d{4}-\d+\$</code>". The value contains the country code and starts with 00. The format is "00XX-XXXXXXX". - The email address must consist of an email prefix and an email domain, as well as the (@) symbol. name: The value must comply with the regular expression "<code>^([a-zA-Z-]([a-zA-Z0-9_-]){4,31})\$</code>" and contains 5 to 32 characters. The value cannot start with op_ or shadow_ and cannot contain only digits. It must start with a letter (case-insensitive) or a hyphen (-).

Example Request

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

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

Response

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.

Parameter	Type	Value Range	Description
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
check_result	String	A maximum of 32 characters	• available: The account name, mobile number, or email address is valid. • used_by_user: The account name, mobile number, or email address is in use.

Example Response

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

Returned Values

NOTE

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

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

5.1.2 Sending a Verification Code

Function

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

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

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

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/bases/verificationcode/send

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
receiver_type	Yes	Integer	[2]	Verification code type. 2: Send an email verification code.
timeout	No	Integer	[1-3000]	Timeout of sending a verification code. If this parameter is not included in the request parameters or is set to null , the default timeout interval 10 minutes is used. If the value of this parameter is greater than 60 , the value is fixed to 5 minutes. Unit: minutes
email	Yes	String	A maximum of 64 characters	Email that receives the verification code.

Parameter	Mandatory	Type	Value Range	Description
lang	No	String	A maximum of 16 characters	Language in which the email verification code is sent. • zh-cn: Chinese • en-us: English If this parameter is not included in the request parameters, is set to "", or is set to null , the default value en-us is used.

Example Request

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

{
  "receiver_type":2,
  "timeout": 5,
  "email":"***@163.com",
  "lang":"en-us"
}
```

Response

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.

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.99000035	You are not a customer of a partner yet.
400	CBC.99004002	Failed to generate the verification code.
400	CBC.99004003	The verification code is successfully generated but fails to be sent.
400	CBC.99004004	Empty email address./Invalid format.
400	CBC.99004015	The number of verification code sending times has reached the upper limit (15 times per hour, 60 times per day).
401	CBC.0154	Invalid or expired token.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

5.1.3 Creating a Customer

Function

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

 CAUTION

- After a HUAWEI CLOUD account is created for a customer, SAML authentication is required if the customer wants to switch from the partner sales platform to the Huawei Cloud official website. For details, see "SAML Authentication" in [Web UI Mode](#).
 - If you do not enter the email address when creating a customer, the customer cannot receive any email notification from Huawei Cloud. The customer needs to log in to the Huawei Cloud to add the email address by themselves.
 - When the API for creating a customer is invoked, Huawei Cloud will synchronously create a Huawei Cloud customer account and send the customer ID and account name to the partner platform. Then, Huawei Cloud associates the customer with the partner asynchronously. To query the association result, you can invoke the API described in [5.3.1 Querying Customers](#).
 - Newly created customers are associated with their partners in the reseller model by default.
-

Constraints

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

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/partners/sub-customers

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
domain_area	Yes	String	A maximum of 2 characters	Two-letter ID representing the country/region of the customer. The ID complies with the ISO 3166 standard. Example: MX for Mexico
xaccount_id	Yes	String	A maximum of 128 characters	Unique user ID on the partner sales platform. The ID is allocated by the partner.
xaccount_type	Yes	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?
domain_name	No	String	[5-32]	HUAWEI CLOUD username of the customer. If this parameter is left blank, the value is generated randomly. The value cannot start with op_ or shadow_ and cannot contain only digits. The verification length is 5 to 32 digits and the verification rules are <code>^[a-zA-Z_-]([a-zA-Z0-9_-])*\$</code> . If this parameter is not included in the request parameters, is set to "", or is set to null , the value is randomly generated.
email	No	String	A maximum of 64 characters	Email address. Format: The value must contain @. If this parameter is not included in the request parameters or is set to null , no value is returned. If this parameter is set to "", "" is returned.

Parameter	Mandatory	Type	Value Range	Description
verification_code	No	String	[6]	Verification code. Invoke the API described in 5.1.2 Sending a Verification Code to obtain the verification code. If no email address is available, you do not need to enter the verification code. If this parameter is not included in the request parameters or is set to null, this parameter will not be used. It cannot be set to "".
password	No	String	The value can be a string of 8 to 32 characters	The password must meet the following rules: - Contains at least two of the following character types: uppercase letters, lowercase letters, digits, and special characters. - Differs from the account name or the account name in reverse order. - Does not contain the email address. If this parameter is left blank, a user does not have a password and cannot directly log in to HUAWEI CLOUD. In this case, the user can only switch to HUAWEI CLOUD from the partner system using SSO. If this parameter is not included in the request parameters or is set to null, the password is randomly generated. This parameter cannot be set to "".

Parameter	Mandatory	Type	Value Range	Description
is_close_market_ms	No	String	A maximum of 10 characters	Whether to disable the marketing message sending function. true: Disable this function. false: Retain this function enabled (default). If this parameter is not included in the request parameters, is set to "", or is set to null , false is returned.
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain such IDs, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory for creating a customer for a Huawei Cloud reseller. If this parameter is not included in the request parameters, is set to "", or is set to null , this parameter will not be used.
include_association_result	No	Boolean	-	Whether to return the result of associating a partner and sub-customer. true: Returns the association result. false: Does not return the association result. The default value is false . If this parameter is not included in the request parameters, is set to "", or is set to null , false is returned.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "domain_name": "test",
  "email": "****@163.com",
  "verification_code": "253****",
  "domain_area": "HK",
  "xaccount_id": "35rey****",
  "xaccount_type": "****_IDP",
```

```
"password": "*****",  
"is_close_market_ms": "true",  
"indirect_partner_id": "a0d736*****aab6502d1a828c1809",  
"include_association_result": "false"  
}
```

Response

Response Parameters

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

Example Response

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

Returned Values

NOTE

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

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error. Check whether the input parameters meet the requirements according to the request parameter descriptions.
400	CBC.0101	Invalid parameter.
400	CBC.50010059	Customer association not supported for distributors.
400	CBC.99000038	The account name already exists.
400	CBC.99000028	The email address already exists.
400	CBC.99000031	Invalid account name.
400	CBC.5016	Invalid email address format.
400	CBC.99000039	Duplicate xAccountId.
400	CBC.99000004	An exception occurred when the customer authorized rights to the partner.
400	CBC.99000036	Invalid password.
400	CBC.99000034	Currently, registration with HUAWEI CLOUD is not available for users in this country.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
500	CBC.99000050	Query for the result of associating partner and its sub-customer timed out. Refer to 5.3.1 Querying Customers to check the association result.
400	CBC.99000051	Customer creation failed because this mobile number or email address has been preregistered by Huawei.

HTTP Value	Error Code	Description
400	CBC.99004007	Invalid email address.
400	CBC.99004008	Invalid verification code.
400	CBC.99004009	The verification code is available, but the number of verification failures is greater than 3.
400	CBC.99004010	The verification code entered by the client is incorrect.
400	CBC.99005035	This API cannot be used by a sandbox account.
401	CBC.0154	Invalid or expired token.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.
400	CBC.50010085	Customer association not allowed. The account of this partner has been restricted.
400	CBC.50010086	Customer association not allowed. This partner is a Huawei Cloud reseller, and the account of its associated distributor has been restricted.
400	CBC.50010120	Customer development not supported. There are no credits granted for the partner.

5.2 Real-Name Authentication

5.2.1 Requesting an Individual Real-Name Authentication

Function

This API can be used to submit an individual real-name authentication application.

An individual customer can refer to the instructions described in [Getting Authenticated](#) to complete the real-name authentication.

Constraints

- This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.
- To use this API, partners need to enable **Upload Photos of Handheld ID Cards Required for Real-Name Authentication** on the [Support > Open APIs > Configure](#) page.

- Images for real-name authentication must be uploaded to the **download** directory of the bucket.
- Only individual certificate authentication can be performed using APIs.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/customers/realname-auths/individual

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
identify_type	Yes	Integer	-	Authentication method. 0 : Using the individual certificate

Parameter	Mandatory	Type	Value Range	Description
verified_file_url	Yes	List<String>	A maximum of 4 characters	1. Attachment URL for individual certificate authentication. The URL must be entered in sequence. Assume that the name of the picture for the passport profile page is abc023 and that for the customer holding the passport profile page is def004. abc023 def004 Enter the URL in the preceding sequence. The file name is case sensitive. 2. Currently, certificate attachments must be in .jpg, .jpeg, .bmp, .png, .gif, or .pdf format. The maximum size of a single file is 10 MB. 3. The URL is a relative URL and does not need to contain the bucket name or download directory. It only needs to contain the subdirectory and corresponding file name in the download directory. Example: - If the uploaded attachments are stored in the following location of the bucket, enter abc023.jpg: https:// bucketname.obs.Endpoint. myhuaweicloud.com/ download/abc023.jpg - If the uploaded attachments are stored in the following location of the bucket, enter test/abc023.jpg: https:// bucketname.obs.Endpoint.

Parameter	Mandatory	Type	Value Range	Description
				myhuaweicloud.com/download/test/abc023.jpg
name	Yes	String	A maximum of 255 characters	Name.
verified_number	Yes	String	A maximum of 32 characters	Certificate number.
xaccount_type	Yes	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?

Parameter	Mandatory	Type	Value Range	Description
verified_type	No	Integer	-	Certificate type. 3: Passport. Two attachments need to be uploaded: the picture of the profile page, and the picture of the customer holding the passport in hands (the profile page on the front side). 5: Exit-Entry Permit for Traveling to and from Hong Kong and Macao. Three attachments need to be uploaded: the picture of the front side of Exit-Entry Permit (profile page), the picture of the back side of Exit-Entry Permit, and the picture of the customer holding Exit-Entry Permit in hands (profile page on the front side). 6: Mainland Travel Permit for Taiwan Residents. Three attachments need to be uploaded: the picture of the front side of Mainland Travel Permit (profile page), the picture of the back side of Mainland Travel Permit, and the picture of the customer holding Mainland Travel Permit in hands (profile page on the front side). 9: Residence Permit for Hong Kong and Macao Residents. Three attachments need to be uploaded: the picture of the profile side of Residence Permit for Hong Kong and Macao Residents, the picture of the national emblem side of Residence Permit for Hong Kong and Macao Residents, and the picture of the customer holding Residence Permit for Hong Kong and Macao Residents in hands (profile side on the front side).

Parameter	Mandatory	Type	Value Range	Description
				10: Residence Permit for Taiwan Residents. Three attachments need to be uploaded: the picture of the profile side of Residence Permit for Taiwan Residents, the picture of the national emblem side of Residence Permit for Taiwan Residents, and the picture of the customer holding Residence Permit for Taiwan Residents in hands (profile side on the front side). This parameter needs to be specified only when identify_type is set to 0 .
change_type	No	Integer	[-1]	Change type. -1: First time real-name authentication

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/customers/realname-auths/individual HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIIlNPXsidG9rZ
{
  "verified_number": "949826*****2922",
  "verified_file_url": [
    "shimingrenzheng/zhengmian001.jpg",
    "shimingrenzheng/fanmian002.jpg"
  ],
  "name": "wangx_****_001",
  "change_type": -1,
  "customer_id": "068a6d*****288536b6ba57d1ffae",
  "verified_type": 3,
  "identify_type": 0,
  "xaccount_type": "***_IDP"
}
```

Response

Response Parameters

Status code: 200

Parameter	Type	Value Range	Description
is_review	Integer	-	Whether to transfer to manual review. This parameter is returned only when the status code is 200. • 0: No • 1: Yes

Status code: 400

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
is_review	Integer	-	Whether to transfer to manual review. This parameter is returned only when the status code is 200. • 0: No • 1: Yes
fail_check_items	List<String>	-	Error list.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "is_review": "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.99000027	Expired verification code.
400	CBC.99000035	You are not a customer of a partner yet.
400	CBC.99000099	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.
400	CBC.99000100	Incorrect format of the certificate attachment the customer submitted for real-name authentication.
400	CBC.99005030	The partner did not complete real-name authentication or bucket authentication.
400	CBC.99007188	This customer has completed real-name authentication or is currently being authenticated.
400	CBC.99007189	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.
400	CBC.99007191	The maximum number of real-name authentication times has been reached.
400	CBC.99007193	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.
400	CBC.99007202	Real-name authentication failed.
400	CBC.99007261	The bank card is not supported. Try another bank card.
400	CBC.0100	Parameter error.
400	CBC.70600026	Huawei Cloud cannot review the information you submitted for real-name authentication. Contact your account manager.

HTTP Value	Error Code	Description
400	CBC.70600032	The operation has failed due to abnormal identity information, which could result in non-compliance risks. If you have any questions, please submit a service ticket to the customer service.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

5.2.2 Requesting an Enterprise Real-Name Authentication

Function

This API can be used to submit an enterprise real-name authentication application.

An enterprise customer can refer to the instructions described in [Getting Authenticated](#) to complete the real-name authentication.

Constraints

- This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.
- To use this API, partners need to enable **Upload Photos of Handheld ID Cards Required for Real-Name Authentication** on the **Support > Open APIs > Configure** page.
- Images for real-name authentication must be uploaded to the **download** directory of the bucket.
- Only enterprise certificate authentication can be performed using APIs.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/customers/realname-auths/enterprise

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
identify_type	Yes	Integer	-	Authentication method. 1: Using the enterprise's certificate scanned copy

Parameter	Mandatory	Type	Value Range	Description
verified_file_url	Yes	List<String>	A maximum of 4 characters	1. URL of the certificate attachment file used for enterprise certificate authentication. The attachment URL must be entered in sequence. Enter the name of the attachment of the enterprise certificate first. If the enterprise personal information is specified in the request, enter the name of the ID card attachment of the enterprise personal information. The sequence of the enterprise certificate attachments is as follows: First: picture of the front side of the enterprise certificate Second: picture of the back side of the enterprise certificate The sequence of the individual certificate attachments is as follows: First: picture of the profile side of the personal ID card Second: picture of the back side of the personal ID card (national emblem side) If the enterprise does not have a legal entity, and its first attachment is the picture of the front side of the enterprise certificate abc.023, and the second is the back side of the enterprise certificate def004, and then upload the attachments in the following sequence: abc023 def004 The file name is case sensitive. 2. Currently, certificate attachments must be

Parameter	Mandatory	Type	Value Range	Description
				in .jpg, .jpeg, .bmp, .png, .gif, or .pdf format. The maximum size of a single file is 10 MB. 3. The URL is a relative URL and does not need to contain the bucket name or download directory. It only needs to contain the subdirectory and corresponding file name in the download directory. Example: - If the uploaded attachments are stored in the following location of the bucket, enter abc023.jpg: https:// <i>bucketname.obs.Endpoint.myhuaweicloud.com/download/abc023.jpg</i> - If the uploaded attachments are stored in the following location of the bucket, enter test/abc023.jpg: https:// <i>bucketname.obs.Endpoint.myhuaweicloud.com/download/test/abc023.jpg</i>
corp_name	Yes	String	A maximum of 255 characters	Organization name. The value cannot contain only digits, special characters, or spaces.
verified_number	Yes	String	A maximum of 32 characters	Enterprise certificate number.
xaccount_type	Yes	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?

Parameter	Mandatory	Type	Value Range	Description
certificate_type	No	Integer	-	Enterprise certificate type. • 0: Enterprise's business license • 1: Legal entity certificate • 2: Legal entity registration certificate • 3: Administrative law enforcement subject certificate • 4: Organization code certificate • 99: Others
reg_country	No	String	A maximum of 10 characters	Registration country entered for real-name authentication. Enter the two-letter code that stands for the country. For example, enter CN for China.
reg_addresses	No	String	A maximum of 256 characters	Enterprise registration address for real-name authentication.
enterprise_person	No	EnterprisePerson Object	-	Enterprise person information. For details, see Table 5-1 .

Table 5-1 EnterprisePerson

Parameter	Mandatory	Type	Value Range	Description
legal_name	Yes	String	A maximum of 255 characters	Legal entity name.
legal_id_number	Yes	String	A maximum of 32 characters	Legal entity card ID.
certifier_role	No	String	A maximum of 32 characters	Legal entity role. legalPerson: Legal representative

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/customers/realname-auths/enterprise HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "verified_number": "371812*****8888",
  "verified_file_url": [
    "gerenshiming/zhengmian001.jpg",
    "gerenshiming/fanmian002.jpg",
    "gerenshiming/chizheng003.jpg"
  ],
  "reg_address": "Beijing",
  "reg_country": "CN",
  "customer_id": "4505ce*****de8263e33b57e76abc",
  "certificate_type": 0,
  "corp_name": "test001",
  "enterprise_person": {
    "certifier_role": "legalPerson",
    "legel_name": "wangmoumou",
    "legel_id_number": "371812*****8888"
  },
  "identify_type": 1,
  "xaccount_type": "****_IDP"
}
```

Response

Response Parameters

Status code: 200

Parameter	Type	Value Range	Description
is_review	Integer	-	Whether to transfer to manual review. This parameter is returned only when the status code is 200. 0: No 1: Yes

Status code: 400

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.

Parameter	Type	Value Range	Description
is_review	Integer	-	Whether to transfer to manual review. This parameter is returned only when the status code is 200. 0: No 1: Yes
fail_check_items	List<String>	-	Error list. This parameter is displayed only when error code CBC.99007004 is returned. For details, see Table 5-2 .

Table 5-2 failCheckItems list

Item	Description

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "is_review": "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.
400	CBC.99000035	You are not a customer of a partner yet.
400	CBC.99000099	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.

HTTP Value	Error Code	Description
400	CBC.99 000100	Incorrect format of the certificate attachment the customer submitted for real-name authentication.
400	CBC.99 005030	The partner has not enabled real-name authentication, or the bucket authentication has failed. For details about how to enable the option, click here .
400	CBC.99 007004	The initiated service operation does not meet the service check item requirement.
400	CBC.99 007188	The customer has passed real-name authentication or is being reviewed.
400	CBC.99 007191	The number of real-name authentication times of the customer exceeds the upper limit.
400	CBC.70 600026	Huawei Cloud cannot review the information you submitted for real-name authentication. Contact your account manager.
400	CBC.70 600032	The operation has failed due to abnormal identity information, which could result in non-compliance risks. If you have any questions, please submit a service ticket to the customer service.
403	CBC.01 51	Access denied.
500	CBC.09 99	Unknown error occurred.

5.2.3 Requesting a Real-Name Authentication Change

Function

This API can be used to submit a real-name authentication change application.

For details about how to change an individual account to an enterprise account through real-name authentication, visit [Changing an Individual Account to an Enterprise Account](#).

Constraints

- This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.
- To use this API, partners need to enable **Upload Photos of Handheld ID Cards Required for Real-Name Authentication** on the **Support > Open APIs > Configure** page.
- Images for real-name authentication must be uploaded to the **download** directory of the bucket.

- Real-name authentication change through API only supports changing an individual account to an enterprise account.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

PUT /v2/customers/realname-auths/enterprise

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
identify_type	Yes	Integer	-	Authentication method. 1: Using the enterprise's certificate scanned copy

Parameter	Mandatory	Type	Value Range	Description
verified_file_url	Yes	List<String>	A maximum of 4 characters	URL of the certificate attachment file used for enterprise certificate authentication. The attachment URL must be entered in sequence. Enter the name of the attachment of the enterprise certificate first. If the enterprise personal information exists, enter the name of the ID card attachment of the enterprise personal information. The order of the enterprise certificate attachments is as follows: First: Picture of the front side of the enterprise certificate Second: Picture of the back side of the enterprise certificate The order of the individual certificate attachments is as follows: First: Picture of the front side of the personal ID card (profile side) Second: Picture of the back side of the personal ID card (national emblem side) If the enterprise does not have a legal entity, and its first attachment is the picture of the front side of the enterprise certificate abc023, and the second attachment is the back side of the enterprise certificate def004, then upload the attachments in the following sequence: abc023 def004 Enter the URL in the preceding sequence. The file name is case sensitive. Currently, certificate attachments can only be in .jpg, .jpeg, .bmp, .png, .gif,

Parameter	Mandatory	Type	Value Range	Description
				or .pdf format. The maximum size of a single file is 10 MB. The URL is a relative URL and does not need to contain the bucket name or download directory. It only needs to contain the subdirectory and corresponding file name in the download directory. Example: If the uploaded attachments are stored in the following location of the bucket, enter abc023.jpg: https:// bucketname.obs.Endpoint.myhuaweicloud.com/download/abc023.jpg If the uploaded attachments are stored in the following location of the bucket, enter test/abc023.jpg: https:// bucketname.obs.Endpoint.myhuaweicloud.com/download/test/abc023.jpg
corp_name	Yes	String	A maximum of 255 characters	Organization name. The value cannot contain only digits, special characters, or spaces.
verified_number	Yes	String	A maximum of 32 characters	Enterprise certificate number.
change_type	Yes	Integer	[1]	Change type. 1: Change individual real-name authentication to enterprise real-name authentication.
xaccount_type	Yes	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?

Parameter	Mandatory	Type	Value Range	Description
certificate_type	No	Integer	-	Enterprise certificate type. 0: Enterprise's business license 1: Legal entity certificate 2: Legal entity registration certificate 3: Administrative law enforcement subject certificate 4: Organization code certificate 99: Others If this parameter is not included in the request parameters or is set to null , no value is returned.
reg_country	No	String	A maximum of 10 characters	Registration country entered for real-name authentication. Enter the two-letter code that stands for the country. For example, enter CN for China. If this parameter is not included in the request parameters or is set to null , no value is returned. If this parameter is set to "", "" is returned.
reg_addresses	No	String	A maximum of 256 characters	Enterprise registration address for real-name authentication. If this parameter is not included in the request parameters or is set to null , no value is returned. If this parameter is set to "", "" is returned.
enterprise_person	No	EnterprisePerson Object	-	Enterprise person information. For details, see Table 5-3 . This parameter is reserved.

Table 5-3 EnterprisePerson

Parameter	Mandatory	Type	Value Range	Description
legel_name	Yes	String	A maximum of 255 characters	Legal entity name.
legel_id_number	Yes	String	A maximum of 32 characters	Legal entity card ID.
certifier_role	No	String	A maximum of 32 characters	Legal entity role. legalPerson: Legal representative

Example Request

```
PUT https://bss-intl.myhuaweicloud.com/v2/customers/realname-auths/enterprise HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "verified_number": "371812*****8888",
  "verified_file_url": [
    "gerenshiming/zhengmian001.jpg",
    "gerenshiming/fanmian002.jpg",
    "gerenshiming/chizheng003.jpg"
  ],
  "reg_address": "Beijing",
  "reg_country": "CN",
  "customer_id": "4505ce*****de8263e33b57e76abc",
  "certificate_type": 0,
  "corp_name": "test001",
  "enterprise_person": {
    "certifier_role": "legalPerson",
    "legel_name": "wangmoumou",
    "legel_id_number": "371812*****8888"
  },
  "identify_type": 1,
  "xaccount_type": "***_IDP",
  "change_type": 1
}
```

Response

Response Parameters

Status code: 200

Parameter	Type	Value Range	Description
is_review	Integer	-	Whether to transfer to manual review. This parameter is returned only when the status code is 200. • 0: No • 1: Yes

Status code: 400

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
is_review	Integer	-	Whether to transfer to manual review. This parameter is returned only when the status code is 200. • 0: No • 1: Yes
fail_check_items	List<String>	-	Error list. This parameter is displayed only when error code CBC.99007004 is returned. For details, see Table 5-4 .

Table 5-4 failCheckItems list

Item	Description
IS_DEBT	The customer's account is in arrears.
IS_CREDIT_ACCOUNT	The customer has a credit account and has a credit outstanding amount.
IS_ORG_ACCOUNT	The customer account is an enterprise master account or member account.
MEM_OF_ORG	Your account and the associated master account belong to the same legal entity. Please cancel the association before performing real-name authentication.

Item	Description
MEN_ANSWERING_ORG	You have received an invitation to associate with another account as a member account. Please reject the invitation and then perform real-name authentication.
ORG_INVITING_MEM	Your account is a master account and has invited another member account for association. Please cancel the invitation and then perform real-name authentication.
ORG_HAVE_MEM_EQUITY_APPLYING	Your account is a master account. The equity certificate is being reviewed. Please wait for the certificate to be approved, and then perform real-name authentication.
MEM_OF_ORG_EQUITY_APPLYING	Your account is a member account. The equity certificate of the associated master account is being reviewed. Please wait for the certificate to be approved, and then perform real-name authentication.
ORG_HAVE_MEM_EQUITY_APPROVED	Your account is a master account and already has an equity certificate. Please cancel the member account that has the equity certificate and then perform real-name authentication.
MEM_OF_ORG_EQUITY_APPROVED	Your account is a member account and already has an equity certificate. Please cancel the association with the master account and then perform real-name authentication.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "is_review": "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.
400	CBC.99000035	You are not a customer of a partner yet.
400	CBC.99000099	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.
400	CBC.99000100	Incorrect format of the certificate attachment the customer submitted for real-name authentication.
400	CBC.99007004	The initiated service operation does not meet the service check item requirement.
400	CBC.99007188	The customer has passed real-name authentication or is being reviewed.
400	CBC.99007191	The number of real-name authentication times of the customer exceeds the upper limit.
400	CBC.70600026	Huawei Cloud cannot review the information you submitted for real-name authentication. Contact your account manager.
400	CBC.70600032	The operation has failed due to abnormal identity information, which could result in non-compliance risks. If you have any questions, please submit a service ticket to the customer service.
403	CBC.0151	Access denied.
500	CBC.0999	Unknown error occurred.

5.2.4 Querying the Real-Name Authentication Review Result

Function

If the response to a real-name authentication application or real-name authentication change application indicates that manual review is required, this API can be used to query the review result.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/customers/realname-auths/result

The following table describes the parameters.

Table 5-5 Query parameters

Parameter	Mandatory	Type	Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/customers/realname-auths/result?customer_id=06a7969058802f0c0f01c00b91846780 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 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.

Parameter	Type	Value Range	Description
review_result	Integer	-	Real-name authentication review result. This parameter is returned only when the status code is 200 and the real-name authentication application has been submitted. 0: Under review 1: Failed 2: Approved
opinion	String	A maximum of 256 characters	Review comment. This parameter is returned only when the status code is 200 and the review is not approved.

Example Response

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

{
  "review_result": 2,
  "opinion": 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.
403	CBC.0151	Access denied.
500	CBC.0999	Unknown error occurred.

5.3 Customer Management

5.3.1 Querying Customers

Function

This API is used to query your customers.

Visit [Querying Customers](#) to learn about how to query customers in Partner Center.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/partners/sub-customers/query

Request

Request parameters

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

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

Parameter	Mandatory	Type	Value Range	Description
association_type	No	String	A maximum of 2 characters	Association type. 1: Referral 3: Reseller If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
associated_on_begin	No	String	A maximum of 20 characters	Start time of the association time range (UTC time). Value format: YYYY-MM-DD'T'hh:mm:ss'Z', for example, 2019-05-06T08:05:01Z. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
associated_on_end	No	String	A maximum of 20 characters	End time of the association time range (UTC time). Value format: YYYY-MM-DD'T'hh:mm:ss'Z', for example, 2019-05-06T08:05:01Z. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion.
customer_id	No	String	A maximum of 64 characters	Customer account ID. You can call the API for 5.3.1 Querying Customers to obtain the value of this parameter, or you can obtain the value of the domain ID from the response of the API for Creating a Customer. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory for querying the list of customers of a Huawei Cloud reseller.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIIPAgYJKoZlHvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "account_name": "betahc_kehu107",
  "customer": "sun**01",
  "offset": "0",
  "limit": "10",
  "label": "sunny",
  "association_type": "1",
  "associated_on_begin": "2019-05-06T08:05:01Z",
  "associated_on_end": "2019-05-06T08:05:01Z",
  "customer_id": "065024*****e90f44c01cbccfa280",
  "indirect_partner_id": "si3fjg8ugf*****1"
}
```

Response

Response parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 16 characters	Error code. This parameter is returned only when a failure occurs. For details, see Returned Values .
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
customer_infos	List<CustomerInfo>	-	Customer list. For details, see Table 5-6 .
count	Integer	-	Total number of records.

Table 5-6 Customer information

Parameter	Type	Value Range	Description
customer	String	A maximum of 128 characters	Name that has passed the real-name authentication.
account_name	String	A maximum of 128 characters	Account name. If the customer has created an IAM user, the account name of the master account is returned.
customer_id	String	A maximum of 64 characters	Customer account ID.
associated_on	String	A maximum of 20 characters	Time when a customer is associated with a partner. The value is UTC time in "yyyy-MM-dd 'T' HH:mm:ss 'Z'" format, such as 2019-05-06T08:05:01Z . <i>HH</i> ranges from 0 to 23, and <i>mm</i> and <i>ss</i> ranges from 0 to 59.
association_type	String	A maximum of 2 characters	Association type. • 1: Referral • 3: Reseller
label	String	A maximum of 64 characters	Tag.
telephone	String	A maximum of 20 characters	Customer phone number.
verified_statuses	String	A maximum of 5 characters	Real-name authentication status. • -1: The real name is not authenticated. • 0: Real-name authentication is under review. • 1: The real-name authentication is not passed. • 2: The real name is authenticated.
country_code	String	A maximum of 10 characters	Country code, which is the country code prefix of a phone number. Example: 0086 for China

Parameter	Type	Value Range	Description
customer_type	Integer	-	Customer type. • -1: None • 0: Individual • 1: Enterprise When a customer is registered, customerType is -1. The customer can set customerType in the account center or select the enterprise or individual real-name authentication to determine the customer type.
is_frozen	Integer	-	Whether to freeze the account. • 0: No • 1: Only account • 2: Account and resources
account_managers	List<AccountManager>	A maximum of 10 managers	Customer manager list. Only 1 account manager can be configured at present. For details, see Table 5-7 .
xaccount_id	String	A maximum of 128 characters	Unique user ID on the partner sales platform. The ID is allocated by the partner.
xaccount_type	String	A maximum of 64 characters	Platform ID assigned by Huawei to a partner. This value is assigned by Huawei. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?
customer_level	String	A maximum of 64 characters	Customer tier. • V0 • V1 • V2 • V3 • V4 • V5
email	String	A maximum of 256 characters	Customer's email address.

Table 5-7 AccountManager

Parameter	Type	Value Range	Description
account_name	String	A maximum of 128 characters	Name of the account manager.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "customer_infos": [
    {
      "customer": "sun***01",
      "account_name": "betahc_kehu107",
      "customer_id": "0b11fa*****870f20c003f6a53940",
      "associated_on": "2021-01-05T06:35:51Z",
      "association_type": "1",
      "label": "sunny",
      "telephone": "134****6666",
      "verified_status": "2",
      "country_code": "0086",
      "customer_type": "0",
      "is_frozen": "0",
      "account_managers": [
        {
          "account_name": "tan_ma"
        }
      ],
      "xaccount_id": "98**9707",
      "xaccount_type": "****_JDP",
      "customer_level": "V0",
      "email": "****@163.com"
    }
  ],
  "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.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.

HTTP Value	Error Code	Description
401	CBC.0154	Invalid or expired token.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

5.3.2 Freezing a Customer Account

Function

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

Visit [Freezing a Customer Account](#) to learn about how to freeze a customer account.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/partners/sub-customers/freeze

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customer_ids	Yes	List<String>	A maximum of 10 IDs	IDs of customers whose accounts are to be frozen. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
reason	Yes	String	A maximum of 256 characters	Account freezing reason.

Parameter	Mandatory	Type	Value Range	Description
indirect_partner_id	No	String	Maximum length: 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory for freezing the customers of a reseller.
freeze_type	No	String	-	Freezing type. • ACCOUNT: The account will be frozen. • ACCOUNT_AND_RESOURCE: Both the account and resources in the account will be frozen. Default value: ACCOUNT If this parameter is not included in the request or is set to null , the default value will be used. This parameter cannot be set to an empty string, and enumeration verification will be conducted.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers/freeze HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "customer_ids": [
    "0bb8e9*****760f6fc010ebfd95e1"
  ],
  "reason": "Arrears",
  "indirect_partner_id": "0b5e9b*****0c0f0fc00874a9e000",
  "freeze_type": "ACCOUNT"
}
```

Response

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. This field is not returned when the operation is successful or partially failed. For details, see Returned Values .

Parameter	Type	Value Range	Description
error_msg	String	A maximum of 2,000 characters	Error description. This field is not returned when the operation is successful or partially failed.
error_details	List<ErrorDetail>	-	Error cause description. This field is returned only when the operation is partially failed. For details, see Table 5-8 .

Table 5-8 ErrorDetail

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

Example Response

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

Returned Values

 NOTE

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

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.

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

5.3.3 Unfreezing a Customer Account

Function

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

Visit [Unfreezing a Customer Account](#) to learn about how to unfreeze a customer account.

NOTE

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

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/partners/sub-customers/unfreeze

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customer_ids	Yes	List<String>	A maximum of 10 IDs	IDs of customers whose accounts are to be unfrozen. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
reason	Yes	String	A maximum of 256 characters	Account unfreezing reason.
indirect_partner_id	No	String	Maximum length: 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory for unfreezing the customers of a reseller.
unfreeze_type	No	String	-	Unfreezing type ACCOUNT: The account will be unfrozen. ACCOUNT_AND_RESOURCE: Both the account and resources in the account will be unfrozen. Default value: ACCOUNT If this parameter is not included in the request or is set to null , the default value will be used. This parameter cannot be set to an empty string, and enumeration verification will be conducted.

Example Request

POST https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers/unfreeze HTTP/1.1
Content-Type: application/json
X-Auth-Token: *MIIIPAgYJKoZlHvcNAQcCo...ggg1BBIIlNPXsidG9rZ*

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

Response

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. This field is not returned when the operation is successful or partially failed. For details, see Returned Values .
error_msg	String	A maximum of 2,000 characters	Error description. This field is not returned when the operation is successful or partially failed.
error_details	List<ErrorDetail>	-	Error cause description. This field is returned only when the operation is partially failed. For details, see Table 5-9 .

Table 5-9 ErrorDetail

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

Example Response

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

Returned Values

 NOTE

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

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

6 Managing Huawei Cloud Resellers

6.1 Querying Huawei Cloud Resellers

6.1.1 Querying the List of Huawei Cloud Resellers

Function

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

Constraints

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

Debugging

You can debug this API [API Explorer](#).

URI

POST /v2/partners/indirect-partners/query

Request

Request parameters

Parameter	Mandatory	Type	Maximum Length of Characters/Value Range	Description
account_name	No	String	64 characters	Account name of a reseller. If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.
association_begin	No	String	20 characters	Start time of the association between a reseller and a distributor. The time is in the UTC format (time zone is required), for example, <i>2016-03-28T00:00:00Z</i> . If this parameter is not included in the request parameters or is set to null , it cannot be used as a filter criterion.
association_end	No	String	20 characters	End time of the association between a reseller and a distributor. The time is in the UTC format (time zone is required), for example, <i>2016-03-28T00:00:00Z</i> . If this parameter is not included in the request parameters or is set to null , it cannot be used as a filter criterion.
indirect_partner_id	No	String	64 characters	Reseller ID. For details about how to obtain such IDs, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory if you want to query a specific reseller.

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

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/partners/indirect-partners/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZihvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "account_name": "account_name",
  "associated_on_begin": "2017-12-17T10:32:02Z",
  "associated_on_end": "2017-12-17T10:32:02Z",
  "offset": 0,
  "limit": 10,
  "indirect_partner_id": "c9e731c4663646988ef4cdb3122837b6"
}
```

Response

Response Parameters

Parameter	Type	Maximum Length of Characters/Value Range	Description
error_code	String	20 characters	Status code. For details, see Status Codes . This parameter is returned only when the query failed.
error_msg	String	1000 characters	Error description. This parameter is returned only when the query failed.
count	Integer	[0, Maximum integer]	Number of records that meet the search conditions. This parameter is returned only when the operation is successful.
indirect_partners	List<IndirectPartnerInfo>	-	Reseller list. For details, see Table 6-1 .

Table 6-1 IndirectPartnerInfo

Parameter	Type	Maximum Length of Characters/Value Range	Description
indirect_partner_id	String	64 characters	Reseller ID.
mobile_phone	String	20 characters	Mobile number of a reseller.
email	String	200 characters	Email address of a reseller.
account_name	String	64 characters	Account name of a reseller.

Parameter	Type	Maximum Length of Characters/Value Range	Description
name	String	255 characters	Reseller name.
associated_on	String	20 characters	Time when a reseller is associated with a Huawei Cloud distributor. The time is in the UTC format (time zone is required), for example, <i>2016-03-28T00:00:00Z</i> .
account_manager_id	String	64 characters	Account name of an account manager for login
account_manager_name	String	255 characters	Account manager name.

Example Response

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

Status Codes

NOTE

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

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

7 Managing Credits

7.1 Querying Consumption Quota

Function

Partners can use this API to query consumption quotas.

Constraints

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

Debugging

You can debug this API in [API Explorer](#). Automatic authentication is supported. API Explorer can automatically generate and debug SDK code examples.

URI

GET /v2/partners/credit/consumption-quota

Example request

```
GET https://bss-intl.myhuaweicloud.com/v2/partners/credit/consumption-quota HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlIhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

Response

Response parameters

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

Parameter	Parameter Type	Value Length Limit	Description
error_msg	String	1,000	Error description. This parameter is returned only when the query fails.
consumption_quota	String	64	Consumption quota.
amount	String	64	Account balance.
coupon_amount	String	64	Cash coupon balance.
due_amount	String	64	Amount due.
unbilled_amount	String	64	Estimated expenditure amount (unbilled).
used_consumption_quota	String	64	Used consumption quota. used_consumption_quota = due_amount + unbilled_amount - amount - coupon_amount NOTE If the account balance or cash coupon balance is greater than the expenditure amount, a negative value will be returned for the used expenditure quota, indicating that the expenditure quota is not used.
currency	String	20	Currency type. USD : US dollar
measure_id	Integer	4	Measurement unit ID. 1 : USD

Example Response

```

HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "consumption_quota": "10000",
  "amount": "10.18",
  "coupon_amount": "10.03",
  "due_amount": "500.28",
  "unbilled_amount": "100.01",
  "used_consumption_quota": "580.08",
  "measure_id": 1,
  "currency": "USD"
}

```

Status Code

 NOTE

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

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

8 Transaction Management

8.1 Managing Customers' Budgets

8.1.1 Querying Customer Budgets

Function

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

Click [here](#) to learn about how to query the budget of a customer.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/partners/sub-customers/budget

The following table describes the parameters.

Table 8-1 Query parameters

Parameter	Mandatory	Type	Maximum Length	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory if you want to query the budget of a reseller's customer. In other cases, this parameter will not be used.

Request

Request Parameters

None

Request sample

```
GET https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers/budget?
customer_id=06ffbcd46880d3f30f62c001a49be460&indirect_partner_id=0b5e9bb21980d20c0f0fc00874a9e00
0 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

Response

Response Parameters

Parameter	Type	Maximum Length/ Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Returned Values . 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.
budget_amount	BigDecimal	-	Initial budget.

Parameter	Type	Maximum Length/ Value Range	Description
used_amount	BigDecimal	-	Used budget. The data displayed in the system may have certain deviation and latency.
measure_id	Integer	-	Unit: 1: dollar
currency	String	A maximum of 4 characters	Currency. The options are as follows: USD
budget_type	String	-	Budget type. MONTHLY : Monthly budget PACKAGE : One-time budget

Response sample

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

Returned Values

NOTE

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

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99000000	You do not have the operation permission to this customer.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.

HTTP Value	Error Code	Description
400	CBC.99005024	This API cannot be invoked because the association type of the customer is incorrect.
403	CBC.0151	Access denied.
403	CBC.0150	Invalid operation.
500	CBC.0999	Other errors.

8.1.2 Batch Querying Customer Budgets

Function

This API is used to batch query budgets of multiple customers. You can decide whether to adjust budgets for your customers based on the query results.

Click [here](#) to learn about how to query the budget of a customer.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug SDK code examples.

URI

POST /v2/partners/sub-customers/budget/query

Request

Request parameters

Parameter	Mandatory	Type	Maximum Length/ Value Range	Description
customer_ids	Yes	List<String>	100	Customer IDs. Up to 100 customer IDs are supported. If there are IDs of customers that have not been associated with the partner or that are not associated with partner in the resale mode, information of these customers will not be returned. You can call the 5.3.1 Querying Customers API to obtain IDs of customers whose association type is association_type=3 .
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain reseller IDs, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory if you want to query the budget of a reseller's customer.

Example request

```
POST https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers/budget/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "customer_ids": ["053a48736500d5f40ffec01689b88480"],
  "indirect_partner_id": "0b5e9b*****0c0f0fc00874a9e000"
}
```

Response

Response parameters

Parameter	Type	Maximum Length/ Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Status Code . 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.
measure_id	Integer	-	Unit. 1: dollar
currency	String	A maximum of 4 characters	Currency. The options are as follows: USD
budget_infos	List<BudgetInfo>	A maximum of 100 characters	Customer budget. For details, see #mt_01006/table750511154510 .

Table 2 Budget information

Parameter	Type	Maximum Length/ Value Range	Description
customer_id	String	A maximum of 64 characters	Customer account ID.
budget_amount	BigDecimal	-	Budget granted
used_amount	BigDecimal	-	Used budget. There may be some deviation and latency for the used budget displayed.
budget_type	String	-	Budget type. MONTHLY : Monthly budget PACKAGE : One-time budget

Example response

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

```
"budget_infos":[
  {
    "customer_id":"053a*****d5f40ffec01689b88480",
    "budget_amount": 50.0,
    "used_amount": 1.0,
    "budget_type":"MONTHLY"
  },{
    "customer_id":"053a*****d5f40ffec01689b88481",
    "budget_amount": 40.0,
    "used_amount": 2.0,
    "budget_type":"PACKAGE"
  }
]
```

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	Error Code	Description
400	CBC.0100	Invalid parameter.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
403	CBC.0151	Access denied.
403	CBC.0150	Invalid operation.
500	CBC.0999	Other errors.

8.1.3 Setting Customer Budgets

Function

This API is used to set or adjust a customer's budget. If the budget is set for the first time, and the freezing type is not specified for budget exhaustion, manual freezing is applied by default.

Click [here](#) to learn about how to query the budget of a customer.

Once a distributor grants the budget setting permission to a reseller, the reseller can set budgets for their own customers.

For details, see [Setting Account Freezing and Budget Setting Permissions for Resellers](#).

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/partners/sub-customers/budget

Request

Request Parameters

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the customer ID.
budget_amount	Yes	BigDecimal	(0-2147483647]	Target amount, which can be accurate to two decimal places. Unit: USD
cancel_partner_frozen	No	String	-	Whether to unfreeze the account when setting the customer budget. • 0: No • 1: Yes The default value is 0. If this parameter is not included in the request parameters, is set to "", or is set to null , the default value 0 is used.
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory if you want to set a budget for a reseller's customer. If this parameter is not included in the request parameters, is set to "", or is set to null , this parameter will not be used.

Parameter	Mandatory	Type	Maximum Length/ Value Range	Description
budget_type	No	String	-	Budget type. • MONTHLY: Monthly budget • PACKAGE: One-time budget The default value is MONTHLY. If this parameter is not included in the request parameters or is set to null, the default value MONTHLY is used. The value of this parameter cannot be an empty string.
frozen_operate_type	No	Integer		Whether to automatically freeze the budget when the budget is exhausted. • 0: Manual freezing • 1: Auto freezing NOTE Monthly budget effective time and disclaimer One-time budget effective time and disclaimer If this parameter is not included in the request, is left empty, or is set to null, this parameter does not take effect.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/partners/sub-customers/budget HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "customer_id": "053a48736500d5f40ffec01689b88480",
  "budget_amount": 100,
  "cancel_partner_frozen": 0,
  "indirect_partner_id": "0b5e9b*****0c0f0fc00874a9e000",
  "budget_type":"MONTHLY",
  "frozen_operate_type": 0
}
```

Response

Response Parameters

Parameter	Type	Maximum Length	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Returned Values . 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.

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.50000030	Setting budgets not supported. This reseller's budget quota is insufficient.
400	CBC.50000033	Budget setting permissions have been revoked. This reseller cannot set budgets.
400	CBC.99000000	You do not have the operation permission to this customer.
400	CBC.99000037	You do not have the permission to operate this Huawei Cloud reseller.
400	CBC.99005024	This API cannot be invoked because the association type of the customer is incorrect.
403	CBC.0151	Access denied.
403	CBC.0150	Invalid operation.
500	CBC.0999	Other errors.

8.1.4 Querying Customer Budget Adjustment Records

Function

This API is used by partners to query customer budget adjustment records.

Click [here](#) to learn about how to check customer budget adjustment records in Partner Center.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/partners/sub-customers/budget/records

The following table describes the parameters.

Table 8-2 Parameters

Parameter	Mandatory	Type	Maximum Length/ Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API in 5.3.1 Querying Customers to obtain the value of parameter.
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain the ID, see 6.1.1 Querying the List of Huawei Cloud Resellers . This parameter is mandatory if a distributor needs to query the budget setting records of a reseller's customer.

Parameter	Mandatory	Type	Maximum Length/ Value Range	Description
operation_type	No	String	A maximum of 10 characters	Operation type. • SETTING: Setting • DELETE: Disassociating If this parameter is not included in the request parameters, data of all types is queried. It cannot be left empty or set to "".
budget_type	No	String	A maximum of 10 characters	Budget type. • MONTHLY: Monthly budget • PACKAGE: One-time budget If this parameter is not included in the request parameters, data of all types is queried. It cannot be left empty or set to "".
offset	No	Integer	0 to maximum integer	Offset, which starts from 0. The default value is 0. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.

Parameter	Mandatory	Type	Maximum Length/ Value Range	Description
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-intl.myhuaweicloud.com/v2/partners/sub-customers/budget/records?customer_id=06ffbcd46880d3f30f62c001a49be460&indirect_partner_id=0b5e9bb21980d20c0f0fc00874a9e000&operation_type=SETTING&budget_type=MONTHLY&offset=0&limit=10 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIIINPXsidG9rZ
```

Response

Response Parameters

Parameter	Type	Maximum Length/ Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Returned Values . 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.
total_count	Integer	-	Total number of returned records.
measure_id	Integer	-	Unit. 1 : dollar
currency	String	A maximum of 4 characters	Currency. The options are as follows: USD
record_list	List<Budget RecordInfo>	A maximum of 100 characters	Customer budget. For details, see Table 8-3 .

Table 8-3 BudgetRecordInfo

Parameter	Type	Maximum Length/Value Range	Description
budget_amount	BigDecimal	0 to 2147483647	Budget amount.
operation_type	String	A maximum of 10 characters	Operation type. ● SETTING: Setting ● DELETE: Disassociating
operation_time	String	A maximum of 20 characters	Operation time. The value is UTC time in <i>yyyy-MM-ddTHH:mm:ssZ</i> format.
operator	String	A maximum of 64 characters	Operator or system.
budget_type	String	A maximum of 10 characters	Budget type. ● MONTHLY: Monthly budget ● PACKAGE: One-time budget
partner_corp_name	String	A maximum of 256 characters	Partner name. NOTE If the budget is set by a reseller, the value of this parameter is the name of the reseller.
partner_account_name	String	A maximum of 128 characters	Partner account name. NOTE If the budget is set by a reseller, the value of this parameter is the account name of the reseller.

Example Response

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

```
Date: response time
{
  "total_count": 100,
  "measure_id": 1,
  "currency": "USD",
  "record_list": [
    {
      "budget_amount": 2147483647,
      "operation_type": "SETTING",
      "operation_time": "yyyy-MM-ddTHH:mm:ssZ",
      "operator": "Op*****01",
      "budget_type": "MONTHLY",
      "partner_corp_name": "ji*****company",
      "partner_account_name": "ji*****_hk"
    }
  ]
}
```

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	Parameter error.
400	CBC.99000000	You do not have the operation permission to this customer.
400	CBC.99000037	You do not have the operation permission to this Huawei Cloud reseller.
400	CBC.99005024	This API cannot be invoked because the association type of the customer is incorrect.
403	CBC.0151	Access denied.
403	CBC.0150	Invalid operation.
500	CBC.0999	Other errors.

8.2 Coupons Management

8.2.1 Querying Coupons

Function

Partners can query information about their coupons.

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

NOTE

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

Constraints

If this API is called using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor, only the coupons of the cloud solution provider, the distributor, or the distributor's managed resellers can be queried. If the coupons of a customer who belongs to a cloud solution provider or a distributor need to be queried, the token of the customer should be used. Before doing so, you need to [request authorization from the customer](#) or [ask the customer to create an agency for you](#).

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/promotions/benefits/coupons

The following table describes the parameters.

Table 8-4 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.

Parameter	Mandatory	Type	Value Range	Description
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. 1: Cash coupon If this parameter is not included in the request parameters, is left empty, or is set to null , it cannot be used as a filter criterion. It cannot be set to "".
status	No	Integer	[1-5]	Customer coupon status. 2: To be used 3: Used 4: Expired 5: Withdrawn If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion.
active_start_time	No	String	A maximum of 64 characters	Activation start time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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. It cannot be set to "" or null .
active_end_time	No	String	A maximum of 64 characters	Activation end time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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. It cannot be set to "" or null .

Parameter	Mandatory	Type	Value Range	Description
offset	No	Integer	0 to maximum integer	Offset, which starts from 0. The default value is 0. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-100]	Number of coupons queried each time. The default value is 10 .
source_id	No	String	A 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 null, it cannot be used as a filter criterion. If it is set to "", it can be used as a filter criterion.

Request Message

Request Parameters

No.

Example Request

```
GET https://bss-intl.myhuaweicloud.com/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 Returned Values .
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 Table 8-5 .

Table 8-5 QueryUserCouponsResult

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

Parameter	Type	Description
order_id	String	Order ID. NOTE If a coupon is used for multiple times, order IDs involved are separated by semicolons (;). If a coupon is used in a combined payment, order IDs involved are separated by commas (,). Example: CS1904011928GIBHC1,CS1904011928GIBHC2,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.
media_type	Integer	Medium type. 1: E-coupon 2: Paper coupon
fetch_method	Integer	Obtaining method. 1: Claimed online 2: Redeemed online 3: Issued online 4: Obtained offline 5: Rewarded based on events
use_limits	List<ICouponUseLimitInfoV2>	Coupon usage limits. For details, see Table 8-6 .
active_time	String	Activation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
reserve_time	String	Usage time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
promotion_id	String	Promotion ID.
create_time	String	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
coupon_version	Integer	Coupon version. 2: Coupons can be used repeatedly.
balance	Double	Coupon balance. Unit: USD
lock_order_id	String	ID of the order for the coupon.

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

Table 8-6 ICouponUseLimitInfoV2

Parameter	Type	Description
use_limit_info_id	String	Usage limit ID.
limit_key	String	Usage limit. For details about the value, see Table 8-7 .
value1	String	Value 1.
value2	String	Value 2.
value_unit	String	Value unit.
limit_type	String	Limit type.
promotion_plan_id	String	Promotion plan ID.

Table 8-7 limit_key requirements for ICouponUseLimitInfo

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

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

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

Key	Meaning	Description	Remarks
isRebate	Whether coupons are counted in to the partner incentive rebates.	The value is specified in value1 . The value can be: 0: No 1: Yes This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.
serviceTypeBlackList	Service type blacklist.	Service type blacklist. The service type code is specified in value1 . This restriction applies only to flexi-purchase coupons.	Flex-purchase coupons are supported.
minConsumeDiscount	Minimum customer consumption discount.	The value is specified in value1 . The value ranges from 0 to 1 (excluding 0 and 1).	Cash coupons and flexi-purchase coupons are supported.
isForAnnualContracts	Whether coupons can only be used for yearly/monthly (one-year) orders.	The value can be: 0: No 1: Yes	Cash coupons and discount coupons are supported.
simultaneousUseWithPromotionalProduct	Whether cash coupons can be used together with promotional products.	The value is specified in value1 . The value can be: 0: No 1: Yes	Cash coupons and discount coupons are supported.
simultaneousUseWithPromotionalDiscount	Whether cash coupons can be used together with promotional discounts.	The value is specified in value1 . The value can be: 0: No 1: Yes	Cash coupons are supported.

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

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "count": "1",
  "user_coupons": [
    {
      "coupon_id": "CP19092406014086E3",
      "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

8.3 Managing Yearly/Monthly Orders

8.3.1 Querying Orders

Function

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

A partner can log in to Partner Center and follow the instructions described in [Viewing a Customer's Orders](#) to view orders of a customer.

NOTE

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

Constraints

This API can be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor, or the AK/SK or token of a customer. If this API is invoked using the AK/SK or token of a cloud solution provider or a distributor, they can query orders of all their customers.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

GET /v2/orders/customer-orders

Table 8-8 Request parameters

Parameter	Mandatory	Type	Maximum Length/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 or is left empty, it will not be used as a filter criterion. If it is set to null , it can be used as a filter criterion. This parameter cannot be set to "". NOTE When special characters are used for query, perform the URL code conversion. For example, % should be converted to %25.
customer_id	No	String	A maximum of 64 characters	Customer account ID. To obtain the customer ID, call the API in 5.3.1 Querying Customers . If this parameter is not included, it will not be used as a filter criterion. If it is set to null , it can be used as a filter criterion. This parameter cannot be set to "" or left empty.
create_time_begin	No	String	A maximum of 20 characters	Start time of order creation. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The span between the order creation time and end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null .

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
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 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The span between the order creation time and the end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.
service_type_code	No	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. Cloud service type code is case insensitive. You can call 4.1.1 Querying Cloud Service Types to obtain a specific service type. If this parameter is not included or is left empty, it will not be used as a filter criterion. If this parameter is set to "" or null, it will be used as a filter criterion.
status	No	Integer	-	Order status. The value can be: • 1: Pending approval • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed If this parameter is not included, is left empty, or is set to null, it will not be used as a filter criterion. It cannot be set to "".

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

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
order_by	No	String	A maximum of 36 characters	Sorting order of the orders. This parameter is case insensitive. You can sort the orders by creation time. If you set the value to createTime, the system sorts orders by creation time in ascending order. If you set the value to -createTime, the system sorts orders by creation time in descending order. If this parameter is not included, is left empty, or is set to "" or null, orders will be sorted by creation time in descending orders.
payment_time_begin	No	String	A maximum of 20 characters	Start time of order payment. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The span between the order payment start time and end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.
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 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The span between the order payment start time and end time cannot be more than 1 year. If this parameter is not included or is left empty, it will not be used as a filter criterion. It cannot be set to "" or null.

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
indirect_partner_id	No	String	A maximum of 64 characters	Reseller ID. For details about how to obtain such IDs, see Query Huawei Cloud Resellers . If a distributor needs to query orders of their resellers' customers, this parameter must be included. If it is not included, orders of the distributor's customers will be returned. If this parameter is not included or is left empty, it will not be used as a filter criterion. If this parameter is set to "" or null , it will be used as a filter criterion.
method	No	String	A maximum of 64 characters	Query method. oneself: Query your own orders. sub_customer: Query customer orders that are paid for by you. If this parameter is not included in the request parameters, is set to "", or is set to null , the default value oneself is used.

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/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&indirect_partner_id=646988ef4cdb3122834feswrygfd&paying_agent_id=646988ef4cdb3122834feswrygfd HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

Response

Response Parameters

Parameter	Type	Maximum Length/ Value Range	Description
error_code	String	A maximum of 20 characters	Status code. For details, see Returned Values .
error_msg	String	A maximum of 2,000 characters	Error description.
total_count	Integer	An integer greater than or equal to 0	An integer greater than or equal to 0. Number of records that match the query conditions.
order_infos	List<CustomerOrderV2>	-	Order details. For details, see Table 8-9 .

Table 8-9 CustomerOrderV2

Parameter	Type	Maximum Length	Description
order_id	String	A maximum of 64 characters	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 hws.service.type.obs .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .

Parameter	Type	Maximum Length	Description
source_type	Integer	-	Customer order source type. The value can be: • 1: Customer • 2: Agent • 3: Contract • 4: Distributor • 5: Deleted resources • 6: Supplement • 7: Compensation • 8: Auto-created NOTE Orders generated in the following scenarios are automatically created by the system: • Unsubscription orders created in the cases of subscription failed and auto unsubscription • Auto unsubscription triggered for failed hardware orders or failed subscription of combined cloud services (including hardware) • Return orders automatically created for hardware replacement • Renewal orders created during auto-renewal
status	Integer	-	Order status. The value can be: • 1: Pending approval • 2: Pending refund • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed • 10: To be shipped • 11: To be received • 12: Pending pick-up • 13: Exchange in progress

Parameter	Type	Maximum Length	Description
order_type	Integer	-	Order type. The value can be: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/monthly to pay-per-use • 11: Pay-per-use to yearly/monthly • 13: Trial • 14: Commercial use • 15: Price adjustment
official_amount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount .
amount_after_discount	Double	-	Order amount after a discount (excluding the vouchers or cards).
measure_id	Integer	-	Order amount unit. • 1: 1 Yuan/Dollar
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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 (available only after an order is successfully paid). UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <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 Table 8-10 .
enterprise_projects	List<EnterpriseProject>	-	Enterprise project details of a customer order. For details, see Table 8-12 . NOTE You can query enterprise project information for each order in batch unsubscription and renewal scenarios by order ID.
sub_order_infos	List<SubCustomerOrderV2>	-	Details of orders in a combined order. For details, see Table 8-13 . NOTE If the order being queried is a combined order, the information of the orders included in the combined order will be returned. If the order being queried is a common order, this field will be left empty.

Table 8-10 AmountInfoV2

Parameter	Type	Maximum Length	Description
discounts	List<DiscountItemV2>	-	Item For details, see Table 8-11 .
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).

Parameter	Type	Maximum Length	Description
consumed_amount	Double	-	Consumptions (only for unsubscription orders).

Table 8-11 DiscountItemV2

Parameter	Type	Maximum Length	Description
discount_type	String	A maximum of 8 characters	Discount type. • 200: Promotion product discount • 300: Promotion discount coupon • 301: Promotion coupon • 302: Promotion flexi-purchase coupon • 500: Specified discount for agent subscription • 501: Specified exemption for agent subscription • 502: Specified buy-it-now price for agent subscription • 600: Discount specified in the discount and rebate contract • 601: Discount specified in the channel frame contract • 602: Discount specified in the designated-purpose fund contract • 603: Discount specified in the directly signed offline contract • 604: Discount specified in the authorized telemarketing contract • 605: Discount specified in the commercial contract • 606: Discount specified in the channel commercial contract • 607: Partner authorized discount • 609: Discount for order price adjusting • 610: Discount amount • 700: Promotion discount • 800: Top-up account discount

Parameter	Type	Maximum Length	Description
discount_amount	Double	-	Discounted amount.

Table 8-12 EnterpriseProject

Parameter	Type	Maximum Length	Description
id	String	A maximum of 256 characters	Enterprise project ID.
name	String	A maximum of 256 characters	Enterprise project name.

Table 8-13 SubCustomerOrderV2

Parameter	Type	Maximum Length	Description
order_id	String	A maximum of 64 characters	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 hws.service.type.obs .

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 Elastic Cloud Server .

Parameter	Type	Maximum Length	Description
source_type	Integer	-	Customer order source type. The value can be: • 1. Customer • 2. Agent • 3: Contract • 4: Distributor • 5: Deleted resources • 6: Supplement • 7: Compensation • 8: Auto-created NOTE Orders generated in the following scenarios are automatically created by the system: • Unsubscription orders created in the cases of subscription failed and auto unsubscription • Auto unsubscription triggered for failed hardware orders or failed subscription of combined cloud services (including hardware) • Return orders automatically created for hardware replacement • Renewal orders created during auto-renewal

Parameter	Type	Maximum Length	Description
status	Integer	-	Order status. The value can be: • 1: Pending approval • 2: Pending refund • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed • 10: To be shipped • 11: To be received • 12: Pending pick-up • 13: Exchange in progress
order_type	Integer	-	Order type. The value can be: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/ monthly to pay-per-use • 11: Pay-per-use to yearly/ monthly • 13: Trial • 14: Commercial use • 15: Price adjustment

Parameter	Type	Maximum Length	Description
official_amount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount .
amount_after_discount	Double	-	Order amount after a discount (excluding the vouchers or cards).
measure_id	Integer	-	Order amount unit. 1: 1 Yuan/ Dollar
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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 (available only after an order is successfully paid). UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0–23, and the range of <i>mm</i> and <i>ss</i> is 0–59.

Parameter	Type	Maximum Length	Description
currency	String	A maximum of 4 characters	Currency code.
contract_id	String	A maximum of 64 characters	Contract ID.
amount_info	AmountInfoV2 Object	-	Order deduction details. For details, see Table 8-10 .
enterprise_projects	List<EnterpriseProject>	-	Enterprise project details of a customer order. For details, see Table 8-12 . NOTE You can query enterprise project information for each order in batch unsubscription and renewal scenarios by order ID.

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": "CS2405161952CE7IU5QmodifyJobAndPartFailJob",
    "customer_id": "0c7fd9bdfb80d4170fb1c0056128d420",
    "service_type_code": "hws.service.type.ec2",
    "service_type_name": "Elastic Cloud Server"
    "source_type": 1,
    "status": 5,
    "order_type": 1,
    "amount_after_discount": 274.6,
    "official_amount": 349.5,
    "measure_id": 1,
    "create_time": "2024-05-16T11:52:10Z",
    "payment_time": "2024-05-16T12:18:35Z",
    "currency": "USD",
    "contract_id": null,
    "amount_info": {
      "discounts": [
        {
          "discount_type": "700",
          "discount_amount": 69.9
        },
        {
          "discount_type": "301",
```



```
        "discount_amount": 5.0
      }
    ],
    "flexipurchase_coupon_amount": 0.0,
    "coupon_amount": 5.0,
    "stored_card_amount": 0.0,
    "commission_amount": null,
    "consumed_amount": null
  },
  "enterprise_projects": [
    {
      "id": "0",
      "name": "default"
    }
  ],
  "sub_order_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.0101	Invalid parameter.
400	CBC.99000037	You do not have the permission to operate this reseller.
403	CBC.0155	Request denied. The possible causes are as follows: The account authentication information is incorrect. The account or member account does not have the permission to call the API.
500	CBC.0999	Other errors.

8.3.2 Querying Order Details

Function

Customers can view order details on the partner sales platform.

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

 NOTE

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

Constraints

This API can be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor, or the AK/SK or token of a customer.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

The following table describes the parameters.

Table 8-14 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 8-15 Request parameters

Parameter	Mandatory	Value Range	Description
offset	No	0 to a maximum integer	Offset, which starts from 0. The default value is 0. If this parameter is not included in the request parameters, is set to "", or is set to null, the default value 0 is used. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	1 to 100	Number of records displayed per page. The default value is 10. If this parameter is not included in the request parameters, is set to "", or is set to null, the default value 10 is used.
indirect_partner_id	No	A maximum of 64 characters	Reseller ID. For details about how to obtain such IDs, see Query Huawei Cloud Resellers. This parameter is mandatory only when a distributor queries order details of customers associated with its resellers. Otherwise, the order details of the distributor's own customers will be queried.

Table 8-16 Message header parameter

Parameter	Mandatory	Type	Value Range	Description
X-Language	No	String	A maximum of 10 characters	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/orders/customer-orders/details/CS19040119281JMYC?limit=10&offset=0&indirect_partner_id=c9e731c4663646988ef4cdb3122837b6 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	Status code. For details, see Returned Values .
error_msg	String	A maximum of 2,000 characters	Error description.
order_info	Customer OrderEntityV2 Object	-	Order details. For details, see Table 8-17 .
total_count	Integer	-	Order item ID array.
order_line_items	List<OrderLineItemEntityV2>	-	ID of the primary order item mapping the order item. For details, see Table 8-18 .

Table 8-17 CustomerOrderEntityV2

Parameter	Type	Maximum Length	Description
order_id	String	A maximum of 64 characters	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 hws.service.type.obs .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
source_type	Integer	-	Customer order source type. The value can be: • 1. Customer • 2. Agent • 3: Contract • 4: Distributor • 5: Deleted resources • 6: Supplement • 7: Compensation • 8: Auto-created NOTE Orders generated in the following scenarios are automatically created by the system: • Unsubscription orders created in the cases of subscription failed and auto unsubscription • Auto unsubscription triggered for failed hardware orders or failed subscription of combined cloud services (including hardware) • Return orders automatically created for hardware replacement • Renewal orders created during auto-renewal

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

Parameter	Type	Maximum Length	Description
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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 2019-05-06T08:05:01Z 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 Table 8-20 .
currency	String	A maximum of 4 characters	Currency code.
contract_id	String	A maximum of 64 characters	Contract ID.
user_name	String	A maximum of 64 characters	Order creator name • If the order is placed by the customer, the login name of the operator who places the order is returned. • If the order is placed by the operation personnel at the background, Operation personnel is returned. • If the order is automatically placed by the operation system, Operation system is returned.

Parameter	Type	Maximum Length	Description
pending_payment_end_time	String	A maximum of 20 characters	Payment end time of an unpaid order. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0–23, and the range of <i>mm</i> and <i>ss</i> is 0–59. NOTE A specific value is returned only when the order is in the pending payment state. For other order statuses, the value is null.
sub_order_infos	List<SubCustomerOrderEntityV2>	-	Details of orders in a combined order. For details, see Table 8-22. NOTE If the order being queried is a combined order, the information of the orders included in the combined order will be returned. If the order being queried is a common order, this field will be left empty.

Table 8-18 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 hws.service.type.obs .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
product_id	String	A maximum of 64 characters	Product ID.
product_spec_desc	String	A maximum of 512 characters	Product specification description.

Parameter	Type	Value Range	Description
period_type	Integer	-	Period type. The options are as follows: • 0: Day • 1: Week • 2: Month • 3: Year • 4: Hour • 5: One-off • 6: Pay-per-use (reserved) • 7: By usage report (reserved)
period_num	Integer	-	Number of periods. NOTE The value of this parameter is null for an unsubscription order.
effective_time	String	A maximum of 20 characters	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
expire_time	String	A maximum of 20 characters	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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). In the unsubscription order, the amount is the refund amount after the handling fee is deducted.
official_amount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount .
amount_info	AmountInfoV2 Object	-	Order deduction details. For details, see Table 8-20 .

Parameter	Type	Value Range	Description
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 hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
commercial_resource	string	A maximum of 64 characters	Type code of a commercial resource. Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .
base_product_info	BaseProductInfo Object	--	Product information in the order line before the change. For details, see Table 8-19 . NOTE A specific value is returned only when the order_type is set to Change . For other order types, the value is null .
order_id	String	A maximum of 64 characters	Order ID.

Table 8-19 BaseProductInfo

Parameter	Type	Maximum Length	Description
product_id	String	A maximum of 64 characters	Product ID.

Parameter	Type	Maximum Length	Description
product_spec_desc	String	A maximum of 512 characters	Product specification description.
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 hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
commercial_resource	string	A maximum of 64 characters	Type code of a commercial resource. Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .

Table 8-20 AmountInfoV2

Parameter	Type	Value Range	Description
discounts	List<DiscountItemV2>	-	Fee item. For details, see Table 8-21 .
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 8-21 DiscountItemV2

Parameter	Type	Maximum Length	Description
discount_type	String	A maximum of 8 characters	Discount type. • 200: Promotion product discount • 300: Promotion discount coupon • 301: Promotion coupon • 302: Promotion flexi-purchase coupon • 500: Specified discount for agent subscription • 501: Specified exemption for agent subscription • 502: Specified buy-it-now price for agent subscription • 600: Discount specified in the discount and rebate contract • 601: Discount specified in the channel frame contract • 602: Discount specified in the designated-purpose fund contract • 603: Discount specified in the directly signed offline contract • 604: Discount specified in the authorized telemarketing contract • 605: Discount specified in the commercial contract • 606: Discount specified in the channel commercial contract • 607: Partner authorized discount • 609: Discount for order price adjusting • 610: Discount amount • 700: Promotion discount • 800: Top-up account discount
discount_amount	Double	-	Discounted amount.

Table 8-22 SubCustomerOrderEntityV2

Parameter	Type	Maximum Length	Description
order_id	String	A maximum of 64 characters	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 hws.service.type.obs .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .

Parameter	Type	Maximum Length	Description
source_type	Integer	-	Customer order source type. The value can be: • 1. Customer • 2. Agent • 3: Contract • 4: Distributor • 5: Deleted resources • 6: Supplement • 7: Compensation • 8: Auto-created NOTE Orders generated in the following scenarios are automatically created by the system: • Unsubscription orders created in the cases of subscription failed and auto unsubscription • Auto unsubscription triggered for failed hardware orders or failed subscription of combined cloud services (including hardware) • Return orders automatically created for hardware replacement • Renewal orders created during auto-renewal

Parameter	Type	Maximum Length	Description
status	Integer	-	Order status. The value can be: • 1: Pending approval • 2: Pending refund • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed • 10: To be shipped • 11: To be received • 12: Pending pick-up • 13: Exchange in progress
order_type	Integer	-	Order type. The value can be: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/ monthly to pay-per-use • 11: Pay-per-use to yearly/ monthly • 13: Trial • 14: Commercial use • 15: Price adjustment

Parameter	Type	Maximum Length	Description
official_amount	Double	-	Order amount (list price). In the unsubscription order, this amount equals the value of amount_after_discount .
amount_after_discount	Double	-	Order amount after a discount (excluding the vouchers or cards). In the unsubscription order, the amount is the refund amount after the handling fee is deducted.
measure_id	Integer	-	Order amount unit. ● 1: 1 Yuan/ Dollar
create_time	String	A maximum of 20 characters	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <i>HH</i> is 0–23, and the range of <i>mm</i> and <i>ss</i> is 0–59.

Parameter	Type	Maximum Length	Description
payment_time	String	A maximum of 20 characters	Payment time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z The range of <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 Table 8-20 .
currency	String	A maximum of 4 characters	Currency code.
contract_id	String	A maximum of 64 characters	Contract ID.

Parameter	Type	Maximum Length	Description
user_name	String	A maximum of 64 characters	Order creator name • If the order is placed by the customer, the login name of the operator who places the order is returned. • If the order is placed by the operation personnel at the background, Operation personnel is returned. • If the order is automatically placed by the operation system, Operation system is returned.

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

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",
    "pending_payment_end_time": "2024-11-14T15:59:59Z",
    "sub_order_infos": []
  },
}
```

```

"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 IO|40.0GB",
    "period_type": 3,
    "period_num": null,
    "effective_time": "2018-12-21T19:21:03Z",
    "expire_time": "2019-12-22T15:59:59Z",
    "subscription_num": 1,
    "amount_after_discount": -33.12,
    "official_amount": -33.12,
    "amount_info": {
      "discounts": [],
      "flexipurchase_coupon_amount": null,
      "coupon_amount": null,
      "stored_card_amount": null,
      "commission_amount": 3.68,
      "consumed_amount": 0.0
    },
    "currency": "USD",
    "category_code": "hws.resource.storage1.evs",
    "product_owner_service": null,
    "commercial_resource": null,
    "base_product_info": null,
    "order_id": null
  },
  {
    "order_line_item_id": "CS18122203217MRPB-000002",
    "service_type_code": "hws.service.type.ec2",
    "product_id": "00301-02019-0--1",
    "product_spec_desc": "General Computing | s2.medium.4 | 1 vCPU| 4 GB | 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,
    "base_product_info": {
      "product_id": "00301-238595-0--0",
      "product_spec_desc": "General computing | s3.small.1 | 1 vCPU| 1 GB | Linux",
      "category_code": "hws.resource.computing.ecs",
      "product_owner_service": "hws.service.type.ec2",
      "commercial_resource": null
    },
    "order_id": "S1812*****RBP"
  }
]

```

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

8.3.3 Paying Yearly/Monthly Product Orders

Function

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

Customers can follow the instructions described in [Payment](#) to pay yearly/monthly product orders in the pending payment status in Billing Center.

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 discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field **simultaneousUseWithContractDiscount** with a value of **0**, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field **minConsumeDiscount** and the values of **discount_ratio** for all the order items are less than the value of **minConsumeDiscount**, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field **simultaneousUseWithPromotionDiscount** with a value of **0**, the discount and coupon cannot be used at the same time.
- When this API is invoked by a unified accounting member, if their enterprise master account has coupons available for the orders, the coupons are automatically applied without the need to include coupon IDs in a request.
- If a unified accounting member calls this API for manual payment, an order will be generated. The enterprise master account can access Billing Center, find this order in **Orders**, and pay for the order.
- If a unified accounting member calls this API for auto payment, the order will be automatically paid by the enterprise master account. If the API fails to be called due to reasons such as insufficient balance in the master account, an order will be generated. The enterprise master account can then access Billing Center, find this order in **Orders**, and pay for the order again.

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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 order_id value in the response message of invoking the API described in 8.3.1 Querying Orders or the order_ids value in the response message of API described in 8.4.2 Renewing Subscription to Yearly/Monthly Resources .
use_coupon	Yes	String	[YES NO]	Whether coupons are used for order payment. If this parameter is set to YES , the coupon_infos field is mandatory. If this parameter is set to NO , the value of coupon_infos is ignored. • YES: indicates that the coupons are used for payment. • NO: indicates that the coupons are not used for payment.
use_discount	Yes	String	[YES NO]	Whether a discount is used for the order payment. If this parameter is set to YES , the discount_infos field is mandatory. If this parameter is set to NO , the value of discount_infos is ignored. • YES: indicates that the discount is used for payment. • NO: indicates that the discount is not used for payment.

Parameter	Mandatory	Type	Maximum Length of Characters	Description
coupon_infos	No	List<CouponSimpleInfo>	A maximum of 3 IDs are supported.	For details, see Table 8-23. This parameter is reserved. If use_coupon is set to YES, this parameter is mandatory. If use_coupon is set to NO, this parameter can be left empty. Otherwise, a message indicating parameter error is displayed. CAUTION When this API is invoked by a unified accounting member, if their enterprise master account has coupons available for the orders, the coupons are automatically applied without the need to include coupon IDs in a request.
discount_infos	No	List<DiscountSimpleInfo>	Only one discount ID is allowed.	For details, see Table 8-24. Discount ID list. If use_discount is set to YES, this parameter is mandatory. If use_discount is set to NO, this parameter can be left empty. Otherwise, a message indicating parameter error is displayed.

Table 8-23 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. • 300: Discount coupon (reserved) • 301: Promotion coupon • 302: Promotion flexi-purchase coupon (reserved) • 303: Promotion stored-value card (reserved)

Table 8-24 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. • 0: promotion discount • • 2: commercial discount • 3: discount granted by a partner

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v3/orders/customer-orders/pay HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...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 of 10 characters	Error code. For details, see Returned Values .
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 Table 8-25 . This parameter is valid only when error_code is set to CBC.99003141 . - If the quota is insufficient, notify the customer to submit a service ticket on the HUAWEI CLOUD official website to increase the quota and then pay the order. - If the capacity is insufficient, notify the customer to place an order again. - If the specifications have changed, notify the customer to place an order again.

Parameter	Type	Maximum Length of Characters	Description
enterprise_project_auth_result	List<EnterpriseProject>	-	Information about the enterprise project whose fund is insufficient. For details, see Table 8-26 . This parameter is valid only when error_code is set to CBC.99003155 .

Table 8-25 QuotaInfo

Parameter	Type	Description
region	String	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs .
resource_type_code	String	Resource type code. For example, the resource type code of VM is hws.resource.type.vm . The relationship between ResourceType and CloudServiceType is as follows: A resource type represents a resource contained in the cloud service type, and the cloud service type is a combination of multiple resource types.
resource_spec_code	String	Resource specifications of the subscribed cloud service products. For example, the resource specification of a small-scale VM is s2.small.1.linux .
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
resource_type_name	String	Resource type. For example, the resource type of ECS is Cloud Host .

Parameter	Type	Description
auth_result	Integer	Verification result of the change of the cloud service quota, capacity, or specifications. • 1: The quota is insufficient. • 2: The capacity is insufficient. • 3: The resource specifications are incorrect. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order. • 4: The associated resource information is incorrect. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order. • 99: Other errors. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order.
available_zone	String	AZ ID. For details, see the AZ names of regions listed on the Regions and Endpoints , for example, cn-north-1a .

Table 8-26 EnterpriseProject

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project where an order belongs. • 0: ID of a default project • -1 or null: Non-project ID
enterprise_project_name	String	Enterprise project name.
auth_status	Integer	Verification result of the enterprise project's fund quota. 10: Insufficient fund quota/Invalid project 11: The organization budget quota is insufficient.

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.
400	CBC.30000010	Operation not allowed because the order is invalid or does not exist.
400	CBC.99003106	The order status has changed and no payment can be made.
400	CBC.99003108	This discount cannot be used for this order.
400	CBC.99003110	The order has not been paid before the expiration time. Please re-submit the order.
400	CBC.99003112	The coupon or stored-value card has been used.
400	CBC.99003116	The restriction to selected coupon regulates that the coupon cannot be used with the discount at the same time.
400	CBC.99003117	The selected discount is less than the minimum discount rate configured for the selected coupon. Note: For example, if the minimum discount rate configured for a coupon is 90% and the selected discount is less than 90% in all order lines, the discount cannot be used.
400	CBC.99003141	The cloud service quota or capacity is insufficient, or the resource specifications have changed.
400	CBC.99003143	The product in this order is no longer available.
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.

HTTP Status Code	Error Code	Description
400	CBC.99005003	Insufficient balance.
400	CBC.99005036	Payment via API not allowed for this customer. (Payment by balance and monthly-settled payment are not allowed.)
400	CBC.99006093	Failed to obtain the tax rate.
400	CBC.7281	Renewal, unsubscription, or payment not supported. Your account has been frozen.
400	CBC.99008040	Too many attempts.
500	CBC.0999	Other errors.
400	CBC.99000088	Your payment is being processed.
400	CBC.99000089	Operation failed. Sub-orders of a combine order cannot be processed independently.
400	CBC.99008056	The maximum number of transactions allowed today has been reached.

8.3.4 Canceling Orders in the Pending Payment Status

Function

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

Customers can follow the instructions described in [Cancellation](#) to cancel yearly/monthly product orders in the pending payment status in Billing Center.

NOTE

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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 order_id in the response of the API described in 8.3.1 Querying Orders .

Example Request

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

Response

Response Parameters

Table 8-27 Response parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 10 characters	Status code. For details, see Returned Values .
error_msg	String	A maximum of 256 characters	Error description.

Example Response

```
HTTP/1.1 204 No Content
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
```

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

8.3.5 Querying the Amount of Unsubscription Orders

Function

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

NOTE

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

Constraints

This API can be invoked using the token of a cloud solution provider or a distributor. Before using their token to invoke this API, they need to [request authorization from the customer](#) or [ask the customer to create an agency for them](#).

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

Table 8-28 Request 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-intl.myhuaweicloud.com/v2/orders/customer-orders/refund-orders?
order_id=CS1904190917GIBHC 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 Status Code .
error_msg	String	Error description.
total_count	Integer	Total queries.
refund_info	List<OrderRefundInfoV2>	Resource list. For details, see Table 8-29 .

Table 8-29 OrderRefundInfoV2

Parameter	Type	Description
id	String	Record ID.

Parameter	Type	Description
amount	BigDecimal	Amount. - A negative number indicates the unsubscription amount. - A positive number indicates the handling fee for unsubscription.
measure_id	String	Fee unit. 1: 1 Yuan/Dollar
customer_id	String	Customer account ID.
resource_type_code	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm .
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs .
resource_type_name	String	Resource type. For example, the resource type of ECS is Cloud Host .
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
region_code	String	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
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": "ap-southeast-1",
      "base_order_id": "CS2006*****1F8CJ"
    }
  ]
}
```

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.

8.4 Managing Yearly/Monthly Resources

8.4.1 Querying Customer's Yearly/Monthly Resources

Function

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

NOTE

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

Constraints

- This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.
- This API queries resources successfully provisioned only.
- If a parameter is set to **null**, is set to an empty JSON array, or is set to "", the specified number of resources of the current account will be returned. The number of resources is specified by the **limit** parameter, and the default value is **10**.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/orders/subscriptions/resources/query

Request

Request Parameters

Table 8-30 Request parameters

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

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

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

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 hws.service.type.obs . You can call the 4.1.1 Querying Cloud Service Types API to query the type of a cloud service. If this parameter is not included or is set to null , it will not be used as a filter criterion. This parameter cannot be set to an empty string. There will be parameter verification.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/orders/subscriptions/resources/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "resource_ids":[
    "0A063A*****BC8548E65D0089A905"
  ],
  "order_id":"CS1905251035OA***",
  "only_main_resource":1,
  "status_list":[
    2
  ],
  "offset":0,
  "limit":10,
  "expire_time_begin":"2021-09-01T08:05:01Z",
  "expire_time_end":"2021-09-03T08:05:01Z",
  "service_type_code": "hws.service.type.obs"
}
```

Response

Response Parameters

Parameter	Type	Description
error_code	String	Error code. For details, see Returned Values .
error_msg	String	Error description.
data	List<OrderInstanceV2>	Resource list. For details, see Table 8-31 .
total_count	Integer	Total number of records

Table 8-31 OrderInstanceV2

Parameter	Type	Description
id	String	Internal ID of the resource to be provisioned. The ID generated after the resource is provisioned is resource_id .
resource_id	String	Resource ID.
resource_name	String	Resource instance name.
region_code	String	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs .
resource_type_code	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm .
resource_spec_code	String	Specification of a cloud service resource. For example, a VM resource specification is s2.small.1.linux (.win or .linux should be added at the end of the specification).
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
resource_type_name	String	Resource type. For example, the resource type of ECS is Cloud Host .
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. 0: Attached resource 1: Primary resource
status	Integer	Resource status. 2: Provisioned 3: Closed (not visible to customers) 4: Frozen 5: Expired
effective_time	String	Effective time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
expire_time	String	Expiration time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z
expire_policy	Integer	Billing policy after a resource expires. 0: Entering the grace period upon expiration 1: Yearly/monthly to pay-per-use 2: Automatically deleted upon expiration (directly deleted from resources that take effect) 3: Automatically renewed upon expiration 4: Automatically frozen upon expiration 5: Automatically deleted upon expiration (deleted from resources in the retention period) NOTE Only 3 indicates that the resource is automatically renewed. In other cases, the expiration policy for non-automatic renewal is used.
product_spec_desc	String	A maximum of 512 characters allowed. Product specification description.
spec_size	BigDecimal	Product size, which is available only for linear products. NOTE Linear products are those whose size must be specified during a subscription. For example, you can select 10 GB or 20 GB during a disk subscription.

Parameter	Type	Description
spec_size_measure_id	Integer	Product size unit, which is available only for linear products. Call the API in 4.1.5 Querying Measurement Units to obtain the value.
update_time	String	Time when the resource was updated. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z NOTE In transaction scenarios, for example, provisioning, unsubscription, and change, resources are updated, and the update time changes. In other non-transaction scenarios, such as starting and stopping a machine, the update time does not change.
enterprise_project	EnterpriseProject Object	Enterprise project details of a customer resource. For details, see Table 8-32 .

Table 8-32 EnterpriseProject

Parameter	Type	Maximum Length	Description
id	String	A maximum of 256 characters	Enterprise project ID.
name	String	A maximum of 256 characters	Enterprise project name.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "data": [
    {
      "id": "01154-674800049-0",
```

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

Returned Values

NOTE

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

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

8.4.2 Renewing Subscription to Yearly/Monthly Resources

Function

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

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

Customers can follow the instructions described in [Manually Renewing a Resource](#) to renew the subscription to the yearly/monthly resources in Billing Center.

NOTE

- If a primary resource has resources attached, the system renews the subscription to both the primary resource and its attached ones after this API is invoked. You can invoke [8.4.1 Querying Customer's Yearly/Monthly Resources](#) to obtain the details of the attached resources.
- If a newly purchased EVS disk is attached to an ECS, but this disk is not the attached to any of the ECS primary resources, you must invoke [8.4.1 Querying Customer's Yearly/Monthly Resources](#) to obtain the details of the ECS primary resources and its attached ones.
- This API supports automatic payment. For details about how to use discounts or coupons during payment, see [13.7 Support for Discounts or Coupons](#).
-

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used. Currently, cloud solution providers and distributors are unable to purchase products directly, which means they do not have yearly/monthly products.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/orders/subscriptions/resources/renew

Request

Request Parameters

Parameter	Mandatory	Type	Description
resource_ids	Yes	List<String>	Definition: Resource IDs. Constraints: Only the primary resource ID is supported. A maximum of 10 resource IDs can be configured. To determine the primary resources, query is_main_resource in the response of the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources. Range: 1 to 10 Default Value: N/A
period_type	Yes	Integer	Definition: Period type. Constraints: N/A Range: • 2: month • 3: year Default Value: N/A
period_num	Yes	Integer	Definition: Number of periods. Constraints: • Month: 1 to 11 • Year: 1 to 3 Range: [1-11] Default Value: N/A

Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	Definition: Whether enable automatic payment. Constraints: N/A Range: 0: No 1: Yes Default Value: If this parameter is not included or is set to null , the default value 0 is used, indicating not to enable the automatic payment.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/orders/subscriptions/resources/renew HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "resource_ids": [
    "96308d5efd7841b9a4dac673d84d0e14"
  ],
  "period_type": 2,
  "period_num": 1,
  "is_auto_pay": 0
}
```

Response

Response Parameters

Status code: 200

Table 8-33 Response body parameters

Parameter	Type	Description
order_ids	List<String>	Definition: List of order IDs generated when resource subscription is renewed.
fail_resource_infos	List<FailResourceInfo>	Definition: List of resources that failed to be renewed. This parameter has a value only when there are resources that fail to be renewed. For details, see Table 8-34 . This parameter is reserved.

Table 8-34 FailResourceInfo

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

Status code: 400

Table 8-35 Response body parameters

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

Example Response

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

Returned Values

NOTE

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

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.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.

8.4.3 Unsubscribing from Yearly/Monthly Resources

Function

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

Customers can follow the instructions described in [Unsubscription](#) to unsubscribe from the yearly/monthly resources in Billing Center.

NOTE

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used. Currently, cloud solution providers and distributors are unable to purchase products directly, which means they do not have yearly/monthly products.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v2/orders/subscriptions/resources/unsubscribe

Request

Request Parameters

Parameter	Mandatory	Type	Description
resource_ids	Yes	List<String>	Definition: Resource IDs. Constraints: Up to 10 resource IDs can be entered at a time. Only IDs of primary resources and child resources that are attached to primary resources are supported. The parent resource ID is required in whole-set sales scenarios. Determine whether a resource is a primary resource based on is_main_resource in the response of the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources. Range: 1 to 10 Default Value: N/A
unsubscribe_type	Yes	Integer	Definition: Unsubscription type. Constraints: N/A Range: • 1: Unsubscribe from the resource and its renewal periods. • 2: Unsubscribe from only the resource renewal periods. Default Value: N/A

Parameter	Mandatory	Type	Description
unsubscribe_reason_type	No	Integer	Definition: Unsubscription reason category. Constraints: N/A Range: • 1: The product is of poor usability. • 2: The product functions cannot meet the requirements. • 3: Customers do not know how to use the product, or the product operations are complex. • 4: Customers are not satisfied with the service. • 5: Others Default Value: N/A
unsubscribe_reason	No	String	Definition: Unsubscription reason, which is generally specified by the customer. Constraints: N/A Range: A maximum of 512 characters Default Value: N/A

Example Request

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

Response

Response Parameters

Parameter	Type	Description
error_code	String	Definition: Status code. For details, see Returned Values .
error_msg	String	Definition: Error description.
order_ids	List<String>	Definition: Unsubscription order IDs.
fail_resource_infos	List<FailResourceInfo>	Definition: List of resources that failed to be unsubscribed from. This parameter has a value only when there are resources that fail to be unsubscribed from. For details, see #api_order_00019_mMcCpPsS_table1730013753_12 . This parameter is reserved.

Table FailResourceInfo

Parameter	Type	Description
error_code	String	Definition: Status code. For details, see Returned Values . This parameter is reserved.
error_msg	String	Definition: Error description. This parameter is reserved.
resource_id	String	Definition: 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.30000053	Unsubscription not supported. The billing mode of the resource is Savings Plans.
400	CBC.30000067	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.
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.99003650	Unsubscription not supported for this cloud service in KooGallery.
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.

HTTP Value	Error Code	Description
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.

8.4.4 Enabling Automatic Subscription Renewal for Yearly/Monthly Resources

Function

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

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

NOTE

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

The following table describes the parameters.

Table 8-36 Path parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Definition: Resource ID. Constraints: You can obtain the resource ID by invoking the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources. The attached resource IDs will be configured together when you configure primary resource IDs. • For example, ECS is the primary resource, and EVS is the attached resource. • If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource. • If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource. If automatic renewal is enabled for the secondary resource, the primary resource will also be renewed. Range: A maximum of 64 characters Default Value: N/A

Request

Request Parameters

Parameter	Mandatory	Type	Description
auto_renew_times	No	Integer	Definition: Number of auto renewals. Auto renewal will end after the specified number of auto renewals is reached. Constraints: If auto-renewal is enabled for the first time, and this parameter is not included in the request parameters or is set to null, there is no limit to the number of auto renewals. If auto-renewal has been enabled, this parameter is mandatory when the number of auto renewals is reset. Otherwise, this parameter is not processed or modified. Range: [0-99] NOTE The value 0 indicates that the number of auto renewals is not limited. Default Value: N/A

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/orders/subscriptions/resources/autorenew/
eb1cac79-773b-414b-8915-6c3eed8ddf24 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIIPAgYJKoZlHvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "auto_renew_times": 3
}
```

Response

Response Parameters

Parameter	Type	Description
error_code	String	Definition: Status code. For details, see Returned Values.
error_msg	String	Definition: 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.

8.4.5 Disabling Automatic Subscription Renewal for Yearly/Monthly Resources

Function

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

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

NOTE

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

The following table describes the parameters.

Table 8-37 Path parameters

Parameter	Mandatory	Type	Description
resource_id	Yes	String	Definition: Resource ID. Constraints: You can obtain the resource ID by invoking the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources. The attached resource IDs will be configured together when you configure primary resource IDs. - For example, ECS is the primary resource, and EVS is the attached resource. - If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource. - If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource. Range: A maximum of 64 characters Default Value: N/A

Request

Request Parameters

None

Example Request

```
DELETE https://bss-intl.myhuaweicloud.com/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	Definition: Error code. For details, see Returned Values .
error_msg	String	Definition: 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.

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

Function

A customer can change the billing mode of resources from yearly/monthly to 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 [8.4.1 Querying Customer's Yearly/Monthly Resources](#) to query the resource ID, resource expiration date, and deduction policy after the resource is expired.
- With the change from yearly/monthly to pay-per-use enabled, after a yearly/monthly package expires, you will be billed for subsequently used resources on a pay-per-use basis.
- To cancel the change from yearly/monthly to pay-per-use, you must enable the change by calling the API described in [8.4.6 Enabling/Canceling the Change from Yearly/Monthly to Pay-per-Use upon Expiration](#) or set the expiration policy to Pay-per-Use After Expiration by calling the API described in [8.4.2 Renewing Subscription to Yearly/Monthly Resources](#).

REST API

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

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. SET_UP: Enable CANCEL: Cancel
resource_ids	Yes	list<string>	[1-100]	Resource ID. You can obtain the resource ID by invoking the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources . A maximum of 100 IDs of only primary resources can be set. After this parameter is set, both the primary resource and its attached resources are changed to pay-per-use resources. This field is mandatory. You can refer to parameter is_main_resource in the response of the API described in 8.4.1 Querying Customer's Yearly/Monthly Resources to check whether the resource is primary.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/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 Returned Values .

Parameter	Type	Value Range	Description
error_msg	String	A maximum of 1,000 characters	Error 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 Table 8-38 .

Table 8-38 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 Returned Values .
error_msg	String	A maximum of 1,000 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.

8.5 Managing Resource Packages

8.5.1 Querying Resource Packages

Function

This API is used to query resource packages.

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

CAUTION

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

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

POST /v3/payments/free-resources/query

Table 8-39 Header parameter

Parameter	Mandatory	Maximum Length	Description
X-Language	No	A maximum of 8 characters	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
region_code	No	String	A maximum of 64 characters	Cloud service region code, for example, ap-southeast-1 . Obtain the value from the Region column in Regions and Endpoints . If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
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 null , 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 null , it cannot be used as a filter criterion.
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 null , 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 null , the resources not included in the enterprise project are queried.
status	No	Integer	(0, 4)	Status: ● 0: Not effective ● 1: In effect ● 2: Used up ● 3: Expired ● 4: Unsubscribed If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Maximum Length/Value Range	Description
offset	No	Integer	(0, 999999)	Offset, starting from 0. The default value is 0. NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1, the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1, the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	(1, 1000)	Number of records queried each time. The default value is 10.
service_type_code_list	No	List<String>	[0-10]	The ID of the cloud service type. The value is case-insensitive. For example, the cloud service type code of OBS is hws.service.type.obs. You can call the 4.1.1 Querying Cloud Service Types API to query the type of a cloud service. If this parameter is not included in the request, is left empty, or is set to null, it cannot be used as a filter criterion, and records that meet other search criteria are returned.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/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	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	1000	Error description. This parameter is returned only when the query failed.
free_resource_packages	List<FreeResourcePackage>	-	Resource package list. For details, see Table 8-40 .
total_count	Integer	-	Total number of records

Table 8-40 FreeResourcePackage

Parameter	Type	Maximum Length /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 source_type is 1 , this parameter is left empty. NOTE If there are renewal orders that have not taken effect, the ID of the order that has taken effect is returned.

Parameter	Type	Maximum Length/Value Range	Description
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.
enterprise_project_scope	Integer	(0, 1)	Enterprise projects for which resource packages are used: 0: All enterprise projects 1: Specific enterprise projects
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: 0: Not effective 1: In effect 2: Used up 3: Expired 4: Unsubscribed

Parameter	Type	Maximum Length /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 hws.service.type.obs .
service_type_name	String	A maximum of 200 characters	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
region_code	String	A maximum of 64 characters	Cloud service region code, for example, ap-southeast-1 . Obtain the value from the Region column in Regions and Endpoints .
source_type	Integer	(0, 1)	Source of a resource package. The options are as follows: • 0: Order • 1: Gifted by DevCloud
bundle_type	String	[ATOMIC_PKG BUNDLE_PKG]	Bundle binding type. The options are as follows: • ATOMIC_PKG: Atomic package • BUNDLE_PKG: Combined package

Parameter	Type	Maximum Length /Value Range	Description
quota_reuse_mode	Integer	(1,2)	Use model. The options are as follows: • 1: 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 quota_reuse_mode set to 1 and quota_reuse_cycle to 4, then the resource package will be reset each month (you will get 40 GB resource each month) within the year. • 2: Not resettable Indicates that the purchased resource package will not be reset. For example, if you purchase a 1-year 40 GB pay-per-use resource package with quota_reuse_mode set to 2, the resource package will not be reset, and you will get 40 GB resource within the year.
free_resources	List<FreeResource>	-	For details about resource items (ID-specific) in a resource package, see Table 8-41 .

Table 8-41 FreeResource

Parameter	Type	Maximum Length /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	Maximum Length/Value Range	Description
usage_type_name	String	A maximum of 1,024 characters	Usage type name.
amount	String	A maximum of 32 characters	Remaining resource quota of a package whose quota_reuse_mode is Resettable , 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 quota_reuse_mode is Resettable , that is, the total resource quota in each reset period.
measure_id	Integer	-	Measurement unit of the quota of a free resource package. You call the API in 4.1.5 Querying Measurement Units to obtain the value.

Example Response

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

```
{
  "original_amount": 100,
  "measure_id": 34
}
```

Returned Values

NOTE

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

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

8.5.2 Viewing Resource Package Usage

Function

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

CAUTION

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

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

Table 8-42 Header parameter

Parameter	Mandatory	Description
X-Language	No	Definition: Language. Constraints: N/A Range: - zh_CN: Chinese - en_US: English Default Value: en_US

Request

Request Parameters

Parameter	Mandatory	Type	Description
free_resource_ids	Yes	List<string>	Definition: List of resource item IDs. Each ID contains a maximum of 64 bytes. Resource ID. A resource package contains multiple resources, and a resource has a usage type. The resource ID is obtained from the response of the API in 8.5.1 Querying Resource Packages . Constraints: N/A Range: [1-100] Default Value: N/A

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v2/payments/free-resources/usages/details/query HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "free_resource_ids": [
    "d4463497-991b-439d-9ab6-23f9ed197fe9"
  ]
}
```

```
    ]  
  }
```

Response

Response Parameters

Parameter	Type	Description
error_code	String	Definition: Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	Definition: Error description. This parameter is returned only when the query failed.
free_resources	List<FreeResourceDetail>	Definition: Resource information (resource details) in a resource package. For details, see Table 8-43 .

Table 8-43 FreeResourceDetail

Parameter	Type	Description
free_resource_id	String	Definition: Resource ID. A resource package contains multiple resources, and a resource has a usage type. NOTE If there are renewed resources that have not taken effect, the ID of the resource that has taken effect is returned. Range: A maximum of 64 characters
free_resource_type_name	String	Definition: Resource type name.
quota_reuse_cycle	Integer	Definition: Reset period. This parameter is valid only when quota_reuse_mode is set to 1 (Resettable). 1: Hour 2: Day 3: Week 4: Month 5: Year

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

Parameter	Type	Description
original_amount	BigDecimal	Definition: Original resource quota of a package whose quota_reuse_mode is Resettable , that is, the total resource quota in each reset period.
measure_id	Integer	Definition: Measurement unit of the quota of a free resource package. Call the API in 4.1.5 Querying Measurement Units to obtain the value.

Example Response

```
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.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

8.5.3 Querying Resource Package Usage Details

Function

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

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

Debugging

You can debug this API in [API Explorer](#). Automatic authentication is supported. API Explorer can automatically generate and debug example SDK code.

URI

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

Table 8-44 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 8.5.1 Querying Resource Packages . If this parameter is not included or is left empty, it will not be used as a filter criterion.
product_id	No	String	A maximum of 64 characters	Product ID, that is, resource package ID. If this parameter is not included or is left empty, it cannot be used as a filter criterion.
resource_type_code	No	String	A maximum of 64 characters	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types . If this parameter is not included or is left empty, it will not be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
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). NOTE The gap between the start time and end time must be less than or equal to 90 days.
offset	No	Integer	0 to a maximum integer	Offset, starting from 0 . The default value is 0 . NOTE This parameter is used for pagination. Retain its default value 0 if pagination is not required. offset indicates the offset relative to the first data record among all that meets the conditions configured. If you set offset to 1 , the second and subsequent data records are returned. For example, if there are 10 records that meet query conditions, when you set limit to 10 and offset to 1 , the second to the tenth records are returned. If there are 20 records that meet query conditions, when you set offset to 0 and limit to 10 for the first page and set offset to 10 and limit to 10 for the second page, then each page will respectively have 10 records.
limit	No	Integer	[1-1000]	Maximum number of records in each query. The default value is 10 .

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/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: MIIPAgYJKoZlIhvcNAQcCo...ggg1BBIINPXsidG9rZ

Response

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	20	Error code. For details, see Returned Values . This parameter is returned only when the query failed.
error_msg	String	1000	Error description. This parameter is returned only when the query failed.
free_resource_records	List<FreeResourceRecord>	Maximum number : 1000	Resource package usage details. For details, see Table 8-45 .
total_count	Integer	-	Total number of records that meet the conditions.

Table 8-45 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.
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.

Parameter	Type	Value Range	Description
resource_type_code	String	A maximum of 64 characters	Resource type code. For example, the resource type code of VM is hws.resource.type.vm .
resource_type_name	String	A maximum of 200 characters	Resource type. For example, the resource type of ECS is Cloud Host .
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.
usage_type_code	String	A maximum of 64 characters	Usage type
available_amount	String	A maximum of 64 characters	Available resources before deduction

Parameter	Type	Value Range	Description
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 4.1.5 Querying Measurement Units 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.

8.6 Managing Pay-Per-Use Resources

8.6.1 Querying Customer's Pay-Per-Use Resources

Function

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

Constraints

- This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.
- The data obtained using this API is for reference only because it has a delay, and the delay for each cloud service is different.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

Table 8-46 Header parameter

Parameter	Mandatory	Value Range	Description
X-Language	No	A maximum of 8 characters	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customer_id	Yes	String	A maximum of 64 characters	Customer account ID. You can call the API described in 5.3.1 Querying Customers to obtain the account ID of a customer associated in the reseller model.
region_code	No	String	A maximum of 64 characters	Cloud service region code, for example, ap-southeast-1 . Obtain the value from the Region column in Regions and Endpoints . If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.
service_type_code	No	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types . If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
resource_ids	No	List<String>	A maximum of 50 IDs	Uses IDs to query resources in a batch. It is used to query the resources corresponding to specified resource IDs. A maximum of 50 IDs can be transferred at the same time. If this parameter is not included in the request parameters, is left empty, or is set to null, it cannot be used as a filter criterion.
effective_time_begin	No	String	A maximum of 20 characters	Start time of the validity period. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of <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, is set to "", or is set to null, it cannot be used as a filter criterion.
effective_time_end	No	String	A maximum of 20 characters	End time of the validity period. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z. The range of <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, is set to "", or is set to null, it cannot be used as a filter criterion.

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

Example Request

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

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

Response

Response Parameters

Parameter	Type	Description
error_code	String	Status code. For details, see Returned Values .
error_msg	String	Error description.
resources	List<CustomerResourceV2>	Customer resources. For details, see Table 8-47 .
total_count	Integer	Total number of query records.

Table 8-47 CustomerResourceV2

Parameter	Type	Description
customer_id	String	Customer account ID.
region_code	String	Cloud service region code, for example, ap-southeast-1 . Obtain the value from the Region column in Regions and Endpoints .
availability_zone_code	String	AZ code.
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs .

Parameter	Type	Description
resource_type_code	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm .
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
resource_type_name	String	Resource type. For example, the resource type of ECS is Cloud Host .
resource_id	String	Resource ID.
resource_name	String	Resource instance name.
effective_time	String	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
expire_time	String	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, such as 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
status	Integer	Resource status. • 1: Normal (provisioned) • 2: Grace period • 3: Freezing • 4: Changing • 5: Canceling • 6: Canceled
resource_spec_code	String	Specification of a cloud service resource. For example, a VM resource specification is s2.small.1.linux (.win or .linux should be added at the end of the specification).

Parameter	Type	Description
resource_info	String	Capacity of pay-per-use resources. The value is in "resourceInfo": "{\"specSize\":40.0}" format.
product_spec_desc	String	Product specification description. Example: - ECS: General computing-plus c6.2xlarge.4 8 vCPUs 32 GB Linux - Disk: EVS_SATA_LXH01 40.0 GB

Example Response

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

Returned Values

NOTE

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

HTTP Value	Error Code	Description
400	CBC.0100	Parameter error.
400	CBC.99000000	You do not have the operation permission to the customer.

HTTP Value	Error Code	Description
400	CBC.99000035	You are not a customer of a partner yet.
400	CBC.99000037	You do not have the permission to operate this reseller.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

9 Bill Management

9.1 Managing Customer Consumptions

9.1.1 Querying Customer Resource Usage

Function

This API is used to query customer resource usage.

NOTICE

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

File

A partner can subscribe to the customer resource usage in HUAWEI CLOUD Partner Center to learn the resource usage of the customer. For details, see [File Subscription](#).

NOTE

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

1. Link to obtain the file

`https://bucketname.obs.Endpoint.myhuaweicloud.com/customerUsage/
filename`

Table 9-1 Parameter description

Parameter	Description
bucketname	Name of an OBS bucket. Only OBS buckets purchased on Huawei Cloud in the Hong Kong region can be used. For details about how to create a bucket, see Creating a Bucket . NOTE You cannot use your account to buy OBS buckets. Instead, you can use your customers' accounts to do so.
Endpoint	Domain name or IP address of the server bearing the REST service endpoint. Obtain this value from Regions and Endpoints .
customerUsage	Name of the folder for storing the customer resource usage details uploaded by the system.
filename	File name. The file name format is customerUsageV2_YYYYMM_YYYYMMDD.tar.gz . • The file is a compressed package. • YYYYMM indicates the month of the data to be exported. For example, if the data for February 2019 is exported, YYYYMM should be 201902. • YYYYMMDD specifies the date when the customer resource usage data is exported. For example, if the file name is customerUsageV2_201902_20190301.tar.gz, the data generated from February 1, 2019 to February 28, 2019 is exported on March 1, 2019. Files in the package are in the format of customerUsageV2_YYYYMM_YYYYMMDD_XXXXXXXX.csv . Each .csv file contains 100,000 records.

2. Generation time of the resource usage details

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

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

3. File fields

File: **customerUsageV2_YYYYMM_YYYYMMDD_XXXXXXXXX.csv**

Parameter	Type	Maximum Length of Characters	Description
Billing Cycle	String	256	Billing cycle of the consumption record
Customer ID	String	256	Domain ID of a customer
Transaction Time	String	256	Transaction time in the format of UTC NOTE When the exported file is in Chinese language, the time in the file is GMT+08:00 time.
Billing Mode	String	8	Billing mode. The options are as follows: • 1: Yearly/monthly • 3: Pay-per-use • 10: Reserved instances • 11: Savings plan

Parameter	Type	Maximum Length of Characters	Description
Bill Type	String	8	Bill type: • 1: Expenditure - purchase • 2: Expenditure - renewal • 3: Expenditure - change • 4: Refund - unsubscription • 5: Expenditure - use • 8: Expenditure - auto-renewal • 9: Adjustment - compensation • 12: Expenditure - hourly billing • 13: Expenditure - unsubscription handling fee • 14: Expenditure - month-end deduction for support plan • 15: Expenditure - tax • 16: Adjustment - deduction • 17: Expenditure - difference amount (min. guaranteed-actual) NOTE Expenditure-difference amount (min. guaranteed-actual) determines the fees that a customer needs to pay if the customer does not reach the minimum expenditure limit stipulated in the signed contract. This rule is applicable to direct sales customers and referral customers who use postpaid method. • 18: Expenditure - monthly payment • 20: Refund - change • 23: Expenditure-savings plans • 24: Refund-changing to Pay-Per-Use • 100: Refund - unsubscription tax • 101: Adjustment - tax compensation • 102: Adjustment - tax deduction
Resource ID	String	256	Resource instance ID. If the resource is a reserved instance, the value is the reserved instance ID.

Parameter	Type	Maximum Length of Characters	Description
Resource Name	String	256	Resource name entered when a customer creates a resource instance. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Resource Tag	String	11,000	Resource tag. Customers can set tags when managing resources. If a customer purchases a resource package product that is not specific to a certain resource, this field is left empty. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Service Type Code	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
Resource Type Code	String	100	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .
Product ID	String	256	Product ID.
Product Name	String	256	Product name
Specifications	String	256	Product specifications. Example: General Computing s2.small.1 1vCPUs 1GB linux
Region Code	String	64	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
Project ID	String	256	ID of the project to which a resource belongs. You can select a project when purchasing a resource.

Parameter	Type	Maximum Length of Characters	Description
Order ID/Transaction ID	String	256	Order ID generated when a customer places the order. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty.
Order Type	String	256	Order type. This parameter is available only for yearly/monthly products. This parameter is left empty in the following cases: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/monthly to pay-per-use • 11: Pay-per-use to yearly/monthly • 13: Trial • 14: Commercial use • 15: Price adjustment
Period Number	String	256	Duration of a yearly/monthly subscription. NOTE • This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty. • The value can be an integer, or a decimal.
Period Type	String	256	Period type for yearly/monthly products. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty. • 0: Daily • 2: Monthly • 3: Yearly • 4: Hourly • 99: Unknown
Usage Type	String	256	Usage type, which can be obtained by calling the API described in 4.1.4 Querying Usage Types .
Usage	String	256	Total resource usage

Parameter	Type	Maximum Length of Characters	Description
Usage Unit	String	256	Usage unit To obtain the unit, call the API in 4.1.5 Querying Measurement Units .
Package Usage	String	256	Used amount of the package. The used resources are not calculated using the pay-per-use price.
Unit (Package Usage)	String	256	Unit of the usage in the package To obtain the unit, call the API in 4.1.5 Querying Measurement Units .
Reserved Instance Usage	String	256	Used reserved instance. The used resources are not calculated using the pay-per-use price.
Unit (Reserved Instance Usage)	String	256	Usage unit for reserved instance To obtain the unit, call the API in 4.1.5 Querying Measurement Units .
Expenditure Amount	String	256	Transaction price listed on the HUAWEI CLOUD official website, excluding the commercial discount provided by HUAWEI CLOUD for partners Unit: USD NOTE If HUAWEI CLOUD writes off the outstanding amount as required or refunds the over-deducted amount, a record with the negative amount will be generated.
Unit Price	String	256	Unit price of a pay-per-use product. This parameter has a value only when the price is the same. For tiered billing, this parameter is left empty.

Parameter	Type	Maximum Length of Characters	Description
Unit	String	256	Unit of the product. - The unit of linear products is USD/{<i>linear unit</i>}/month or USD/{<i>linear unit</i>}/hour. - The unit of non-linear products is USD/month or USD/hour. NOTE The linear unit is the unit of linear products (those come in sizes). For example, the linear unit of the hard disk is GB, and that of the bandwidth is Mbit/s. For example, 0.6 USD/10,000 times. The unit price is 0.6, the price unit is dollar, and the step is 10,000 times. The unit price is 0.6 and the price unit is USD/10,000 times.
Combined Order No	String	256	The combined order number generated when a customer places orders. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty. This parameter is reserved.
Product Type Name	String	200	Product type name
Resource Type Name	String	200	Resource type name
Expenditure Time	String	256	Expenditure time in the format of UTC NOTE When the exported file is in Chinese language, the time in the file is GMT+08:00 time.

4. File example

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

Apr-21, 4FB84D6C27DB4C768B0940560C2AB2CE, 2021-04-26 16:13:35 GMT+08:00, 1, 1, 34ae3e78-d93e-4d46-9bc7-aa8532e44d18, FALSE, 111, hws.service.type.ebs,hws.resource.type.volume, 5797403154426640, GD3

linear EVS disk_ Monthly, GD3 linear EVS disk_ Monthly 1, cn-north-1, ab7eb17368654ff4b1bb3c63c6a478e0,CS20012416121ADNL2, 1, 1, 99, Duration-1, 12312.125, 1, 123, 3, 120, 1, 8400, 12312.123, 1, CS20012416121ADNL3, Elastic Cloud Server, Cloud Host, 2024-05-15 20:06:36 GMT+08:00

9.2 Managing Partner Bill

9.2.1 Querying Monthly Bills

Function

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

For details about how to query monthly bills in the Partner Center, click [here](#).

 NOTE

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

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#) which supports automatic authentication. API Explorer can automatically generate and debug example SDK code.

URI

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

The following table describes the parameters.

Table 9-2 Query parameters

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

Request

Request parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/bills/partner-bills/postpaid-bill-summary?bill_cycle=2020-12
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 16 characters	Error code. For details, see Returned Values . This parameter is returned only when a failure occurs.
error_msg	String	A maximum of 1024 characters	Error description. This parameter is returned only when a failure occurs.
bill_cycle	String	A maximum of 10 characters	Month when a bill is generated. This parameter is returned only when the query is successful. Format: YYYY-MM
initial_amount_due	BigDecimal	-	Amount due (tax included) in a bill. Amount due (output tax included) = Expenditures + Refunds + Adjustments
consume_amount	BigDecimal	-	Expenditures in a bill.
refunds	BigDecimal	-	Refunds in a bill.
adjustments	BigDecimal	-	Partner's adjustments in a billing cycle, for example, arrears write-offs.
tax_amount	BigDecimal	-	Output tax in a bill, which is not included in the amount due.
currency	String	A maximum of 8 characters	This parameter is returned only when the query is successful. USD

Example Response

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

Returned Values

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

9.2.2 Querying Bill Details of Monthly Expenditures

Function

Partners can query bill details of monthly expenditures.

For details about how to query the bill details of monthly expenditures in the Partner Center, click [here](#).

Bill File

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

1. Link to Obtain the File

`https://bucketname.obs.Endpoint.myhuaweicloud.com/customerBill/filename`

Table 9-3 Parameter descriptions

Parameter	Description
bucketname	OBS bucket name. Only OBS buckets purchased on Huawei Cloud in the Hong Kong region can be used. For details about how to create a bucket, see Creating a Bucket . NOTE You cannot use your account to buy OBS buckets. Instead, you can use your customers' accounts to do so.
Endpoint	Domain name or IP address of the server bearing the REST service endpoint. Obtain this value from Regions and Endpoints .
customerBill	Name of the folder for storing the partner bill details file uploaded by the system.
filename	File name. The name of a bill details file is in customerBill_YYYYMM.tar.gz format. In the preceding command, customerBill_YYYYMM.tar.gz is a compressed package. The files contained in the package are named in customerBill_YYYYMM_xxxx.csv format. Each CSV file contains 100,000 records.

2. File Generation Cycle

The file is generated each natural month.

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

3. File Fields

Parameter	Type	Maximum Length/Value Range	Description
Customer ID	String	64	Domain ID of a customer.
Product ID	String	64	Product ID

Parameter	Type	Maximum Length/Value Range	Description
Product type code	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
Resource type code	String	64	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .
Cloud service region code	String	64	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
Billing mode	String	2	0: Yearly/monthly 1: Pay-per-use 2: Reserved instance-upfront payment 3: Reserved instance-hourly billing 4: Savings plan-subscription 5: Savings plan-hourly billing 6: Savings plan-discount
Official website price	BigDecimal	-	List price or promotional price at which customers purchased Huawei Cloud products, in USD.
Fee generation time	String	32	Time when fees are generated. The format is <i>YYYY-MM</i> , indicating year-month. NOTE When the exported file is in Chinese language, the time in the file is GMT+08:00 time.
Order ID	String	64	Order ID. This field is available only for yearly/monthly subscriptions.
Usage	BigDecimal	-	Usage (usage of packages and reserved instances not included). This field is available only for pay-per-use subscriptions.
Usage Unit	Integer	-	Usage unit. You can call the API in 4.1.5 Querying Measurement Units to obtain the value.

Parameter	Type	Maximum Length/Value Range	Description
Whether a spot ECS	String	1	2: Yes
Cash coupon amount	BigDecimal	-	Amount of cash coupons used by a customer, in the unit of USD.
Flexi-purchase coupon amount	BigDecimal	-	Flexi-purchase coupon amount
Stored-value card amount	BigDecimal	-	Stored-value card amount
Settlement product type	Integer	-	0: Common product 1: Promotional product 2: Hybrid hosting products 5: Stored-value card 6: Marketplace products 7: Spot ECSs 8: FCS (reserved) 11: Special price request 60: KooGallery product discounts in resales
Partner preference ratio	BigDecimal	-	Discount percentage for each settlement type. Leave this parameter empty when Partner Preferential Type is set to 1 .
Currency	String	3	USD
Billing cycle	String	32	Billing cycle, in the <i>YYYY-MM</i> format.
Customer account	String	64	HUAWEI CLOUD username of the customer.
Customer name	String	192	Name used by the customer for real-name authentication. If the customer does not perform real-name authentication, this field is left blank.
Product name	String	576	Product name.

Parameter	Type	Maximum Length/Value Range	Description
Product type name	String	192	Cloud service name, which can be obtained by calling the API in 4.1.1 Querying Cloud Service Types .
Resource type name	String	192	Resource type name, which can be obtained by calling the API in 4.1.2 Querying Resource Types .
Cloud service region name	String	96	Cloud service region. Obtain the value from the Region column in Regions and Endpoints .
Package Usage	BigDecimal	-	Used amount of the package. The used resources are not calculated using the pay-per-use price.
Unit (Package Usage)	Integer	-	Package usage unit. For details, see Usage Unit . If the package usage is 0, this field is left blank.
Reserved Instance Usage	BigDecimal	-	Used reserved instance. The used resources are not calculated using the pay-per-use price.
Unit (Reserved Instance Usage)	Integer	-	Reserved instance usage unit. For details, see Usage Unit . If the reserved instance usage is 0, this field is left blank.
Bill Type	String	1	Type of a bill item. • 0: Expenditure • 1: Unsubscription • 2: Huawei write-off
BizID	String	64	Business ID.
BizItemID	String	64	Business item ID.
Amount After Coupons	BigDecimal	-	Consumption amount of a customer, excluding the amount of flexi-purchase coupons, cash coupons, and stored-value cards.
Amount Due	BigDecimal	-	Bill amount that a partner must pay.

Parameter	Type	Maximum Length/Value Range	Description
Specifications	String	256	Product specifications, such as General Computing s2.small.1 1vCPUs 1GB linux. General Computing s2.small.1 1vCPUs 1GB linux
Billing item	String	256	Billing item To obtain a specific billing item, call the API in 4.1.4 Querying Usage Types . The value is the same as the usage type in SDRs. The mappings between cloud services and usage types are as follows: • ECS: Duration • EVS: Duration • EIP: Duration • Bandwidth: Duration (by bandwidth) or upflow (by traffic) • Marketplace image: Duration
Unit Price	BigDecimal	-	Unit price. • For the unit price of a pay-per-use product, this parameter has a value only when the price is the same. For tiered billing, this parameter is left empty. • Unit price of a yearly/monthly product is returned only in the following scenarios: – Yearly/monthly subscription, renewal, specification downsizing, specification upgrade, and capacity expansion – Simple pricing • Unit price of a reserved instance is returned only in the following scenarios: – Subscription, renewal, specification downsizing, specification upgrade, capacity expansion, and pay-per-use – Simple pricing

Parameter	Type	Maximum Length/Value Range	Description
Unit	String	256	Price unit For example, the price is 0.6 yuan/10,000 times. The unit price is 0.6, the price unit is yuan, and the step is 10,000 times. The unit price is 0.6 and the price unit is yuan/10,000 times.
Payment	BigDecimal	-	- When Partner Preferential Type is set to 0, the settlement amount is calculated as follows: Settlement amount = List price x (1 – Partner preference ratio). - When Partner Preferential Type is set to 1, the settlement amount is calculated based on the fixed unit price. The settlement amount includes the cash coupon amount and does not include the tax amount. Unit: USD (\$) This parameter is returned only when a partner uses coupons.
Partner cash coupon amount	BigDecimal	-	Amount of the cash coupon that is deducted after a discount is used. Unit: USD (\$)
Whether to Refund Coupons	String	-	Whether to refund partner's cash coupon generated during the refund. Unit: USD (\$) Y: yes N: no This parameter is returned only when a coupon quota has been converted for partner use only.

Parameter	Type	Maximum Length/Value Range	Description
Cash Payment	BigDecimal	-	Amount that needs to pay after partner's cash coupons are deducted (excluding tax). Unit: USD (\$) This parameter is returned only when a partner uses coupons. NOTE - If Scene is set to Y, this parameter value is calculated as follows: Partner amount without tax = Settlement amount – Partner coupon - If Scene is set to N, the partner amount without tax equals the settlement amount.
Tax Amount	BigDecimal	-	Tax amount. If tax determination is not involved or the tax base is 0, the tax amount is 0. Unit: USD (\$) This parameter is returned only when a coupon quota has been converted for partner use only. Tax amount = Actual amount due × Tax rate NOTE - When Partner Preferential Type is set to 0, Actual amount due = List price × (1 – Partner preference ratio) – Partner cash coupon amount. - When Partner Preferential Type is set to 1, Actual amount due = Settlement amount – Partner cash coupon amount.
Billing Item Name	String	-	Usage type name. To obtain a specific type, call the API in 4.1.4 Querying Usage Types .
Partner Preferential Type	String	-	Partner Preferential Type. The options are as follows: 0: Discount 1: Fixed unit price
Combined Order No.	String	256	The combined order number generated when a customer places orders. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty.

 NOTE

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

4. Sample File

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

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

10 Invoice Management

10.1 Invoice Management

10.1.1 Querying the Invoice List

Function

Partners can query the invoice list.

Log in to Partner Center, and choose **Financial Information** > **Invoices** in the left navigation pane. The invoice list is displayed.

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

Debugging

You can debug the API in [API Explorer](#). Automatic authentication is supported. API Explorer can automatically generate and debug example SDK code.

URI

GET /v1.0/{domain_id}/payments/intl-invoices

Parameter	Mandatory	Value Range	Description
domain_id	Yes	A maximum of 64 characters	Partner ID. For details, see How Do I Check the Partner ID?

Table 10-1 Request parameters

Parameter	Mandatory	Type	Value Range	Description
start_time	Yes	String	A maximum of 64 characters	Invoice application start time UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z .
end_time	Yes	String	A maximum of 64 characters	Invoice application end time UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z .
offset	Yes	Integer	[1-99999]	Page number.
limit	Yes	Integer	[1-100]	Number of records displayed per page.

Request Message

Request parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v1.0/{domain_id}/payments/intl-invoices?  
start_time=2019-01-28T11:48:41Z&end_time=2019-12-28T11:48:41Z&offset=1&limit=10  
Content-Type: application/json  
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

Response Message

Response Parameters

Parameter	Type	Value Range	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Returned Values . 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.
count	Integer	-	Number of records. This parameter is returned only when the query is successful.
invoices	List<IntlInvoiceRequestInfo>	-	Invoice list. For details, see Table 10-2 .

Table 10-2 IntlInvoiceRequestInfo

Parameter	Type	Value Range	Description
requestId	String	A maximum of 64 characters	Request ID
cancelReason	String	A maximum of 256 characters	Rejection reason
titleType	Integer	[0-1]	Title type 0: Individual customer 1: Corporate customer
channelType	Integer	-	Channel type 0: HUAWEI CLOUD
invoiceType	Integer	[0-1]	Invoice type 0: Special VAT invoice 1: General VAT invoice

Parameter	Type	Value Range	Description
invoiceTitle	String	A maximum of 1024 characters	Invoice title
invoiceAmount	Number	-	Invoiced amount (USD)
invoiceMethod	Integer	[0-2]	Invoicing method 0: Invoicing by bill 1: Invoicing by payment 2: Invoicing by order
invoiceClass	Integer	[0-1]	Invoice type 0: Tax invoice 1: Business invoice
invoiceState	Integer	-	Invoicing state 0: Draft 1: Waiting for the first trial 4: Waiting for the export invoice file 5: Waiting for the invoice file backfile 6: Waiting for the mail confirmation 7: Waiting for receipt confirmation 8: Complete 9: Refunded 11: Waiting for rebut audit 13: Invoice return audit 14: Waiting return cis notify 15: Invoice return failed
applyOpera	String	A maximum of 32 characters	Invoice applicant
addressInfo	PostAddressInfoIntl	-	Address information. For details, see Table 10-3 .

Parameter	Type	Value Range	Description
applyTime	String	A maximum of 64 characters	Application time (UTC time)
invoiceMode	String	0	Invoice type 0: Paper invoice
email	String	A maximum of 400 characters	Email receiving the electronic invoice
requestMode	String	[0-2]	Application type 0: Invoice creation application 1: Invoice return application 2: Invoice change application
srcRequestId	String	A maximum of 64 characters	Original application ID when the invoice is returned
salesId	String	A maximum of 64 characters	Signing entity ID
invoiceNo	String	A maximum of 32 characters	Invoice number

Parameter	Type	Value Range	Description
tradeType	Integer	-	Transaction type • 3: Settlement by credit card • 4: Settlement by billing • 5: Invoicing by payment • 6: BP settle by billing • 7: Invoicing by recharge • 8: Order payment online • 10: Invoicing by refund
billCycle	String	A maximum of 64 characters	Billing cycle
taxList	List<TaxInfo>	-	Tax information list. For details, see Table 10-4 .

Table 10-3 PostAddressInfoIntl

Parameter	Type	Value Range	Description
address	String	A maximum of 1024 characters	Recipient address
recipients	String	A maximum of 1024 characters	Recipient
zipCode	String	A maximum of 256 characters	Post code of the recipient address

Parameter	Type	Value Range	Description
mobilePhone	String	A maximum of 256 characters	Recipient mobile number

Table 10-4 TaxInfo

Parameter	Type	Value Range	Description
taxClass	String	A maximum of 64 characters	Tax type • VAT • ISS • WHT • GST
taxRate	String	A maximum of 64 characters	Tax rate
subTaxClass	String	A maximum of 64 characters	Tax subtype • PIS • COFINS • CGST • SGST • IGST • ISS • WHT • VAT
taxAmount	Number	-	Tax amount Unit: USD (\$)

Example Response

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

```

"count": 2,
"invoices": [
  {
    "requestId": "IV19122807N6S5",
    "cancelReason": null,
    "titleType": 1,
    "channelType": 0,
    "invoiceType": 1,
    "invoiceTitle": "Dream666",
    "invoiceAmount": 102.0,
    "invoiceMethod": 1,
    "invoiceClass": 1,
    "invoiceState": 8,
    "applyOpera": "*****",
    "addressInfo": {
      "address": "*****",
      "recipients": "Wang**",
      "zipCode": "10****",
      "mobilePhone": "188****8888"
    },
    "applyTime": "2019-12-28T07:02:03Z",
    "invoiceMode": "1",
    "email": "***@163.com",
    "requestMode": "0",
    "srcRequestId": null,
    "salesId": "1351",
    "invoiceNo": "CSER191001322",
    "tradeType": 5,
    "billCycle": "201912",
    "taxList": [
      {
        "taxClass": "WHT",
        "taxRate": "0.01",
        "subTaxClass": "WHT",
        "taxAmount": 1.0
      },
      {
        "taxClass": "VAT",
        "taxRate": "0.01",
        "subTaxClass": "VAT",
        "taxAmount": 1.0
      }
    ]
  },
  {
    "requestId": "IV19122806VJF8",
    "cancelReason": null,
    "titleType": 1,
    "channelType": 0,
    "invoiceType": 1,
    "invoiceTitle": "Dream666",
    "invoiceAmount": 384.4,
    "invoiceMethod": 1,
    "invoiceClass": 1,
    "invoiceState": 8,
    "applyOpera": "*****",
    "addressInfo": {
      "address": "*****",
      "recipients": "Wang**",
      "zipCode": "10****",
      "mobilePhone": "188****8888"
    },
    "applyTime": "2019-12-28T06:20:41Z",
    "invoiceMode": "1",
    "email": "***@163.com",
    "requestMode": "0",
    "srcRequestId": null,
    "salesId": "1351",
    "invoiceNo": "CSER191001321",

```

```

    "tradeType": 7,
    "billCycle": "201912",
    "taxList": [
      {
        "taxClass": "WHT",
        "taxRate": "0.15",
        "subTaxClass": "WHT",
        "taxAmount": 54.4
      },
      {
        "taxClass": "VAT",
        "taxRate": "0.06",
        "subTaxClass": "VAT",
        "taxAmount": 21.76
      }
    ]
  }
}

```

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.

11 Managing Service Tickets

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

For details, see [Service Ticket Open APIs](#).

12 API to Be Brought Offline

12.1 Product Management

12.1.1 Querying Product Information

12.1.1.1 Querying Cloud Service Types (Old)

Function

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

NOTE

This API will be brought offline soon. For details about the new API for querying cloud service types, see [Querying Cloud Service Types](#).

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

KooGallery services are not included.

URI

GET /v2/bases/service-types

Table 12-1 Header parameter

Parameter	Mandatory	Maximum Length of Characters	Description
X-Language	No	A maximum of 8 characters	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 12-2 Request parameters

Parameter	Mandatory	Type	Maximum Length of Characters	Description
service_type_code	No	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null , it can be used as a filter criterion.

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/bases/service-types?
service_type_code=hws.service.type.workplace HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
X-Language: zh_CN
```

Response

Response Parameters

Parameter	Type	Maximum Length of Characters	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Status Codes . 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.
service_types	List<ServiceType>	-	Returned cloud service type. For details, see Table 12-3 .

Table 12-3 ServiceType

Parameter	Type	Maximum Length of Characters	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
{
  "service_types": [
    {
      "service_type_name": "HUAWEI CLOUD WeLink",
      "service_type_code": "hws.service.type.workplace",
      "abbreviation": "WeLink"
    }
  ]
}
```

Status Codes

NOTE

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

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

12.1.1.2 Querying Resource Types (Old)

Function

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

NOTE

This API will be brought offline soon. For details about the new API for querying resource types, see [Querying Resource Types](#).

Constraints

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

URI

GET /v2/bases/resource-types

Table 12-4 Header parameter

Parameter	Mandatory	Maximum Length of Characters	Description
X-Language	No	A maximum of 8 characters	Language. • zh_CN: Chinese • en_US: English Default value: zh_CN

Table 12-5 Request parameters

Parameter	Mandatory	Type	Maximum Length of Characters	Description
resource_type_code	No	String	A maximum of 64 characters	Resource type code. For example, the resource type code of ECS is hws.resource.type.vm . If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null , it can be used as a filter criterion.

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v2/bases/resource-types?
resource_type_code=hws.resource.type.workplace.basic HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIINPXsidG9rZ
X-Language: zh_CN
```

Response

Response Parameters

Parameter	Type	Maximum Length of Characters	Description
error_code	String	A maximum of 20 characters	Error code. For details, see Status Codes . 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.
resource_types	List<ResourceType>	-	Resource type information. For details, see Table 12-6 .

Table 12-6 ResourceType

Parameter	Type	Maximum Length of Characters	Description
resource_type_code	String	A maximum of 64 characters	Resource type code. For example, the resource type code of ECS is hws.resource.type.vm .
resource_type_name	String	A maximum of 200 characters	Resource type name.
resource_type_desc	String	A maximum of 200 characters	Resource type description.

Example Response

```
HTTP/1.1 200 OK
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
{
  "resource_types": [
    {
      "resource_type_code": "hws.resource.type.workplace.basic",
      "resource_type_name": "Basic package",
      "resource_type_desc": "Basic package"
    }
  ]
}
```

Status Codes

NOTE

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

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

12.2 Customer Management

12.2.1 Querying Customers (Old)

Function

This API is used to query your customers.

NOTE

This API will be brought offline soon. For details about the new API for querying the customer list, see [5.3.1 Querying Customers](#).

Web UI

You can log in to the Partner Center to query your customers.

- Step 1** In the top navigation, choose **Sales > Customers > Customer Management**. Select the **Customers** tab on the displayed page.

Step 2 Set search criteria to search for customers.

You can search for customers by the association type, association time, customer name, salesperson name, expenditure this month, resource expiration date, mobile number, or customer tag.

----End

REST API

This API is used to query your customers on the partner sales platform.

NOTE

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

If a customer queried does not exist, the HTTP code **200** is returned by the API and an empty list is returned in the response.

1. URI

POST /v1.0/{partner_id}/partner/customer-mgr/query

The following table describes the parameters.

Parameter	Mandatory	Value Range	Description
partner_id	Yes	A maximum of 64 characters	Partner ID (assigned by Huawei). For details about how to obtain the partner ID, see How Do I Check the Partner ID? The system does not verify this parameter.

2. Request

Request parameters

Parameter	Mandatory	Type	Value Range	Description
domainName	No	String	A maximum of 128 characters	Account name. If the customer has created an IAM user, enter the account name of the master account. For details about the two concepts, see "Account" and "IAM User" in Basic Concepts . Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.
name	No	String	A maximum of 128 characters	Real-name authentication name. Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. If this parameter is not included in the request parameters, is set to "", or is set to null , it cannot be used as a filter criterion.
offset	No	Integer	[1-200000]	Page to be queried. By default, the first page is queried.
limit	No	Integer	[1-100]	Number of records on each page. The default value is 10, and the maximum value is 100.

Parameter	Mandatory	Type	Value Range	Description
label	No	String	A maximum of 64 characters	Tag. Fuzzy search is supported. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. The letters entered for search are case-sensitive.
cooperationType	No	String	A maximum of 1 character	Association type. • 1: Referral • 2: Authorized Distributor • 3: indicates Reseller. Note: Currently, only Referral and Reseller are supported. If this parameter is not included in the request parameters, is set to "", or is set to null, it cannot be used as a filter criterion.
cooperationTimeStart	No	String	A maximum of 20 characters	Start time of the association time range (UTC time). The value is in "yyyy-MM-dd 'T' HH:mm:ss 'Z'" format, such as 2019-05-06T08:05:01Z. This parameter must be used together with cooperationTimeEnd. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion. It cannot be set to "".

Parameter	Mandatory	Type	Value Range	Description
cooperationTimeEnd	No	String	A maximum of 20 characters	End time of the association time range (UTC time). The value is in "yyyy-MM-dd 'T' HH:mm:ss 'Z'" format, such as 2019-05-06T08:05:01Z. This parameter must be used together with cooperationTimeStart. If this parameter is not included in the request parameters or is set to null, it cannot be used as a filter criterion. It cannot be set to "".

Request Example

POST https://bss-intl.myhuaweicloud.com/v1.0/{partner_id}/partner/customer-mgr/query HTTP/1.1
 Content-Type: application/json
 X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIIlNPXsidG9rZ

3. Response

Response parameters

Parameter	Mandatory	Type	Value Range	Description
error_code	No	String	A maximum of 16 characters	Error code. For details, see 4 .
error_msg	No	String	A maximum of 1024 characters	Error description.
customerInfoList	No	List<CustomerInfo>	-	Customer list. For details, see Table 12-7 .
count	No	Integer	-	Total number of records.

Table 12-7 CustomerInfo

Parameter	Mandatory	Type	Value Range	Description
name	No	String	A maximum of 128 characters	Real-name authentication name.
domainName	Yes	String	A maximum of 128 characters	Account name. If the customer has created an IAM user, the account name of the master account is returned.
customerId	Yes	String	A maximum of 64 characters	Customer
cooperationTime	No	String	A maximum of 20 characters	Time when a customer is associated with a partner. The value is UTC time in "yyyy-MM-dd 'T' HH:mm:ss 'Z'" format, such as 2019-05-06T08:05:01Z . <i>HH</i> ranges from 0 to 23, and <i>mm</i> and <i>ss</i> ranges from 0 to 59.
cooperationType	No	String	A maximum of 1 character	Association type. 1: Referral 2: Authorized Distributor 3: indicates Reseller. Note: Currently, only Referral and Reseller are supported.
label	No	String	A maximum of 64 characters	Tag. Fuzzy search is supported.
telephone	No	String	A maximum of 20 characters	Customer phone number.

Parameter	Mandatory	Type	Value Range	Description
verifiedStatus	No	String	A maximum of 5 characters	Real-name authentication status. -1: The real name is not authenticated. 0: Real-name authentication is under review. 1: The real-name authentication is not passed. 2: The real name is authenticated.
countryCode	No	String	A maximum of 10 characters	Country code, which is the country code prefix of a phone number. Example: 0086 for China
customerType	No	Integer	[-1,0,1]	Customer type. -1: None 0: Individual 1: Enterprise When a customer is registered, customerType is -1. The customer can set customerType in the account center or select the enterprise or individual real-name authentication to determine the customer type.
isFrozen	No	Integer	[0,1]	Whether to freeze the account. 0: No 1: Yes

Example response

```

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

{
  "count": 2,
  "customerInfoList": [{
    "name": "xxx",
    "domainName": "a9ca*****b96",
  
```

```
"customerId": "05ad*****4ea0",
"cooperationTime": "2019-07-19T06:40:53Z",
"cooperationType": "3",
"label": null,
"telephone": "17729386686",
"verifiedStatus": "2",
"countryCode": null,
"customerType": 1
},
{
"name": "xxx",
"domainName": "a65b*****89d",
"customerId": "059e*****c6da0",
"cooperationTime": "2019-07-13T11:39:27Z",
"cooperationType": "3",
"label": null,
"telephone": null,
"verifiedStatus": "2",
"countryCode": null,
"customerType": 1,
"isFrozen": 0
}
]
}
```

4. 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
200	CBC.0000	Success.
500	CBC.0999	Other errors.
400	CBC.0100	Incorrect parameter.
403	CBC.0151	Access denied.

12.2.2 Querying Customers (Old)

Function

This API is used to query your customers.

NOTE

This API will be brought offline soon. For details about the new API for querying the customer list, see [5.3.1 Querying Customers](#).

Web UI

You can log in to the Partner Center to query your customers.

Step 1 In the top navigation, choose **Sales > Customers > Customer Management**.

Step 2 Set search criteria to search for customers.

You can search for customers by the association type, association time, customer name, salesperson name, mobile number, or customer tag.

-----End

REST API

This API is used to query your customers on the partner sales platform.

NOTE

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

If a customer queried does not exist, the HTTP code **200** will be returned by the API and nothing is returned in the response.

1. URI

GET /v1.0/{partner_id}/partner/customer-mgr/detail

The following table describes the parameters.

Parameter	Mandatory	Value Range	Description
partner_id	Yes	A maximum of 64 characters	Partner ID (assigned by Huawei). For details about how to obtain the partner ID, see How Do I Check the Partner ID?

2. Request

Request parameters

Parameter	Mandatory	Type	Value Range	Description
domain_name	No	String	A maximum of 128 characters	Account. If the customer has created an IAM user, enter the account name. For details about the two concepts, see "Account" and "IAM User" in Identity Management. Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null, it can be used as a filter criterion.
corp_name	No	String	A maximum of 128 characters	Enter the enterprise name if it is used for real-name authentication. For an individual who uses real name for authentication, enter the individual name. Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null, it can be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
page_no	No	Integer	-	Page to be queried. By default, the first page is queried. If this parameter is not included in the request, is left empty, or is set to null , the value 1 is used. This parameter cannot be set to "".
page_size	No	Integer	[1-100]	Number of records on each page. The default value is 10, and the maximum value is 100. If this parameter is not included in the request, is left empty, or is set to null , the value 10 is used. This parameter cannot be set to "".
label	No	String	A maximum of 64 characters	Tag. Fuzzy search is supported. Only prefix, suffix, or middle part can be used for fuzzy search. The content you enter for fuzzy search cannot contain spaces. The letters entered for search are case-sensitive. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null , it can be used as a filter criterion.

Parameter	Mandatory	Type	Value Range	Description
cooperationType	No	String	[1 3]	Association type. 1: Referral 2: Authorized Distributor 3: Reseller Note: Currently, only Referral and Reseller are supported. If this field is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.
cooperationTimeStart	No	String	A maximum of 20 characters	Start time of the association time range (UTC time). The value is in "yyyy-MM-dd 'T' HH:mm:ss 'Z'" format, such as 2019-05-06T08:05:01Z. This parameter must be used together with cooperationTimeEnd. 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 null.
cooperationTimeEnd	No	String	A maximum of 20 characters	End time of the association time range (UTC time) The value is in the following format: yyyy-MM-dd'T'HH:mm:ss'Z', such as 2019-05-06T08:05:01Z This parameter must be used together with cooperationTimeStart. 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 null.

Request Example

GET https://bss-intl.myhuaweicloud.com/v1.0/{partner_id}/partner/customer-mgr/detail HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlHvcNAQcCo...ggg1BBIIINPXsidG9rZ

3. Response

Response parameters

Parameter	Mandatory	Type	Value Range	Description
error_code	Yes	String	A maximum of 16 characters	Error code. For details, see 4 .
error_msg	Yes	String	A maximum of 1024 characters	Error description.
customer_info_list	No	List<CustomerInfo>	-	Customer list. For details, see Table 12-8 .
count	No	Integer	-	Total number of records.

Table 12-8 CustomerInfo

Parameter	Mandatory	Type	Value Range	Description
corp_name	Yes	String	A maximum of 128 characters	Enterprise name.
domain_name	Yes	String	A maximum of 128 characters	Account. If the customer has created an IAM user, the account name is returned.
customer_id	Yes	String	A maximum of 64 characters	Customer account ID.

Parameter	Mandatory	Type	Value Range	Description
start_time	No	String	A maximum of 20 characters	Time when an enterprise is registered. The value is UTC time in <i>yyyy-MM-ddTHH:mm:ssZ</i> format. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
cooperation_type	No	String	Length: 1	Association type. 1: Referral 2: Authorized Distributor 3: Reseller Note: Currently, only Referral and Reseller are supported.
label	No	String	A maximum of 64 characters	Tag. Fuzzy search is supported.
telephone	No	String	A maximum of 20 characters	Customer phone number
verifiedStatus	No	String	A maximum of 5 characters	Real-name authentication status. -1: The real name is not authenticated. 0: Real-name authentication is under review. 1: The real-name authentication is not passed. 2: The real name is authenticated.
countryCode	No	String	A maximum of 10 characters	Country code, which is the country code prefix of a phone number. Example: 0086 for China

Example response

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

{
  "count": 2,
  "error_code": "CBC.0000",
  "error_msg": "success",
  "customer_info_list": [
    {
      "customer_id": "7ff331de7af7457d8331de0bfe7a42b7",
      "corp_name": null,
      "domain_name": "mingcheng",
      "start_time": "2018-10-11T02:28:34Z",
      "cooperation_type": "1",
      "label": "xxx",
      "telephone": "139xxxxxxxx",
      "verifiedStatus": "-1",
      "countryCode": "xxxx"
    },
    {
      "customer_id": "67b5223d4f6e4cc18d8dfd2da9d01db8",
      "corp_name": null,
      "domain_name": "ambrosiaxu",
      "start_time": "2018-06-25T11:15:20Z",
      "cooperation_type": "1",
      "label": "xxx",
      "telephone": "139xxxxxxxx",
      "verifiedStatus": "-1",
      "countryCode": "xxxx"
    }
  ]
}
```

4. 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
200	CBC.0000	Success.
500	CBC.0999	Other errors.
400	CBC.0100	Incorrect parameter.
403	CBC.0151	Access denied.

12.2.3 Freezing a Customer Account (Old)

Function

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

NOTE

This API will be unavailable soon. For details about the new API for freezing a customer account, see [5.3.2 Freezing a Customer Account](#).

Web UI

When a customer is associated with a partner by reseller model, the customer account is frozen by default. When the account is frozen, the customer cannot purchase, renew the subscription to, change, or properly use the resources. The partner can select **Unfreeze Account** when setting the budget for the customer to unfreeze the account.

Alternatively, partners can switch to the **My Customers** page to unfreeze accounts of reseller customers.

- Step 1** Use your account to log in to [HUAWEI CLOUD](#).
- Step 2** In the drop-down list of your account name, click **Partner Center** to go to the Partner Center.
- Step 3** In the navigation tree, choose **Customer Business > My Customers**.
- Step 4** Click **Freeze Account** in the **Operation** column in the row of the target customer.

Freeze Account



Are you sure you want to freeze the following account(s)?

If the account is frozen, customers cannot buy, renew, or change resources or perform any operations on their resources. For more details, see [Impacts of Account Freeze](#).

* Reason:

0/256

Account Name	Customer	Monthly budget (U...	Month-to-date cas...
jing_4403	--	111.00	0.00

To ensure your account security, click Get Code and enter the received email verification code.

Email: jing_*****@huawei.com

* Verification Code:

Get Code

OK

Cancel

Step 5 Enter the reason.

Step 6 Click **Get Code** and enter the obtained verification code.

Step 7 Click **OK**.

A message is displayed indicating that the account is frozen.

 **NOTE**

To unfreeze the customer's account, click **Unfreeze Account** in the **Operation** column.

----End

REST API

Partners can freeze accounts of customers associated with the partners in reseller model on the partner sales platform. When the accounts are frozen, the customers cannot purchase, renew the subscription to, change, or properly use the resources.

 **NOTE**

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

1. URI

POST /v1.0/{partner_id}/partner/customer-mgr/frozens

The following table describes the parameters.

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Parameter	Mandatory	Value Range	Description
partner_id	Yes	A maximum of 64 characters	Partner ID (assigned by Huawei). For details about how to obtain the partner ID, see How Do I Check the Partner ID? The system does not verify this parameter.

2. Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customerIds	Yes	List<String>	A maximum of 10 IDs	IDs of customers whose accounts are to be frozen Customer account ID. For details, see How Do I Obtain Customer's customer_id and domain_id Values?
reason	Yes	String	A maximum of 256 characters	Account freezing reason.

Example Request

POST https://bss-intl.myhuaweicloud.com/v1.0/{partner_id}/partner/customer-mgr/frozens HTTP/1.1
Content-Type: application/json
X-Auth-Token: *MIIPAgYJKoZlhvcNAQcCo...ggg1BBIIlNPXsidG9rZ*

```
{
  "customerIds": [
    "06502440a080d5e90f44c01cbccfa280",
    "065faa30c880d5ce0fddc007a6cb6f40"
  ],
  "reason": "Arrears"
}
```

3. Response

Response Parameters

Parameter	Mandatory	Type	Value Range	Description
error_code	No	String	A maximum of 16 characters	Error code. This field is not returned when the operation is successful or partially failed. For details, see 4 .

Parameter	Mandatory	Type	Value Range	Description
error_msg	No	String	A maximum of 1024 characters	Error description. This field is not returned when the operation is successful or partially failed.
failDetail	No	list<Error Detail>	-	Error cause description. This field is returned only when the operation is partially failed. For details, see Table 12-9 .
failNum	No	Integer	-	Number of failures. This field is returned only when the operation is successful or partially failed.
successNum	No	Integer	-	Number of successful operations. This field is returned only when the operation is successful or partially failed.

Table 12-9 ErrorDetail

Parameter	Mandatory	Type	Value Range	Description
error_code	Yes	String	A maximum of 16 characters	Error code. For details, see Table 12-10 .
error_msg	Yes	String	A maximum of 1024 characters	Error message.
id	Yes	String	A maximum of 256 characters	ID. The value corresponds to customerId .

Table 12-10 Error codes (partial)

Error Code	Description
CBC.0999	Other errors.

Error Code	Description
CBC.5004	You do not have the operation permission to the customer.
CBC.5024	This API cannot be invoked because the association type of the customer is incorrect.

Example response

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

{
  "failNum": 0,
  "successNum": 2,
  "failDetail": []
}
```

4. 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
500	CBC.0999	Other errors.
400	CBC.0100	Invalid input parameter.
403	CBC.0150	Invalid operation.
400	CBC.5004	You do not have the operation permission to the customer.

12.2.4 Unfreezing a Customer Account (Old)

Function

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

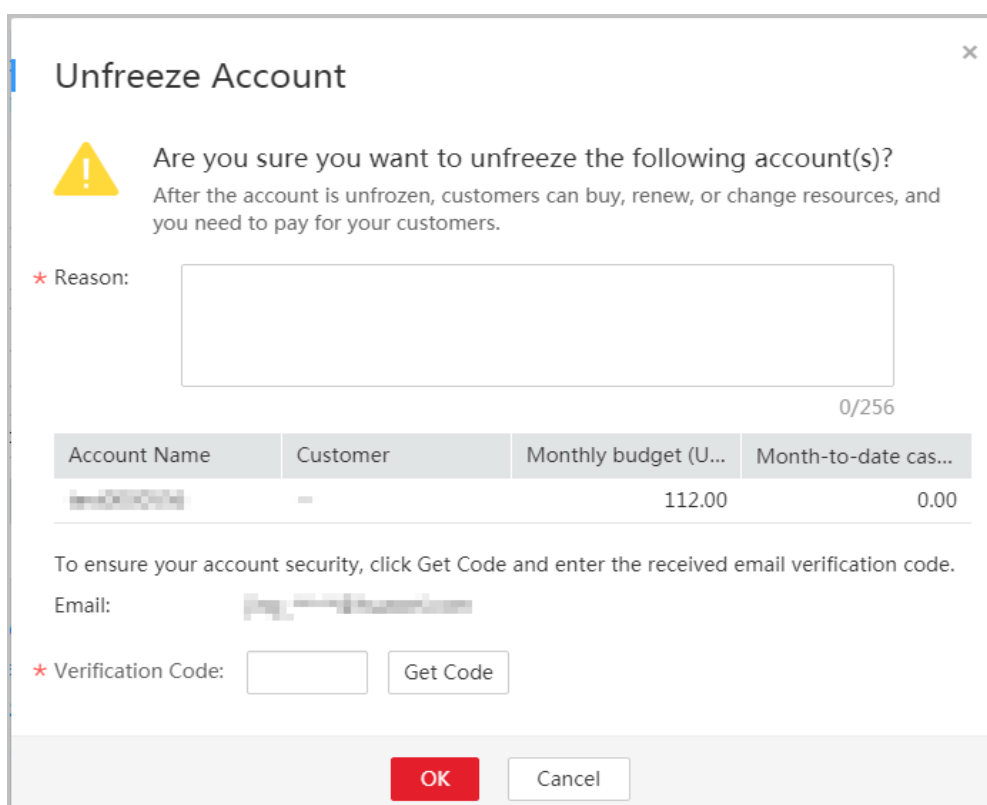
NOTE

This API will be brought offline. For details about the new API for unfreezing a customer Account, see [5.3.3 Unfreezing a Customer Account](#).

Web UI

Alternatively, partners can switch to the **My Customers** page to unfreeze accounts of reseller customers.

- Step 1** Use your account to log in to [Huawei Cloud](#).
- Step 2** In the drop-down list of your account name, click **Partner Center** to go to the Partner Center.
- Step 3** In the navigation, click **Sales > Customer Business > My Customers**.
- Step 4** Click **Unfreeze Account** in the **Operation** column in the row of the target customer.



The dialog box titled "Unfreeze Account" contains a warning icon and the text: "Are you sure you want to unfreeze the following account(s)? After the account is unfrozen, customers can buy, renew, or change resources, and you need to pay for your customers." Below this is a text input field for the reason, with a character count of 0/256. A table lists account details, and below it is an email verification section with a "Get Code" button and a "Verification Code" input field. At the bottom are "OK" and "Cancel" buttons.

Account Name	Customer	Monthly budget (U...	Month-to-date cas...
123456789	-	112.00	0.00

- Step 5** Enter the reason.
- Step 6** Click **Get Code** and enter the obtained verification code.
- Step 7** Click **OK**.

A message is displayed indicating that the account is unfrozen.

----End

REST API

Partners can unfreeze accounts of customers associated with the partners in reseller model on the partner sales platform. After the accounts are unfrozen, fees generated when the customers purchase, renew the subscription to, and change resources are paid by the partners.

 NOTE

This API can only be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor.

1. URI

POST /v1.0/{partner_id}/partner/customer-mgr/unfrozens

The following table describes the parameters.

Parameter	Mandatory	Value Range	Description
partner_id	Yes	A maximum of 64 characters	Partner ID (assigned by Huawei). For details about how to obtain the partner ID, see How Do I Check the Partner ID? The system does not verify this parameter.

2. Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
customerIds	Yes	List<String>	A maximum of 10 IDs	IDs of customers whose accounts are to be unfrozen Customer account ID. For details, see How Do I Obtain Customer's customer_id and domain_id Values?
reason	Yes	String	A maximum of 256 characters	Account unfreezing reason.

Request Example

```
POST https://bss-intl.myhuaweicloud.com/v1.0/{partner_id}/partner/customer-mgr/unfrozens HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlIhvcNAQcCo...ggg1BBIIINPXsidG9rZ

{
  "customerIds": [
    "06502440a080d5e90f44c01cbccfa280",
    "065faa30c880d5ce0fddc007a6cb6f40"
  ],
  "reason": "The customer has topped up its account."
}
```

3. Response

Response Parameters

Parameter	Mandatory	Type	Value Range	Description
error_code	No	String	A maximum of 16 characters	Error code. This field is not returned when the operation is successful or partially failed. For details, see 4 .
error_msg	No	String	A maximum of 1024 characters	Error description. This field is not returned when the operation is successful or partially failed.
failDetail	No	list<Error Detail>	-	Error cause description. This field is returned only when the operation is partially failed. For details, see Table 12-11 .
failNum	No	Integer	-	Number of failures. This field is returned only when the operation is successful or partially failed.
successNum	No	Integer	-	Number of successful operations. This field is returned only when the operation is successful or partially failed.

Table 12-11 ErrorDetail

Parameter	Mandatory	Type	Value Range	Description
error_code	Yes	String	A maximum of 16 characters	Error code. For details, see Table 12-12 .
error_msg	Yes	String	A maximum of 1024 characters	Error message.
id	Yes	String	A maximum of 256 characters	ID. The value corresponds to customerId .

Table 12-12 Error codes (partial)

Error Code	Description
CBC.0999	Other errors.
CBC.5004	You do not have the operation permission to the customer.
CBC.5024	This API cannot be invoked because the association type of the customer is incorrect.

Example response

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

{
  "failNum": 0,
  "successNum": 2,
  "failDetail": []
}
```

4. 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	Parameter error.
403	CBC.0150	Invalid operation.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

12.3 Transaction Management

12.3.1 Yearly/monthly Order Management

12.3.1.1 Querying Orders (Old)

Function

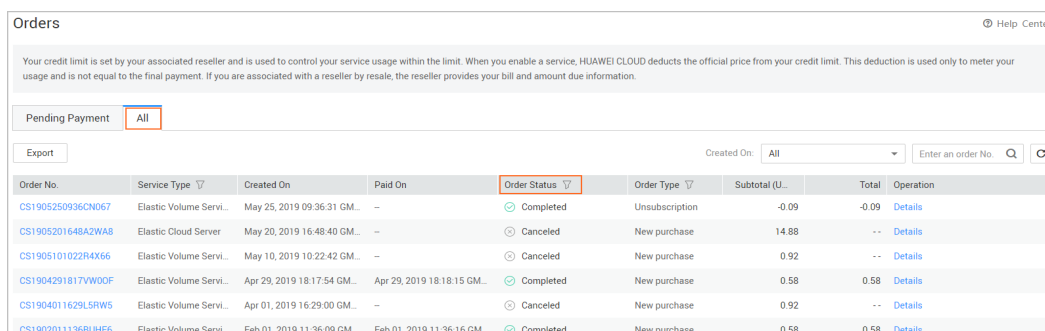
After a customer purchases yearly/monthly resources, it can query the orders in different statuses, such as in the pending approval, processing, canceled, completed, and pending payment statuses.

NOTE

This API will be brought offline soon. For details about the new API for querying orders, see [8.3.1 Querying Orders](#).

Web UI

Log in to the Billing Center and switch to the [Orders](#) page. On the displayed page, click the **All** tab to view the orders in different statuses, such as pending approval, processing, canceled, completed, and pending payment.



Order No.	Service Type	Created On	Paid On	Order Status	Order Type	Subtotal (U.S. \$)	Total	Operation
CS1905250936CND67	Elastic Volume Servi...	May 25, 2019 09:36:31 GM...	--	Completed	Unsubscription	-0.09	-0.09	Details
CS1905201648A2WA8	Elastic Cloud Server	May 20, 2019 16:48:40 GM...	--	Canceled	New purchase	14.88	--	Details
CS1905101022R4X66	Elastic Volume Servi...	May 10, 2019 10:22:42 GM...	--	Canceled	New purchase	0.92	--	Details
CS1904291817VW00F	Elastic Volume Servi...	Apr 29, 2019 18:17:54 GM...	Apr 29, 2019 18:18:15 GM...	Completed	New purchase	0.58	0.58	Details
CS1904011629LSRW5	Elastic Volume Servi...	Apr 01, 2019 16:29:00 GM...	--	Canceled	New purchase	0.92	--	Details
CS1902011136BLUHF6	Elastic Volume Servi...	Feb 01, 2019 11:36:09 GM...	Feb 01, 2019 11:36:16 GM...	Completed	New purchase	0.58	0.58	Details

REST API

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

NOTE

- This API can be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor, or the AK/SK or token of a customer. If this API is invoked using the AK/SK or token of a cloud solution provider or a distributor, only the orders of customers associated in the reseller model can be queried.
- 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 [12.3.2.1 Querying Customer's Yearly/Monthly Resources \(Old\)](#). Enter the order ID in the request to query the resource information.

1. URI

GET /v1.0/{domain_id}/common/order-mgr/orders/detail

The following table describes the parameters.

Table 12-13 URI parameters

Parameter	Mandatory	Maximum Length of Characters	Description
domain_id	Yes	A maximum of 64 characters	- A partner id should be entered if the partner's AK/SK or token is used. For details about how to obtain the partner ID, see How Do I Check the Partner ID? - A customer account ID should be entered if the customer AK/SK or token is used. For details, see How Do I Obtain Customer's customer_id and domain_id Values?

Table 12-14 Request parameters

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
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. If this parameter is set to "" or null , it can be used as a filter criterion.
customer_id	No	String	A maximum of 64 characters	Customer account ID. For details, see How Do I Obtain Customer's customer_id and domain_id Values? If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null .

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
create_time_begin	No	String	A maximum of 64 characters	Start time of order creation. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The range queried cannot exceed one year. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.
create_time_end	No	String	A maximum of 64 characters	End time of order creation. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0 - 23, and the range of <i>mm</i> and <i>ss</i> is 0 - 59. The range queried cannot exceed one year. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.
service_type	No	String	A maximum of 64 characters	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs. To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null, it can be used as a filter criterion.

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
status	No	String	A maximum of 64 characters	Order status. The value can be: • 1: Pending approval • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed If this parameter is not included in the request parameters, is left empty , or is set to null , it cannot be used as a filter criterion. It cannot be set to "".
order_type	No	String	A maximum of 64 characters	Order type. The value can be: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/monthly to pay-per-use • 11: Pay-per-use to yearly/monthly • 13: Trial • 14: Commercial use • 15: Price adjustment If this parameter is not included in the request parameters, is left empty , or is set to null , it cannot be used as a filter criterion. It cannot be set to "".
page_size	Yes	Integer	[1-100]	Number of rows on a page.
page_index	Yes	Integer	[1-Maximum integer]	Current page number. If the value of this parameter exceeds 1000000 , the default value 1 is used.

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
sort	No	String	A maximum of 36 characters	Sorting order of the orders. You can sort the orders by creation time. If you set the value to createTime, the system sorts orders by creation time in ascending order. If you set the value to -createTime, the system sorts orders by creation time in descending order. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.
payment_time_begin	No	String	A maximum of 64 characters	Start time of order payment. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The interval between the order creation time and termination cannot exceed one year. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
payment_time_end	No	String	A maximum of 64 characters	End time of order payment. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z. The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59. The interval between the order creation time and termination cannot exceed one year. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. It cannot be set to "" or null.
method	No	String	64	Query method. • oneself: Query your own orders. • sub_customer: Query customer orders that are paid for by you. If this parameter is not included in the request parameters, is set to "", or is set to null, the default value oneself is used.

2. Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v1.0/{domain_id}/common/order-mgr/orders/detail?
page_size=5&page_index=1 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhcNAQcCo...ggg1BBIIlNPXsidG9rZ
```

3. Response

Response Parameters

Parameter	Type	Description
error_code	String	Error code. For details, see 4.

Parameter	Type	Description
error_msg	String	Error description.
data	Result	Order list For details, see Table 12-15 .

Table 12-15 Result

Parameter	Type	Description
pageSize	Integer	Number of rows on a page.
pageIndex	Integer	Current page number.
totalSize	Integer	Number of records that match the query conditions.
orderInfos	List<CustomerOrder>	Order details. For details, see Table 12-16 .

Table 12-16 CustomerOrder

Parameter	Type	Description
orderId	String	Order ID.
baseOrderId	String	Parent order ID (order ID before splitting). When a cloud service is renewed or changed or a cloud service is unsubscribed, a new order ID (orderId value) is generated. In this case, baseOrderId indicates the original ID before the renewal, change, or unsubscription. This field has been discarded.
beld	String	Partner business entity ID.
customerId	String	Customer ID.

Parameter	Type	Description
sourceType	Integer	Customer order source type. The value can be: • 1: Customer • 2: Agent • 3: Contract • 4: Distributor • 5: Deleted resources • 6: Supplement • 7: Compensation • 8: Auto-created NOTE Orders generated in the following scenarios are automatically created by the system: • Unsubscription orders created in the cases of subscription failed and auto unsubscription • Auto unsubscription triggered for failed hardware orders or failed subscription of combined cloud services (including hardware) • Return orders automatically created for hardware replacement • Renewal orders created during auto-renewal
status	Integer	Order status. The value can be: • 1: Pending approval • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed
orderType	Integer	Order Type: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/monthly to pay-per-use • 11: Pay-per-use to yearly/monthly • 13: Trial • 14: Commercial use • 15: Price adjustment
currency	Double	Order amount (original price). In the unsubscription order, the amount is equal to the value of currencyAfterDiscount.

Parameter	Type	Description
currencyAfterDiscount	Double	Order amount after a discount (excluding the vouchers or cards)
measureId	Integer	Order amount unit. 1: Dollar 2: Dime 3: Cent
measureName	String	Amount unit name.
createTime	String	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
paymentTime	String	Payment time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
lastUpdateTime	String	Latest status update time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
needAudit	Boolean	Whether the approval is required.
currencyType	String	Currency code.
contractId	String	Contract ID.
currencyOfficial	Double	Order amount (list price). In the unsubscription order, the amount is equal to the value of currencyAfterDiscount .
amountInfo	AmountInfo	Order deduction details. For details, see Table 12-17 .
serviceType	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .

Table 12-17 AmountInfo

Parameter	Type	Description
discountList	List<DiscountItem>	Fee item. For details, see Table 12-18 .
cashcouponAmount	Double	Flexi-purchase coupon amount (reserved).
couponAmount	Double	Cash coupon amount.
cardAmount	Double	Stored-value card amount (reserved).
commissionAmount	Double	Handling fee (only for unsubscription orders).
consumedAmount	Double	Consumption amount (only for unsubscription orders).

Table 12-18 DiscountItem

Parameter	Type	Description
discountType	String	Discount type. 200 : Promotion product discount 300 : Promotion discount coupon 301 : Promotion coupon 302 : Promotion flexi-purchase coupon 500 : Specified discount for agent subscription 501 : Specified exemption for agent subscription 502 : Specified buy-it-now price for agent subscription 600 : Discount specified in the discount and rebate contract 601 : Discount specified in the channel frame contract 602 : Discount specified in the designated-purpose fund contract 603 : Discount specified in the directly signed offline contract 604 : Discount specified in the authorized telemarketing contract 605 : Discount specified in the commercial contract 606 : Discount specified in the channel commercial contract 607 : Partner authorized discount 609 : discount for adjusting an order price 610 : Discount amount 700 : Promotion discount 800 : Top-up account discount
discountAmount	Double	Discounted amount.

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",
  "data": {
    "pageSize": 10,
    "pageIndex": 1,
    "totalSize": 1,
```

```
"orderInfos": [{
  "orderId": "9Lw9b*****mqK5k",
  "baseOrderId": null,
  "beld": "0",
  "customerId": "L3BnG*****jBdD",
  "sourceType": 1,
  "status": 4,
  "orderType": 1,
  "currency": 30,
  "currencyAfterDiscount": 30,
  "measureId": 1,
  "measureName": null,
  "createTime": "2019-04-01T11:28:20Z",
  "paymentTime": null,
  "lastUpdateTime": "2019-04-02T11:29:42Z",
  "needAudit": false,
  "currencyType": "USD",
  "contractId": null,
  "currencyOfficial": 30,
  "amountInfo": {
    "discountList": [{
      "discountType": "901",
      "discountAmount": 100
    }],
    "cashcouponAmount": 1,
    "couponAmount": null,
    "cardAmount": null,
    "commissionAmount": 4,
    "consumedAmount": 5
  },
  "serviceType": "hws.service.type.ebs"
}]
}
```

4. 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 Status Code	Error Code	Description
200	CBC.000	Succeeded.
400	CBC.0100	Incorrect parameter.
400	CBC.0101	Invalid parameter.
403	CBC.0151	Access denied.

HTTP Status Code	Error Code	Description
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.

12.3.1.2 Querying Order Details (Old)

Function

A customer can invoke this API to query order bills.

NOTE

This API will be brought offline soon. For details about the new API for querying order details, see [8.3.2 Querying Order Details](#).

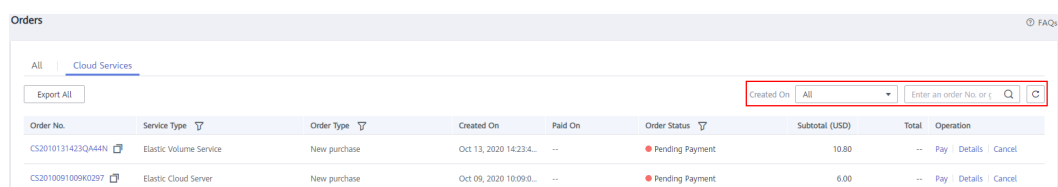
Web UI

A customer can switch to the **Orders** page in the Billing Center to query order details.

Step 1 Go to the [My Orders](#) page.

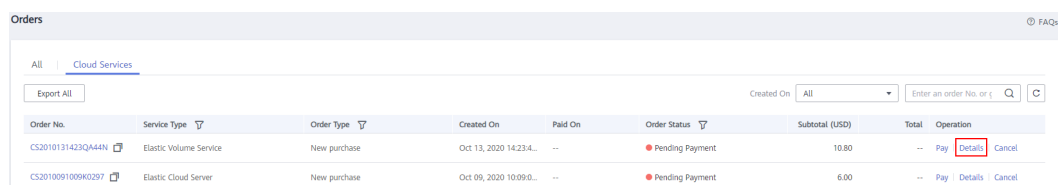
Step 2 To view a cloud service order, click the **Cloud Services** tab.

Step 3 You can filter orders by creation time, order number, or product name.



Order No.	Service Type	Order Type	Created On	Paid On	Order Status	Subtotal (USD)	Total	Operation
CS2010131423Q44N	Elastic Volume Service	New purchase	Oct 13, 2020 14:23:4...	--	Pending Payment	10.80	--	Pay Details Cancel
CS2010091009K0297	Elastic Cloud Server	New purchase	Oct 09, 2020 10:09:0...	--	Pending Payment	6.00	--	Pay Details Cancel

Step 4 Click **Details** for the target order.

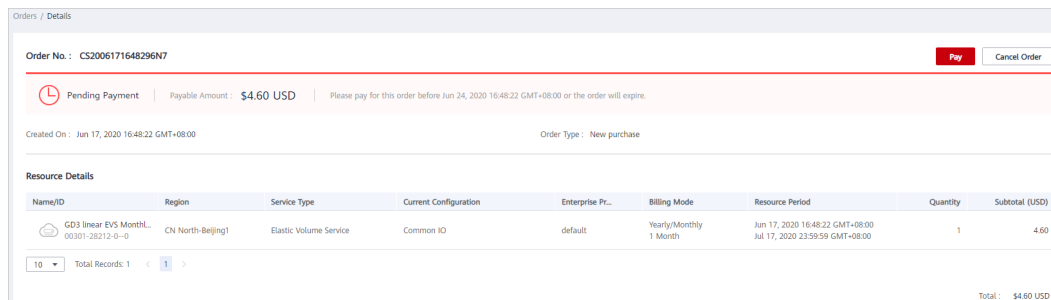


Order No.	Service Type	Order Type	Created On	Paid On	Order Status	Subtotal (USD)	Total	Operation
CS2010131423Q44N	Elastic Volume Service	New purchase	Oct 13, 2020 14:23:4...	--	Pending Payment	10.80	--	Pay Details Cancel
CS2010091009K0297	Elastic Cloud Server	New purchase	Oct 09, 2020 10:09:0...	--	Pending Payment	6.00	--	Pay Details Cancel

NOTE

If the order status is **Processing**,  indicates that resources are being created and indicates that the order contains a resource that failed to be created. 

- If the cloud service order status is **Pending Payment**, you can pay or cancel the order on the order details page.



Name/ID	Region	Service Type	Current Configuration	Enterprise Pr...	Billing Mode	Resource Period	Quantity	Subtotal (USD)
GDS linear EVS Monthl... 00301-28212-0-0	CN North-Beijing1	Elastic Volume Service	Common IO	default	Yearly/Monthly 1 Month	Jun 17, 2020 16:48:22 GMT+08:00 Jul 17, 2020 23:59:59 GMT+08:00	1	4.60

Total : \$4.60 USD

- If your cloud service order has any resources that fail to be provisioned, you will be automatically unsubscribed from the resources.

NOTE

When an account manager places an order on behalf of the customer in accordance with the contract, the contract information will be displayed on the order details page. The account manager can then click the contract name to go to the contract details page.

----End

REST API

A customer can query order details on the partner sales platform.

NOTE

- This API can be invoked using the AK/SK or token of a cloud solution provider or a Huawei Cloud distributor, or the AK/SK or token of a customer.
- If you want to query the resource information of a specified order, invoke the API described in [12.3.2.1 Querying Customer's Yearly/Monthly Resources \(Old\)](#) and enter the order ID in the request to query the resource information.

1. URI

GET /v1.0/{domain_id}/common/order-mgr/orders/{order_id}

The following table describes the parameters.

Table 12-19 URI parameters

Parameter	Mandatory	Maximum Length of Characters	Description
domain_id	Yes	A maximum of 64 characters	- The value will be Partner ID if the partner's AK/SK or token is used. For details about how to obtain the partner ID, see How Do I Check the Partner ID? - A customer account ID should be entered if the customer AK/SK or token is used. For details, see How Do I Obtain Customer's customer_id and domain_id Values?
order_id	Yes	A maximum of 64 characters	Order ID. The system will return the orders if the orders are queried.

Table 12-20 Request parameters

Parameter	Mandatory	Value Range	Description
offset	No	[1-Maximum integer]	Page number. If this parameter is not input, the default value is 1. If the value of this parameter exceeds 1000000, the default value 1 is used. If this parameter is not included in the request parameters, the value 1 is used. It cannot be set to "". If this parameter is left empty or is set to null, the value of orderInfo in the response is null.
limit	No	[1-100]	Number of records displayed on each page. If this parameter is not input, the default value is 10. If this parameter is not included in the request parameters, is left empty, or is set to null, the value 10 is used. This parameter cannot be set to "".

2. Request Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v1.0/{domain_id}/common/order-mgr/orders/CS****O7
HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ
```

3. Response

Response Parameters

Parameter	Type	Description
error_code	String	Error code. For details, see 4 .
error_msg	String	Error description.
orderInfo	Customer OrderEntity	Order details. This parameter is available only when offset is set to 1 . For details, see Table 12-21 .
count	Integer	Number of order items
orderlineitems	List<Order LineItemEntity>	Order items in an order For details, see Table 12-22 .

Table 12-21 CustomerOrderEntity

Parameter	Type	Description
orderId	String	Order ID
baseOrderId	String	Parent order ID (order ID before splitting). This parameter is returned only for renewal orders.
beld	String	Partner business entity ID.
customerId	String	Customer ID.

Parameter	Type	Description
sourceType	Integer	Customer order source type. The value can be: • 1: Customer • 2: Agent • 3: Contract • 4: Distributor • 5: Deleted resources • 6: Supplement • 7: Compensation • 8: Auto-created NOTE Orders generated in the following scenarios are automatically created by the system: • Unsubscription orders created in the cases of subscription failed and auto unsubscription • Auto unsubscription triggered for failed hardware orders or failed subscription of combined cloud services (including hardware) • Return orders automatically created for hardware replacement • Renewal orders created during auto-renewal
status	Integer	Order status. The value can be: • 1: Pending approval • 3: Processing • 4: Canceled • 5: Completed • 6: Pending payment • 9: To be confirmed
orderType	Integer	Order type. The value can be: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/monthly to pay-per-use • 11: Pay-per-use to yearly/monthly • 13: Trial • 14: Commercial use • 15: Price adjustment
currency	Double	Order amount (original price). In the unsubscription order, the amount is equal to the value of currencyAfterDiscount.

Parameter	Type	Description
currencyAfterDiscount	Double	Order amount after a discount (excluding the vouchers or cards)
measureId	Integer	Order amount unit. • 1: Dollar • 2: Dime • 3: Cent
measureName	String	Amount unit name.
createTime	String	Creation time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
paymentTime	String	Payment time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
lastUpdateTime	String	Latest status update time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
needAudit	Boolean	Whether the approval is required.
currencyOfficial	Double	Order amount (list price). In the unsubscription order, the amount is equal to the value of currencyAfterDiscount .
amountInfo	AmountInfo	Order deduction details. For details, see Table 12-23 .
currencyType	String	Currency code.
contractId	String	Contract ID.
serviceType	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .

Table 12-22 OrderLineItemEntity

Parameter	Type	Description
orderLineItemId	String	Order item ID.
cloudServiceType	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
productId	String	Product ID.
productSpecDesc	String	Product specification description.
periodType	Integer	Period type. • 0: Day • 1: Week • 2: Month • 3: Year • 4: Hour • 5: One-off • 6: Pay-per-use (reserved) • 7: By usage report (reserved)
periodNum	Integer	Number of periods.
validTime	String	Effective time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
expireTime	String	Expiration time. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z . The range of <i>HH</i> is 0-23, and the range of <i>mm</i> and <i>ss</i> is 0-59.
subscriptionNum	Integer	Number of subscriptions.
currency	Double	Order amount (original price). In the unsubscription order, the amount is equal to the value of currencyAfterDiscount .
currencyAfterDiscount	Double	Order amount after a discount (excluding the vouchers or cards).

Parameter	Type	Description
currencyOfficial	Double	Order amount (list price). In the unsubscription order, the amount is equal to the value of currencyAfterDiscount .
amountInfo	AmountInfo	Order deduction details. For details, see Table 12-23 .
currencyType	String	Currency code.
categoryCode	String	Product catalog code.

Table 12-23 AmountInfo

Parameter	Type	Description
discountList	List<DiscountItem>	Fee item. For details, see Table 12-24 .
cashcouponAmount	Double	Flexi-purchase coupon amount (reserved).
couponAmount	Double	Cash coupon amount.
cardAmount	Double	Stored-value card amount (reserved).
commissionAmount	Double	Handling fee (only for unsubscription orders).
consumedAmount	Double	Consumption amount (only for unsubscription orders).

Table 12-24 DiscountItem

Parameter	Type	Description
discountType	String	Discount type. 200 : Promotion product discount 300 : Promotion discount coupon 301 : Promotion coupon 302 : Promotion flexi-purchase coupon 500 : Specified discount for agent subscription 501 : Specified exemption for agent subscription 502 : Specified buy-it-now price for agent subscription 600 : Discount specified in the discount and rebate contract 601 : Discount specified in the channel frame contract 602 : Discount specified in the designated-purpose fund contract 603 : Discount specified in the directly signed offline contract 604 : Discount specified in the authorized telemarketing contract 605 : Discount specified in the commercial contract 606 : Discount specified in the channel commercial contract 607 : Partner authorized discount 609 : Discount for adjusting an order price 610 : Discount amount 700 : Promotion discount 800 : Top-up account discount
discountAmount	Double	Discounted amount.

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",
  "orderInfo": {
    "orderId": "CS1*****LZ2",
    "baseOrderId": null,
    "beld": "9689",
```

```
"customerId": "d75****298",
"sourceType": 1,
"status": 5,
"orderType": 1,
"currency": 3,
"currencyAfterDiscount": 0,
"measureId": 1,
"measureName": null,
"createTime": "2019-06-20T16:09:52Z",
"paymentTime": "2019-06-20T16:10:11Z",
"lastUpdateTime": "2019-06-20T16:11:07Z",
"needAudit": false,
"contractId": null,
"currencyType": "USD",
"currencyOfficial": 3,
"amountInfo": {
  "discountList": [{
    "discountType": "301",
    "discountAmount": 3
  }],
  "cashcouponAmount": 0,
  "couponAmount": 3,
  "cardAmount": 0,
  "commissionAmount": null,
  "consumedAmount": null
},
"serviceType": "hws.service.type.ebs"
},
"count": 1,
"orderlineItems": [{
  "orderLineItemId": "CS1****3LZ2-000001",
  "cloudServiceType": "hws.service.type.ebs",
  "productId": "d5d****3d24",
  "productSpecDesc": "Common I/O",
  "categoryCode": "hws.resource.storage1.evs",
  "periodType": 2,
  "periodNum": 1,
  "validTime": "2019-06-20T16:10:30Z",
  "expireTime": "2019-07-21T15:59:59Z",
  "subscriptionNum": 1,
  "currency": 3,
  "currencyAfterDiscount": 0,
  "currencyOfficial": 3,
  "amountInfo": {
    "discountList": [{
      "discountType": "301",
      "discountAmount": 3
    }],
    "cashcouponAmount": 0,
    "couponAmount": 3,
    "cardAmount": 0,
    "commissionAmount": null,
    "consumedAmount": null
  },
  "currencyType": "USD"
}]
}
```

4. 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 Status Code	Error Code	Description
200	CBC.000	Succeeded.
400	CBC.0100	Incorrect parameter.
400	CBC.0101	Invalid parameter.
403	CBC.0151	Access denied.
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.

12.3.1.3 Paying Yearly/Monthly Product Orders (Old)

Function

NOTE

This API will be brought offline soon. For details about the new API for paying yearly/monthly product orders, see [8.3.3 Paying Yearly/Monthly Product Orders](#).

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 discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field **simultaneousUseWithContractDiscount** with a value of **0**, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field **minConsumeDiscount** and the values of **discount_ratio** for all the order items are less than the value of **minConsumeDiscount**, the discount and coupon cannot be used at the same time.
 - If the restriction attribute of a coupon contains field **simultaneousUseWithPromotionDiscount** with a value of **0**, the discount and coupon cannot be used at the same time.
- When this API is invoked by a unified accounting member, if their enterprise master account has coupons available for the orders, the coupons are automatically applied without the need to include coupon IDs in a request.

Constraints

This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used.

URI

POST /v2/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 order_id value in the response message of invoking the API described in 8.3.1 Querying Orders or the order_ids value in the response message of API described in 8.4.2 Renewing Subscription to Yearly/Monthly Resources .

Parameter	Mandatory	Type	Maximum Length of Characters	Description
coupon_infos	No	List<CouponSimpleInfoOrderPay>	[0-3]	This parameter is reserved. For details, see Table 12-25. If this parameter is not included in request parameters, is set to null, or is set to an empty array, no coupons are used in payment. CAUTION When this API is invoked by a unified accounting member, if their enterprise master account has coupons available for the orders, the coupons are automatically applied without the need to include coupon IDs in a request.
discount_infos	No	List<DiscountSimpleInfo>	[0-1]	Discount ID list. For details, see Table 12-26. If this parameter is not included in request parameters, is set to null, or is set to an empty array, no discount is used in payment.

Table 12-25 CouponSimpleInfoOrderPay

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. • 300: Discount coupon (reserved) • 301: Promotion coupon • 302: Promotion flexi-purchase coupon (reserved) • 303: Promotion stored-value card (reserved)

Table 12-26 DiscountSimpleInfo

Parameter	Mandatory	Type	Maximum Length of Characters	Description
id	Yes	String	A maximum of 64 characters	Discount ID.
type	Yes	Integer	[0,2,3,609]	Discount type. • 0: promotion discount • • 2: commercial discount • 3: discount granted by a partner • 609: discount for adjusting an order price NOTE Once the discount 609 (discount for adjusting an order price) is used during order payment, the discount must be used and the discount type cannot be changed.

Example Request

POST https://bss-intl.myhuaweicloud.com/v2/orders/customer-orders/pay HTTP/1.1
Content-Type: application/json

```
X-Auth-Token: MIIPAgYJKoZIhvcNAQcCo...ggg1BBIINPXsidG9rZ
{
  "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 of 10 characters	Error code. For details, see Status Codes .
error_msg	String	A maximum of 256 characters	Error description.

Parameter	Type	Maximum Length of Characters	Description
quota_infos	List<QuotaInfo>	-	List of the resources whose quota or capacity is insufficient. For details, see Table 12-27 . This parameter is valid only when error_code is set to CBC.99003141 . • If the quota is insufficient, notify the customer to submit a service ticket on the HUAWEI CLOUD official website to increase the quota and then pay the order. • If the capacity is insufficient, notify the customer to place an order again. • If the specifications have changed, notify the customer to place an order again.
enterprise_project_auth_result	List<EnterpriseProject>	-	Information about the enterprise project whose fund is insufficient. For details, see Table 12-28 . This parameter is valid only when error_code is set to CBC.99003155 .

Table 12-27 QuotaInfo

Parameter	Type	Description
region	String	Cloud service region code, for example, ap-southeast-1 . Obtain the value from the Region column in Regions and Endpoints .
service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs .
resource_type_code	String	Resource type code. For example, the resource type code of VM is hws.resource.type.vm . The relationship between ResourceType and CloudServiceType is as follows: A resource type represents a resource contained in the cloud service type, and the cloud service type is a combination of multiple resource types.

Parameter	Type	Description
resource_spec_code	String	Resource specifications of the subscribed cloud service products. For example, the resource specification of a small-scale VM is s2.small.1.linux .
service_type_name	String	Cloud service type. For example, the cloud service type of ECS is Elastic Cloud Server .
resource_type_name	String	Resource type. For example, the resource type of ECS is Cloud Host .
auth_result	Integer	Verification result of the change of the cloud service quota, capacity, or specifications. 1: The quota is insufficient. 2: The capacity is insufficient. 3: The resource specifications are incorrect. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order. 4: The associated resource information is incorrect. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order. 99: Other errors. This value is valid only when the resource specifications change between the time when a customer places an order and the time when the customer pays the order.
available_zone	String	AZ ID. For details, see the AZ names of regions listed on the Regions and Endpoints , for example, cn-north-1a .

Table 12-28 EnterpriseProject

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project where an order belongs. 0: ID of a default project - 1 or null: Non-project ID
enterprise_project_name	String	Enterprise project name.

Parameter	Type	Description
auth_status	Integer	Verification result of the enterprise project's fund quota. 10: The fund quota is insufficient or the project is invalid. 11: The organization budget quota is insufficient.

Example Response

```
HTTP/1.1 204 No Content
Content-Type: application/json;charset=UTF-8
Content-Length: length
Date: response time
```

Status Codes

NOTE

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

HTTP Status Code	Error Code	Description
400	CBC.99000046	Insufficient budget.
400	CBC.30000010	Operation not allowed because the order is invalid or does not exist.
400	CBC.99003106	The order status has changed and no payment can be made.
400	CBC.99003108	This discount cannot be used for this order.
400	CBC.99003110	The order has not been paid before the expiration time. Please re-submit the order.
400	CBC.99003112	The coupon or stored-value card has been used.
400	CBC.99003116	The restriction to selected coupon regulates that the coupon cannot be used with the discount at the same time.

HTTP Status Code	Error Code	Description
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.99003151	This discount cannot be used together with other discounts.
400	CBC.99003155	Insufficient enterprise project fund quota, or invalid project.
400	CBC.99003156	Coupons applicable to KooGallery products cannot be used together with dedicated coupons.
400	CBC.99003162	The validity period set for the bandwidth add-on package cannot be earlier than the system time.
400	CBC.99003198	Insufficient budget of the organization.
400	CBC.99005003	Insufficient balance.
400	CBC.99006093	Failed to obtain the tax rate.
400	CBC.99005036	Payment via API not allowed for this customer. (Payment by balance and monthly-settled payment are not allowed.)
400	CBC.99008040	Too many attempts.
400	CBC.7281	Renewal, unsubscription, or payment not supported. Your account has been frozen.
500	CBC.0999	Other errors.
400	CBC.99000089	Operation failed. Sub orders of a combine order cannot be processed independently.
400	CBC.99008056	The maximum number of transactions allowed today has been reached.

12.3.2 Yearly/Monthly Resource Management

12.3.2.1 Querying Customer's Yearly/Monthly Resources (Old)

Function

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

Note:

- This API can be invoked using the customer AK/SK or token. If the AK/SK or token of a cloud solution provider or a distributor is used, no error is reported, but no data can be queried.
- This API can only be used to query resources successfully provisioned.

URI

GET /v1.0/{domain_id}/common/order-mgr/resources/detail

The following table describes the parameters.

Table 12-29 URI parameters

Parameter	Mandatory	Maximum Length of Characters	Description
domain_id	Yes	A maximum of 64 characters	Customer account ID. For details, see How Do I Obtain Customer's customer_id and domain_id Values?

Table 12-30 Request parameters

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
resource_ids	No	String	A maximum of 4096 characters	Resource IDs. Queries resources with the specified resource IDs. When only_main_resource is 0, the system queries the specified resources and their auxiliary resources. A maximum of 50 IDs can be queried at the same time. Use commas (,) to separate multiple IDs. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null, it can be used as a filter criterion. NOTE A resource ID is allocated by a cloud service after the resource is provisioned, such as server_id in ECS.
order_id	No	String	A maximum of 64 characters	Order ID. This parameter can be used for querying the resources in a specified order. If this parameter is not included in the request parameters or is left empty, it cannot be used as a filter criterion. If this parameter is set to "" or null, it can be used as a filter criterion.

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
only_main_resource	No	Integer	[0 1]	Whether to query only the primary resources. This parameter is invalid when resource_ids are IDs of attached resources. In this case, the system queries the attached resources. • 0: Queries both the primary resources and attached resources. • 1: Queries only the primary resources. The default value is 0. If this parameter is not included in the request parameters, is left empty, or is set to null, the default value 0 is used. This parameter cannot be set to "". NOTE A primary resource takes the primary position in the associated resources. • For the ECS service, ECSs are the primary resources, and EVS disks are attached resource. • For VPC, if the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource. If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.
status_list	No	String	-	Resource status. Queries resources in a specified status. If there are multiple statuses, separate them using commas (,). • 2: Provisioned • 4: Frozen • 5: Expired If this parameter is not included in the request parameters or is left empty, resources in all statuses will be returned. This parameter cannot be set to "" or null.

Parameter	Mandatory	Type	Maximum Length of Characters/ Value Range	Description
page_no	No	Integer	An integer greater than or equal to 1	Page number. The default value is 1 . If this parameter is not included in the request parameters, is left empty, or is set to null , the default value 1 is used. This parameter cannot be set to "".
page_size	No	Integer	[1-500]	Number of records on each page. The default value is 10 . The maximum value is 500 . If this parameter is not included in the request parameters, is left empty, or is set to null , the default value 10 is used. This parameter cannot be set to "".

Request

Request Parameters

None

Example Request

```
GET https://bss-intl.myhuaweicloud.com/v1.0/{domain_id}/common/order-mgr/resources/detail?resource_ids=b38*****62e,249*****c07&only_main_resource=1&page_no=1&page_size=100 HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIIPAgYJKoZlHvcNAQcCo...ggg1BBIINPXsidG9rZ
```

Response

Response Parameters

Parameter	Type	Description
error_code	String	Error code. For details, see Status Code .
error_msg	String	Error description.

Parameter	Type	Description
data	List<ResourceInstance>	Resource list. For details, see Table 12-31 .
total_count	Integer	Total number of records. The default value is 0 .

Table 12-31 ResourceInstance

Parameter	Type	Description
id	String	Internal ID of the resource to be provisioned. The ID generated after the resource is provisioned is resourceID .
resource_id	String	Resource ID.
resource_name	String	Resource instance name.
region_code	String	Region code.
cloud_service_type_code	String	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
resource_type_code	String	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .
resource_spec_code	String	Specification of a cloud service resource. For example, a VM resource specification is s2.small.1.linux (.win or .linux should be added at the end of the specification).
project_code	String	Resource project ID.
product_id	String	Product ID.
main_resource_id	String	Primary resource ID.
is_main_resource	Integer	Primary resource or not. ● 0: No ● 1: Yes

Parameter	Type	Description
status	Integer	Resource status. • 2: Provisioned • 3: Closed (not visible to customers) • 4: Frozen • 5: Expired
valid_time	String	Effective time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z .
expire_time	String	Expiration time of a resource. UTC time in "yyyy-MM-dd'T'HH:mm:ss'Z'" format, for example, 2019-05-06T08:05:01Z .
next_operation_policy	Integer	Next billing policy. • 0: Entering the grace period upon expiration • 1: Yearly/monthly to pay-per-use • 2: Automatically deleted upon expiration (directly deleted from resources that take effect) • 3: Automatically renewed upon expiration • 4: Automatically frozen upon expiration • 5: Automatically deleted upon expiration (deleted from resources in the retention period) NOTE Only 3 indicates that the resource is automatically renewed. In other cases, the expiration policy for non-automatic renewal is used.

Example Response

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

{
  "data": [
    {
      "id": "01154-21800069-0",
      "status": 2,
      "resource_id": "249*****c07",
      "resource_name": "114.115.169.185",
      "region_code": "cn-north-1",
      "cloud_service_type_code": "hws.service.type.vpc",
      "resource_type_code": "hws.resource.type.ip",
      "resource_spec_code": "5_sbgp",
      "project_code": "3f*****400",
      "product_id": "c1*****55",
```

```
{
  "main_resource_id": "249****c07",
  "is_main_resource": 1,
  "valid_time": "2018-04-26T18:03:03Z",
  "expire_time": "2018-06-27T15:59:59Z",
  "next_operation_policy": 3
},
{
  "id": "01154-21800073-0",
  "status": 2,
  "resource_id": "b3****62e",
  "resource_name": "ecs-9f88-0001",
  "region_code": "cn-north-1",
  "cloud_service_type_code": "hws.service.type.ec2",
  "resource_type_code": "hws.resource.type.vm",
  "resource_spec_code": "s3.medium.2.linux",
  "project_code": "3f****400",
  "product_id": "00301-62057-0--0",
  "main_resource_id": "b38****62e",
  "is_main_resource": 1,
  "valid_time": "2018-04-26T18:02:33Z",
  "expire_time": "2018-06-27T15:59:59Z",
  "next_operation_policy": 3
}
],
"error_code": "CBC.0000",
"error_msg": "success",
"total_count": 2
}
```

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 Status Code	Error Code	Description
200	CBC.0000	Succeeded.
400	CBC.0100	Incorrect parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.

12.3.2.2 Renewing Subscription to Yearly/Monthly Resources (Old)

Function

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

 NOTE

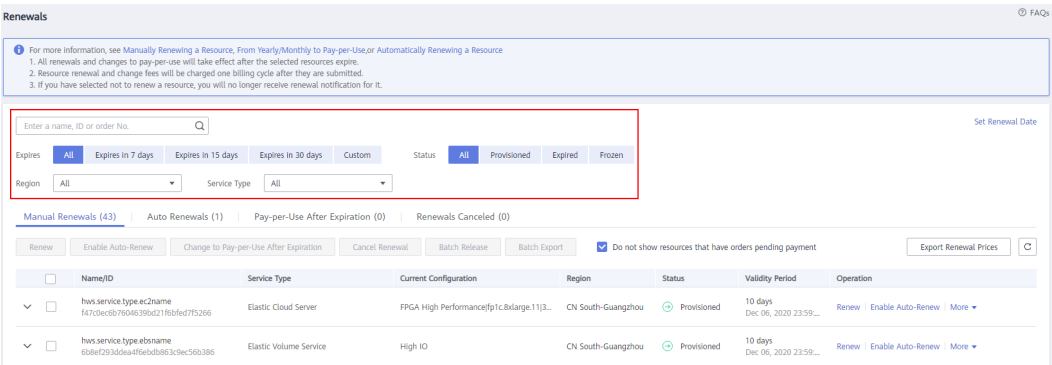
This API will be brought offline. For details about the new API for renewing subscription to yearly/monthly resources, see [8.4.2 Renewing Subscription to Yearly/Monthly Resources](#).

Web UI

Customers can manually renew subscription to yearly/monthly resources when the subscription is about to expire in the Billing Center.

Step 1 Go to the [Renewals](#) page.

Step 2 Set the search criteria.



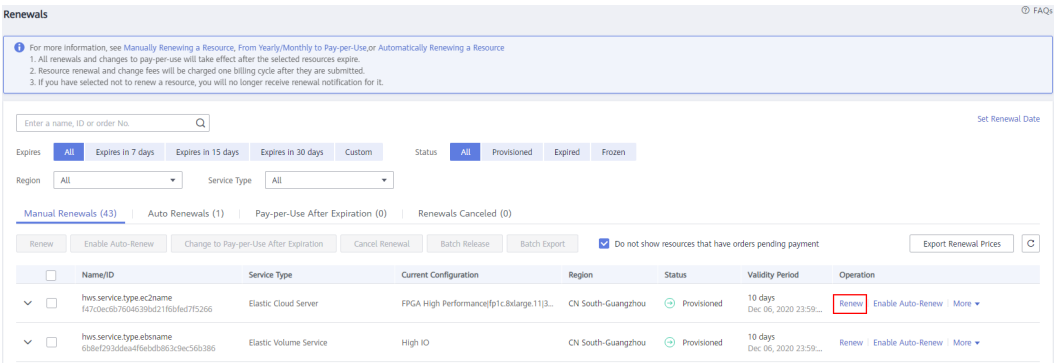
 NOTE

- Customers who have enabled enterprise project management can set the search criteria to filter an enterprise project and query its resources that are to be renewed.
- You can click **Set Renewal Date** to set the expiration date of resources. For details, see [Setting a Renewal Date](#).
- Under the **Manual Renewals**, **Auto Renewals**, **Pay-per-Use After Expiration**, and **Renewals Canceled** tabs, you can query all resources to be renewed.
- You can manually renew resources under the **Manual Renewals**, **Auto Renewals**, **Pay-per-Use After Expiration**, and **Renewals Canceled** tabs.

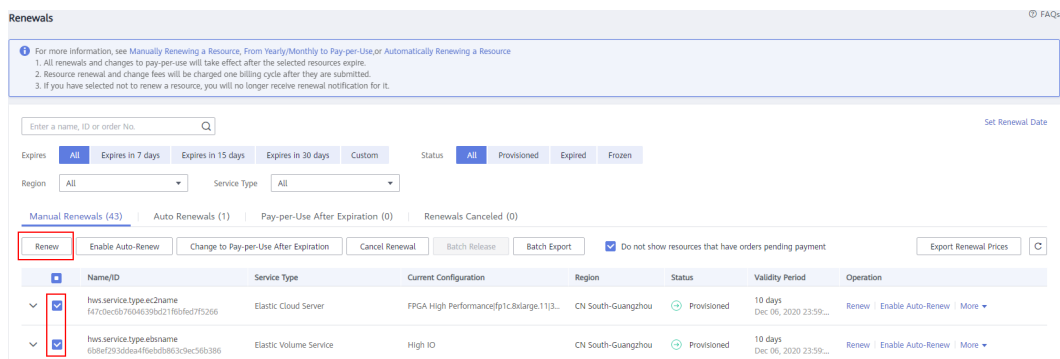
Step 3 All resources that need to be manually renewed can be moved to the **Manual Renewals** tab. For details, see [Restoring to Manual Renewal](#).

Step 4 Renew resources separately or in batches.

- Separate renewal: Click **Renew** in the **Operation** column for the desired resource.



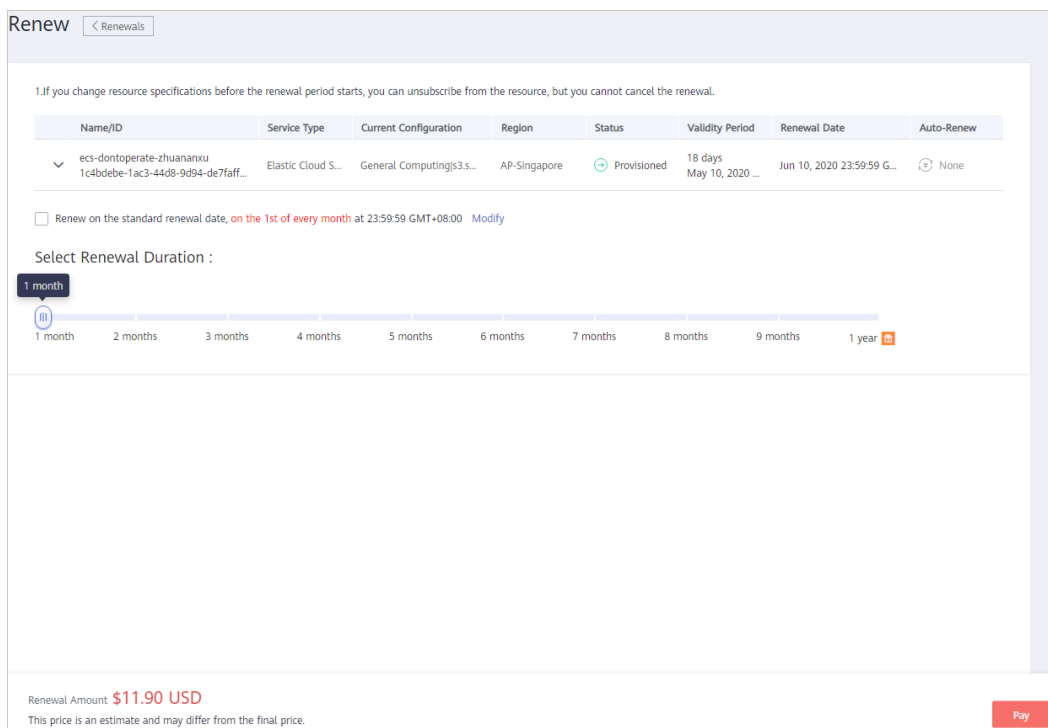
- Batch renewal: Select the check boxes for the desired resources, and click **Renew** in the upper left corner.



NOTE

- On the **Renewals** page, resources that have orders pending payment are hidden by default. You can unselect **Do not show resources that have orders pending payment** to show them.
- When you renew a resource that has an order pending payment, the following message will be displayed: "The resource has an order pending payment. You can renew it only after you pay or cancel the order." You can click the order number in the dialog box to go to the order details page. After you pay or cancel the order, the resource becomes renewable.

Step 5 Select a renewal duration and click **Pay**.



Step 6 Select discounts and a payment option, and click **Pay**.

----End

REST API

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

 NOTE

- This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used. Currently, cloud solution providers and distributors are unable to purchase products directly, which means they do not have yearly/monthly products.
- After you invoke this API, if a primary resource ID has an attached resource ID, the system will renew the subscription to both the primary resource and attached resource.
 - For example, ECS is the primary resource, and EVS is the attached resource.
 - If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource.
 - If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.
- This API supports automatic payment. Discounts and coupons can be used for automatic payment. For details about how to use discounts or coupons during payment, see [13.7 Support for Discounts or Coupons](#).

1. URI

POST /v1.0/{domain_id}/common/order-mgr/resources/renew

The following table describes the parameters.

Table 12-32 URI parameter description

Parameter	Mandatory	Value Range	Description
domain_id	Yes	A maximum of 64 characters	Customer account ID. For details, see How Do I Obtain Customer's customer_id and domain_id Values?

2. 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 is_main_resource in the response of the API described in 12.3.2.1 Querying Customer's Yearly/Monthly Resources (Old) .
period_type	Yes	Integer	[2 3]	Period type. The value can be: • 2: Month • 3: Year
period_num	Yes	Integer	[1-11]	Number of periods. • Month: 1 to 11 • Year: 1 to 3
isAutoPay	No	Integer	[0-1]	Whether enable automatic payment. • 0: No • 1: Yes If this parameter is left empty, default value 0 is used (automatic payment disabled). If this parameter is not included in the request parameters, is set to "", or is set to null , the value 0 is used. This parameter cannot be left empty.

Example Request

POST https://bss-intl.myhuaweicloud.com/v1.0/{domain_id}/common/order-mgr/resources/renew
HTTP/1.1

Content-Type: application/json

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

```
{  
  "resource_ids": ["53fe****068b"],  
  "period_type": 2,  
  "period_num": 2  
}
```

3. Response

Response Parameters

Parameter	Type	Description
error_code	String	Status code. For details, see 4 .
error_msg	String	Error description.
order_ids	List<String>	List of order IDs generated when resource subscription is renewed.
expiredResourceIds	List<string>	List of resources that cannot be renewed due to expiration. This parameter has a value only when the error code is 3016.

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",
  "order_ids": ["xxxxxxxxx"],
  "expiredResourceIds": []
}
```

4. 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
200	CBC.0000	Success.
200/ 400	CBC.0100	Invalid input parameter.
500	CBC.0999	Other errors.
403	CBC.0151	Access denied.
200	CBC.7281	You cannot renew or cancel subscription because your account has been frozen.

HTTP Status Code	Error Code	Description
200	CBC.3016	Expired resources exist.
200	CBC.99003144	You have orders in progress and cannot perform the current operation.
400	CBC.99003154	Subscription plus renewal too long. Select shorter renewal.
200	CBC.3144	You have orders in progress and cannot perform the current operation.
200	CBC.99003631	Resources that are being unsubscribed, deleted, or released cannot be renewed.
200	CBC.30010036	Renewal is only supported for primary resources.
200	CBC.30010069	The renewal period does not exist.
200	CBC.30050006	Automatic order payment failed.

12.3.2.3 Unsubscribing from Yearly/Monthly Resources (Old)

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.

NOTE

This API will be brought offline. For details about the new API for unsubscribing from yearly/monthly resources, see [8.4.3 Unsubscribing from Yearly/Monthly Resources](#).

Web UI

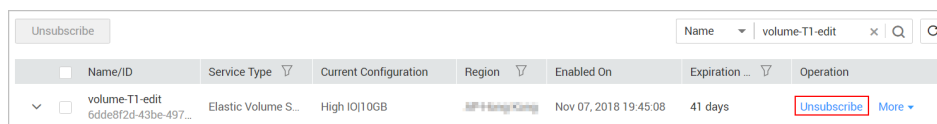
If a customer has subscribed to a yearly/monthly resource, the customer can use this API to unsubscribe from the resource in the Billing Center.

Step 1 Go to the [Unsubscriptions](#) page.

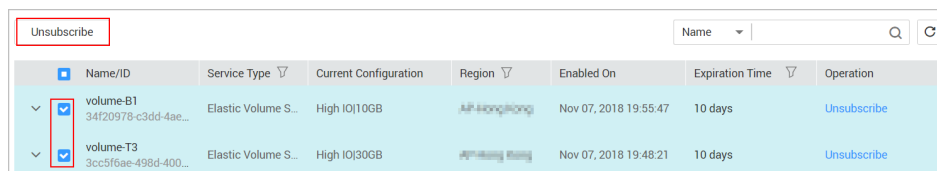
Step 2 Click the **Succeeded Resources** tab.

Step 3 Unsubscribe from resources separately or in batches.

- Unsubscribe from a single resource: Click **Unsubscribe** for a resource from which you want to unsubscribe.



- Batch unsubscribe from resources: Select the target resources from the resource list and click **Unsubscribe** in the upper left corner of the resource list.



Step 4 View the unsubscription information, select **I have confirmed that a handling fee will be charged for this unsubscription**, and click **Unsubscribe**.

Name/ID	Service Type	Current Configuration	Region	Period	Consumed(USD)	Handling Fee...	Unsubscripti...
lijie20181123 49dd1802-ec07-4fc5-83d7-701...	Elastic Volum...	HongKong-3...	HongKong	Nov 23, 2018 20:58:55 Nov 23, 2019 23:59:59	0.32	3.84	34.24

*** Select Reason for Unsubscription**

☒ Incorrect parameter selection during purchase
☐ Service tests completed
☐ Service deployment requirements not met
☐ Other

☐ More services purchased than deployment requirement
☐ Poor service
☐ Irreparable fault

Actual Payment ⓘ \$38.40 USD
Consumed ⓘ -\$0.32 USD
Handling Fee ⓘ -\$3.84 USD
Unsubscription \$34.24 USD

Balance Returned \$34.24 USD

☒ I have confirmed that a handling fee will be charged for this unsubscription. [View Details](#)

Unsubscribe

-----End

REST API

A customer can unsubscribe from its yearly/monthly resources on the partner sales platform.

A yearly/monthly resource can be unsubscribed from only after it has been successfully paid and provisioned.

 NOTE

- This API can be invoked using the customer AK/SK or token. The AK/SK or token of a cloud solution provider or a Huawei Cloud distributor cannot be used. Currently, cloud solution providers and distributors are unable to purchase products directly, which means they do not have yearly/monthly products.
- After you invoke this API, if a primary resource ID has an attached resource ID, the system will unsubscribe from both the primary resource and attached resource.
 - For example, ECS is the primary resource, and EVS is the attached resource.
 - If the shared bandwidth is used, the bandwidth is the primary resource, and EIPs are the attached resource.
 - If the exclusive bandwidth is used, EIPs are the primary resources, and the bandwidth is the attached resource.
- After invoking this API, you can also invoke the API described in Querying the Amount of Unsubscription Orders to query the orders corresponding to the unsubscription order amounts.

1. URI

POST /v1.0/{domain_id}/common/order-mgr/resources/delete

The following table describes the parameters.

Table 12-33 URI parameter description

Parameter	Mandatory	Value Range	Description
domain_id	Yes	A maximum 64 characters	Customer account ID. For details, see How Do I Obtain Customer's customer_id and domain_id Values?

2. Request

Request Parameters

Parameter	Mandatory	Type	Value Range	Description
resourceIds	Yes	List<String>	[1-10]	Resource IDs. A maximum of 10 resource IDs can be entered at a time. Only the primary resource IDs can be entered. Determine whether a resource is a primary resource based on is_main_resource in the response of the API described in 12.3.2.1 Querying Customer's Yearly/Monthly Resources (Old) .
unSubType	Yes	Integer	[1-2]	Unsubscription type. The value can be: 1: Unsubscribe from the resource and its renewal periods. 2: Unsubscribe from only the resource renewal periods.
unsubscribeReasonType	No	Integer	[1-5]	Unsubscription cause. The value can be: 1: The product is of poor usability. 2: The product functions cannot meet the requirements. 3: Customers do not know how to use the product, or the product operations are complex. 4: Customers are not satisfied with the service. 5: Others If this parameter is not included in the request parameters, is set to "", or is set to null, no value is returned.

Parameter	Mandatory	Type	Value Range	Description
unsubscribeReason	No	String	A maximum of 512 characters	Unsubscription reason, which is generally specified by the customer. If this parameter is not included in the request parameters, is set to "", or is set to null, no value is returned.

Example Request

```
POST https://bss-intl.myhuaweicloud.com/v1.0/{domain_id}/common/order-mgr/resources/delete
HTTP/1.1
Content-Type: application/json
X-Auth-Token: MIIPAgYJKoZlIhvcNAQcCo...ggg1BBIINPXsidG9rZ

{
  "resourceIds": ["53fa7828774df68b", "72a256456xdf45g"],
  "unSubType": 2,
  "unsubscribeReasonType": 2,
  "unsubscribeReason": "xxxxxxx"
}
```

3. Response

Response Parameters

Parameter	Type	Description
error_code	String	Status code. For details, see 4 .
error_msg	String	Error description.
orderIds	List<String>	Unsubscription order IDs.

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": "unsubscribe success",
  "orderIds": ["xxxxxxxxx"]
}
```

4. 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
200	CBC.0000	Success.
400	CBC.0100	Invalid input parameter.
403	CBC.0151	Access denied.
500	CBC.0999	Other errors.
200	CBC.3185	The cloud service can only be unsubscribed from as a whole.
200	CBC.30000053	Unsubscription not supported. The billing mode of the resource is Savings Plans.
200	CBC.30000067	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.
200	CBC.7281	You cannot renew or cancel subscription because your account has been frozen.
200	CBC.99003012	Resource ID not found.
200	CBC.99003100	This operation is not allowed because some resources are included in your orders to be paid.
200	CBC.99003128	The resource does not have renewed periods or its renewed periods have taken effect, and the renewal periods cannot be unsubscribed from.
200	CBC.99006066	An error occurred during fee inquiry.
200	CBC.99003645	Unsubscription not supported for this cloud service type.
400	CBC.99003650	Unsubscription not allowed for this cloud service in the Marketplace.
200	CBC.99003656	Operation not allowed. Your resource has been frozen.

12.4 Bill Management

12.4.1 Querying Customer Resource Usage

Function

This API is used to query customer resource usage.

 NOTE

This API will be taken offline. For details about the new API for querying customer resource usage, see [9.1.1 Querying Customer Resource Usage](#).

NOTICE

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

File

A partner can subscribe to the customer resource usage in HUAWEI CLOUD Partner Center to learn the partner's resource utilization.

 NOTE

The system generates the customer resource usage file containing the data generated till the previous day from 12:00 to 20:00 (GMT+8:00) (not later than 24:00) every day. Therefore, it is recommended that the partner sales platform obtains the customer resource usage file at 24:00 every day.

1. Link to obtain the file
`https://bucketname.obs.Endpoint.myhuaweicloud.com/customerUsage/
filename`

Table 12-34 Parameter description

Parameter	Description
bucketname	Name of an OBS bucket. Only OBS buckets purchased on HUAWEI CLOUD in the Hong Kong region can be used. For details about how to create an OBS bucket, see Creating a Bucket . NOTE You cannot use your account to buy OBS buckets. Instead, you can use your customers' accounts to do so.
Endpoint	Domain name or IP address of the server bearing the REST service endpoint. Obtain this value from Regions and Endpoints .

Parameter	Description
customerUsage	Name of the folder for storing the customer resource usage details uploaded by the system.
filename	Specifies the file name. The file is named in the customerUsage_YYYYMM_YYYYMMDD.tar.gz format. The file is a compressed package. YYYYMM indicates the month of the data to be exported. For example, if the data for February 2019 is exported, YYYYMM should be 201902. YYYYMMDD specifies the date when the customer resource usage data is exported. For example, if the file name is customerUsage_201902_20190301.tar.gz, the data generated from February 1, 2019 to February 28, 2019 is exported on March 1, 2019. The files in the compressed package are named in the format of customerUsage_MonthlyYearly_YYYYMM_YYYYMMDD_XXXXXX.csv, customerUsage_PerByUse_YYYYMM_YYYYMMDD_XXXXXX XX.csv, or customerUsage_RI_YYYYMM_YYYYMMDD_XXXXXXXXXX.csv.

2. Generation time of the resource usage details

The resource usage data is summarized by month. The monthly usage details contain incremental data starting from the first day of each month. The data of usage detail may change after being generated. Use the latest data.

The system generates the resource usage details from 12:00 to 20:00 (GMT +8:00) (not later than 24:00) every day.

- The usage details of each month are generated on the first day of the following month. For example, the usage details of July are generated on August 1.
- The month-to-date usage details of the current month and all usages details of the last month are generated on the second to fourth day of the current month. For example, the usage details of August 1 and August 2 and of July are generated on August 3.
- The usage details of this month are generated on the fifth day to the end of this month. For example, the usage details from August 1 to August 5 are generated on August 6.

3. File fields

- Yearly/monthly resources (usage of reseller customers only)
customerUsage_MonthlyYearly_YYYYMM_YYYYMMDD_XXXXXXXXXX.csv

Parameter	Type	Value Limit	Description
Customer	String	256	Domain ID of a customer.
Expenditure or Unsubscription Time	String	256	UTC.
Resource ID	String	256	Resource instance ID.
Resource Name	String	256	Name entered when a customer creates a resource instance. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Product Type Code	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
Resource Type Code	String	100	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .
Product ID	String	256	Product ID.
Product Name	String	256	Product name.
Product Specifications	String	256	Product specifications, such as General Computing s2.small.1 1 vCPU 1 GB Linux
Region	String	64	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
Order No.	String	256	Order ID generated when a customer places the order.

Parameter	Type	Value Limit	Description
Order Type	String	256	Order Type: • 1: New purchase • 2: Renewal • 3: Change • 4: Unsubscription • 10: Yearly/monthly to pay-per-use • 11: Pay-per-use to yearly/monthly • 13: Trial • 14: Commercial use • 15: Price adjustment
Duration	String	256	Duration of a yearly/monthly subscription.
Period Type	String	256	Duration type of a yearly/monthly subscription. 0: Daily 1: Weekly 2: Monthly 3: Yearly 4: Hourly 5: One-off
Amount(USD)	String	256	Transaction price listed on the HUAWEI CLOUD official website, excluding the commercial discount provided by HUAWEI CLOUD for partners. The unit is US Dollar.
Project ID	String	256	ID of the project to which a resource belongs. You can select a project when purchasing a resource.
Resource Tag	String	11,000	Resource tag. Customers can set tags when managing resources. If a yearly/monthly subscription is not intended for a specific resource, leave this field empty. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.

Parameter	Type	Value Limit	Description
Combined Order No	String	256	The combined order number generated when a customer places orders. This parameter is available only for yearly/monthly products. In other cases, this parameter is left empty. This parameter is reserved.
Product Type Name	String	200	Product type name
Resource Type Name	String	200	Resource type name.

- Pay-per-use resources (usage of reseller customers only)
customerUsage_PerByUse_YYYYMM_YYYYMMDD_XXXXXXXXX.csv

Parameter	Type	Value Range	Description
Customer	String	256	Domain ID of a customer.
Expenditure Time	String	256	Transaction time in the format of UTC.
Billing Cycle	String	256	Billing cycle of the consumption record.
Resource ID	String	256	Resource instance ID.
Resource Name	String	256	Name entered when a customer creates a resource instance. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Product Type Code	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .

Parameter	Type	Value Range	Description
Resource Type Code	String	100	Resource type code. For example, the VM resource type code of ECS is hws.resource.type.vm . To obtain a specific resource type, call the API in 4.1.2 Querying Resource Types .
Product ID	String	256	Product ID.
Product Name	String	256	Product Name.
Product Specifications	String	256	Product specifications, such as General Computing s2.small.1 1 vCPU 1 GB Linux
Region	String	64	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
Billing Item	String	256	Usage factor. (Usage type) The value is the same as the usage factor in SDRs. The mappings between cloud services and usage factors are as follows: • ECS: Duration • EVS: Duration • EIP: Duration • Bandwidth: Duration (by bandwidth) or upflow (by traffic) • Marketplace image: Duration
Usage	String	256	Total resource usage.
Package Usage	String	256	Used amount of the package. The used resources are not calculated using the pay-per-use price.
Reserved Instance Usage	String	A maximum of 256 characters	Used reserved instance. The used resources are not calculated using the pay-per-use price.

Parameter	Type	Value Range	Description
Unit	String	256	Usage unit. The optional values are as follows: • 0: DAY (duration) • 1: YUAN (currency) • 2: JIAO (currency) • 3: FEN (currency) • 4: Hour (duration) • 5: MINUTE (duration) • 6: SECOND (duration) • 7: EB (traffic) • 8: PB (traffic) • 9: TB (traffic) • 10: GB (traffic) • 11: MB (traffic) • 12: KB (traffic) • 13: Byte (traffic) • 14: amount (quantity) • 15: Mbps (traffic) • 16: Byte (capacity) • 17: GB (traffic) • 18: KLOC (number of lines) • 19: YEAR (period) • 20: MONTH (period) • 21: MB (traffic) • 22: GHz (frequency) • 23: CORE (quantity) • 24: DAY (period) • 25: HOUR (period) • 30: number (quantity) • 31: Thousand times (quantity) • 32: Million times (quantity) • 33: Billion times (quantity) • 34: bps (bandwidth) • 35: kbps (bandwidth) • 36: Mbps (bandwidth) • 37: Gbps (bandwidth) • 38: Tbps (bandwidth)

Parameter	Type	Value Range	Description
			• 39: GB-seconds (capacity-duration) • 40: times (quantity) • 41: PCS (quantity) • 42: Thousand PCS (quantity) • 43: PCS (quantity) • 44: Thousand PCS (quantity) • 45: Query Per Second (query rate) • 46: Man/Day (quantity) • 47: TB (capacity) • 48: PB (capacity)
Amount(USD)	String	A maximum of 256 characters	Transaction price listed on the HUAWEI CLOUD official website, excluding the commercial discount provided by HUAWEI CLOUD for partners. The unit is US Dollar. If HUAWEI CLOUD writes off the outstanding amount as required or refunds the over-deducted amount, a record with the negative amount will be generated.
Project ID	String	256	ID of the project to which a resource belongs. You can select a project when purchasing a resource.
Resource Tag	String	11,000	Resource tag. Customers can set tags when managing resources. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Unit Price	String	256	Unit price of a pay-per-use product. This parameter has a value only when the price is the same. For tiered billing, this parameter is left empty.

Parameter	Type	Value Range	Description
Unit(Unit Price)	String	256	Unit(Unit Price) For example, the price is \$0.6 USD/10,000 times. The unit price is 0.6, the price unit is US Dollar, and the step is 10,000 times. The unit price is 0.6 and the price unit is US Dollar/10,000 times.
Product Type Name	String	200	Product type name
Resource Type Name	String	200	Resource type name.

- Reserved instances (usage of reseller customers only)
customerUsage_RI_YYYYMM_YYYYMMDD_XXXXXXXXX.csv

Parameter	Type	Value Range	Description
Customer	String	A maximum of 256 characters	Domain ID of a customer.
Expenditure or Unsubscription Time	String	256	UTC.
Expenditure Type	String	256	1: Subscription 2: Renewal 3: Change 4: Unsubscription 8: Automatic renewal 12: Recurring fee for reserved instances
Reserved Instance ID	String	256	ID of a purchased reserved instance.

Parameter	Type	Value Range	Description
Reserved Instance Name	String	256	Name of a reserved instance. NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Product Type Code	String	64	Cloud service type code. For example, the cloud service type code of OBS is hws.service.type.obs . To obtain a specific service type, call the API in 4.1.1 Querying Cloud Service Types .
Region	String	64	Cloud service region code, for example, ap-southeast-1. Obtain the value from the Region column in Regions and Endpoints .
Product	String	256	Product ID.
Order No.	String	256	Order ID of a reserved instance order.
Amount(USD)	String	256	Transaction price listed on the HUAWEI CLOUD official website, excluding the commercial discount provided by HUAWEI CLOUD for partners. The unit is US Dollar.
Project ID	String	A maximum of 256 characters	ID of the project to which a resource belongs. You can select a project when purchasing a resource.
Resource Tag	String	11,000	Resource tag. Customers can set tags when managing resources. Currently, the reserved instance does not belong to a specific resource. This field is left blank (reserved). NOTE If the entered character strings are risky, such as {"=", "+", "-", "@"}, followed by non-pure numbers, then double quotation marks will be added for that field, one at the beginning of the field and the other at the end.
Product Type Name	String	200	Product type name

4. File example

a. **File of yearly/monthly resources**

▪ **Field:**

customerUsage_MonthlyYearly_201905_20190521_232738ebd8d044ac8006571d694ff05d.csv

▪ **Content:**

Customer,Expenditure or Unsubscription Time,Resource ID,Resource Name,Product Type Code,Resource Type Code,Product ID,Product Name,Product Specifications,Region,Order No.,Order Type,Duration,Period Type,Amount(USD),Project ID,Resource Tag,Product Type Name,Resource Type Name
37be0256053e467ba425d6dd61135370,2019-05-06 14:30:25 GMT +00:00,57f5faa7-0aa5-4f13-91e7-b838a6b69178,volume-220f,hws.service.type.ebs,hws.resource.type.volume,00301-03439-0--0,GD3 linear EVS_Monthly,Common IO|10.0|17,cn-north-7,CS1905061430U2BKA,4,,2,0.00,6a4cffd705254584a4386d30b3e15df9,resourcetag008,lastic Cloud Server,Cloud Host

b. **File of pay-per-use resources**

▪ **Field:**

customerUsage_PerByUse_201905_20190521_c40692bef76442e688e044530d62eb03.csv

▪ **Content:**

Customer,Expenditure Time,Billing Cycle,Resource ID,Resource Name,Product Type Code,Resource Type Code,Product ID,Product Name,Product Specifications,Region,Billing Item,Usage,Package Usage,Reserved Instance Usage,Unit,Amount(USD),Project ID,Resource Tag,Unit,Unit Price,Product Type Name,Resource Type Name
b9965f7fa88a49d3aa571d6ab25543fb,2019-05-01 10:00:00 GMT +00:00 - 2019-05-01 23:59:59 GMT +00:00,20190501,bf930731-996d-422e-a2ec-f556d88bc784,ecs-a5d9-volume-0001,hws.service.type.ebs,hws.resource.type.volume,00301-18779-0--0,GD3 linear EVS_On demand,Common IO|duration,cn-north-7,duration,"22,545.00",,0.00,6,0.02,6a4cffd705254584a4386d30b3e15df9,resourcetag001,0,1,lastic Cloud Server,Cloud Host

c. **File of reserved instances**

▪ **Field:**

customerUsage_RI_201905_20190521_f5ee75c834494106b39f4511d20cb416.csv

▪ **Content:**

Customer,Expenditure or Unsubscription Time,Expenditure Type,Reserved Instance ID,Reserved Instance Name,Product Type Code,Region,Product,Order No.,Amount(USD),Project ID,Resource Tag,Product Type Name

37be0256053e467ba425d6dd61135370,2019-05-07 15:01:17 GMT
+00:00,Subscribed Order,01154-3100049-0,,hws.service.type.ec2,cn-
north-7,General Computing Enhanced_C3_2U4G_linux
reserve,CS19050715008ZEL8,516.84,6a4cffd705254584a4386d30b3e1
5df9,resourcetag002,lastic Cloud Server

13 Appendix

13.1 How Do I Obtain Customers' customer_id or domain_id?

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

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

Visit **My Credential** at <https://console-intl.huaweicloud.com/iam/#/myCredential>.

Username		
User ID		
Account Name		
Account ID		
Verified Email Address		Change
Mobile Number		Change
Password	Security Strong   	Change
Login Authentication Method	Disable	Change
Virtual MFA Device	 Unbound Bind	

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

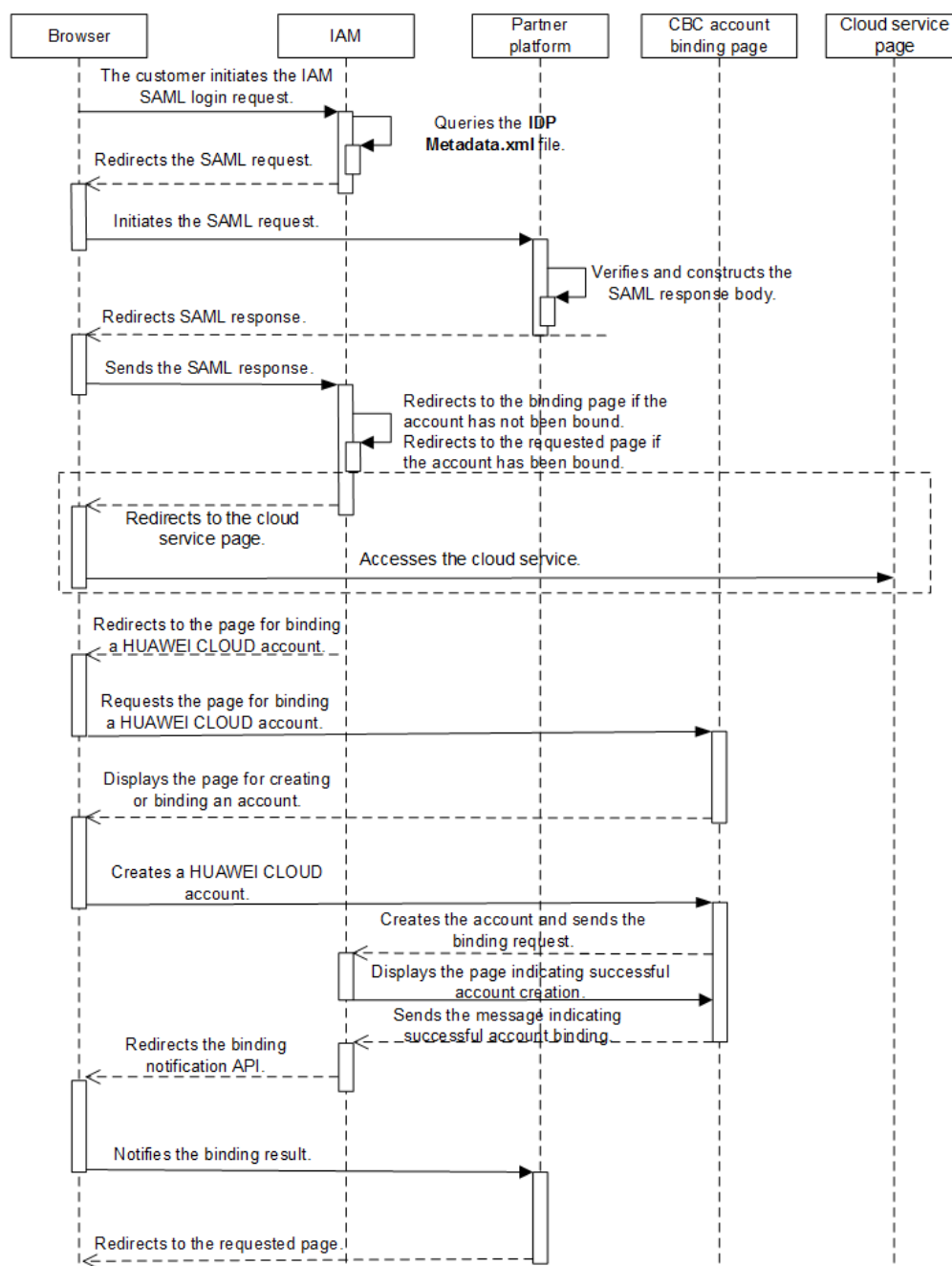
The following describes how to bind a customer account on the partner sales platform with the HUAWEI CLOUD account on the web UI. You can create a HUAWEI CLOUD account and bind it with the customer account, or directly bind an existing HUAWEI CLOUD account with the customer account. The following scenarios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

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

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

Figure 13-1 shows the procedure for binding a HUAWEI CLOUD account with a customer account on the partner sales platform and notifying the binding result.

Figure 13-1 Binding a HUAWEI CLOUD account



1. A partner's customer uses a browser to call the HUAWEI CLOUD login link. IAM sends the SAML request.
 - a. The customer uses a browser to call the HUAWEI CLOUD login link.
<https://auth-intl.huaweicloud.com/authui/saml/login?xAccountType=ZX7&isFirstLogin=true&service=https%3a%2f%2fconsole-intl.huaweicloud.com%2fiam%2f>

Parameter	Mandatory	Description	Example
xAccountType	Yes	Indicates the identifier of the partner sales platform, which is globally unique. The value is provided by Huawei. After the partner configures the access parameters on the Partner Center page, the partner ID is generated. For details about how to obtain the platform ID, see How Do I Obtain the xaccountType Value?	ZXT
isFirstLogin	No	If no HUAWEI CLOUD account is bound, this parameter is mandatory and must be set to true . Otherwise, the value can be left empty or set to false .	true
service	No	Indicates the redirection address after login. The encodeURIComponent function is used for coding.	https%3a%2f%2fconsole-intl.huaweicloud.com%2fiam%2f

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

```

Query String Parameters  view source  view URL encoded
SAMLRequest: jVLLbtsuEPWgnc97bguYt1wVqLkDaqpeTQ58F5K4k7RSp82K2/vpRstuwKGLnuv222ZhfXvzq8dQAWzLDSRhJ87Kpissmwi/1bTDH1BuFoZ11e77ytpVbeHfGLPKLp8j18N056Ko4Y2I2oEh1pF19eWOpGfHeq2sYkpgtD0I
084g4ftXYZba3tD0agS8NQTha2Je+8WKFETHvknycTqKt5Xg8BEYDn3+Q0K29PC6pHUB6o/KqduwvQDZ+fCakbpGvXvM8I11abaH1Gp1N1u1e01u1GvYunZ71mug8m3uGfzh8X0TTP7UAsn+q4Nmmih7q++xZ7tmHphmegvKj7qf68838uzbGul
Jg01cxjHvNSPTqCep98xyK92felyGw1b38ehuz5XZ25K8X3UaP5:j9AD6FR0Z2/Tq1y8D07CteV1+YRF5a60/PFPXIm3hu8Ge/0UoItb/RQK23XmHo8sdtZe1D8Ve8Fu45qym8nCQFq1HhC/05p4zUG/94dwtDypffvTy28=
RelayState: _9inzak3sg5bypjdc3uInbzenfvqq44ft2o5d
SigAlg: http://www.w3.org/2001/04/xmldsig-more#rsa-sha256
Signature: fuTq+fy6XQ1AccVHqTf3GulgvYLU1qd8XK2jy025xkFA226a8AYoZFPPhIhdcbp07yt3PnvXvBhX70HE112c4L1BR8Ynu86ZrGeD0aoN6x9xFN2GVAVH8PbHRQ3gu3m1ac11dLYehuC2K07Lr2us134repcr6hynBrqYH1+Ac=

```

Parameter	Description
SAMLRequest	Indicates the response message body. The response message is in XML format. IAM then compresses the message, encodes the message using Base64, and URL encodes the message. • If the partner uses the SAML toolkits, this parameter can be directly used. The partner does not need to parse the XML file. • If the partner needs to parse the XML file, the partner needs to URL decode the message, decode the message using Base64, and decompress the message (zip.inflate). For details, see Sample Code for Parsing the SAMLRequest.
RelayState	Indicates the response parameters for SAML.
SigAlg	Indicates the signature algorithm. Huawei uses SHA256 for signatures by default. HTTP://WWW.W3.ORG/2001/04/XMLDSIG-MORE#RSA-SHA256
Signature	Indicates the signature. The signature is used to verify the initiator of a request. When initiating a request, HUAWEI CLOUD uses the private key to sign <i>SAMLRequest={ SAMLRequest }&RelayState={ RelayState } &SigAlg={ SigAlg }</i> in request <i>https://www.test.com/saml/login?</i> <i>SAMLRequest={SAMLRequest }&RelayState={ RelayState } &SigAlg={ SigAlg }&Signature={ Signature }</i> and then performs Base64 coding to obtain the signature value. The signature algorithm is specified by the SigAlg field. When receiving the request, the receiver verifies the signature value using the public key provided by HUAWEI CLOUD (the value in the <ds:X509Certificate></ds:X509Certificate> tag in the SP Metadata.xml file). If the signature verification succeeds, the request is sent by HUAWEI CLOUD, and the follow-up operations can be performed. Otherwise, the request is invalid.

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

file. For details, see **Example, Public Key, and Response Path in Obtaining the SP Metadata File**.

- b. The partner sales platform constructs the response message body **response.xml** for the SAML response.

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

NOTICE

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

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the SAML request message. -->
<!-- Parameter Destination needs to be the same as the Location value in the
AssertionConsumerService tag in the SP Metadata.xml file. -->
<saml2p:Response Consent="urn:oasis:names:tc:SAML:2.0:consent:unspecified"
ID="_d794dc393ae6724e236003bf0b917cf0" Destination="https://auth.huaweicloud.com/authui/
saml/SAMLAssertionConsumer"
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
xmlns:saml2p="urn:oasis:names:tc:SAML:2.0:protocol">
  <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
  <saml2:Issuer Format="urn:oasis:names:tc:SAML:2.0:nameid-format:entity"
xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion">https://www.test.com</saml2:Issuer>
  <saml2p:Status>
    <saml2p:StatusCode Value="urn:oasis:names:tc:SAML:2.0:status:Success" />
    <saml2p:StatusMessage>urn:oasis:names:tc:SAML:2.0:status:Success</saml2p:StatusMessage>
  </saml2p:Status>
  <saml2:Assertion ID="_2320c40ac7b5e857b2d0d4ea0c8758c3"
IssueInstant="2018-10-30T08:21:41.740Z" Version="2.0"
xmlns:saml2="urn:oasis:names:tc:SAML:2.0:assertion"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <!-- Must be the same as the entityID value in the IDP Metadata.xml file. -->
    <saml2:Issuer>https://www.test.com</saml2:Issuer>
    <ds:Signature xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
      <ds:SignedInfo>
        <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#" />
        <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
sha256" />
      <!-- The value after "URI #" must be the same as the ID in the Assertion tag. -->
      <ds:Reference URI="#_2320c40ac7b5e857b2d0d4ea0c8758c3">
        <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature" />
          <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
            <ec:InclusiveNamespaces PrefixList="xsd"
xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#" />
          </ds:Transform>
        </ds:Transforms>
        <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig#sha256" />
      <!-- The value of DigestValue is the digest of the Assertion tag object. The digest
algorithm is the same as that of DigestMethod. -->
      <ds:DigestValue>rFxyrcznfGNYOnprZIFJou4ro0Mz65+43MIR5F0+H4=</ds:DigestValue>
    </ds:Reference>
  </ds:SignedInfo>
  <!-- Partner signature value. For details about how to obtain the value, see the
following description. -->
```

```

<ds:SignatureValue>
YqTWQngAPfGqQmWa610PM7LeefqWdKuVeUVINrql67NoHJIDa2WxLwdVzoJIUh64QiNPr6+ndm
L DCMglC5F/9ijuzhIICZcc6lHNijy6EsPkkRjfo9oeoVAqLgG/kmVQYeHLBID0y11RNXXpAVY4nhJ
26KiIVGt7ywykAmhichE+eW/UYAGIOI5vktfgD2gZUGV+yPkv64k7xK4yAH3mL2NaCPuw/90e4enm
iUx0YuazDwM5FiRUSMpcIs0rcNmS6clWAUcCzbOx+y2vJGtTjHb7k3UsmpnTop5eYNp94+sDPEat
8FaV4SgafMEL5z54gpe8+//9yOWEvlBs1b0RYg==
</ds:SignatureValue>
<ds:KeyInfo>
<ds:X509Data>
<!-- Partner public key certificate. The certificate must be the one specified in the IDP
Metadata.xml file. -->
<ds:X509Certificate>
MIIBljANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAhK3L160NjP9EhBGQOC2s4r
+Wc62bkRkc nUxfhiZwCwldQCkykuLOAoATnfoEamV5W25xtSS5kFs+4OC0mYVpKcl3SWoydX
+UE5Qik5Ufj8Dt G1AvSEKhSluyO9axrV5Uv089jMxBnlm/R+xND73WcZM11yIbKJEZSTCEDfh
+KnFbMw108umFMden RZCrNWUJoSp/90XeG0V2Nmj7Fkq72skSifwIASLRq9KqLbmh1QwUX
+AoWpHK/jRUBustMBmG1n1i
AqpD4EBjjBOB27k1wXZ30+loJt8lZmfSZRFoNn5VFWXNeEmZ1aQvGSvd3Tyyw2/Wr+w/
8Mags69C mpeX6QIDAQAB
</ds:X509Certificate>
</ds:X509Data>
</ds:KeyInfo>
</ds:Signature>
<saml2:Subject>
<!-- The value of NameQualifier must be the same as the entityID value in the SP
Metadata.xml file. -->
<saml2:NameID Format="urn:oasis:names:tc:SAML:2.0:nameid-format:transient"
NameQualifier="https://auth.huaweicloud.com/">Some NameID value</saml2:NameID>
<saml2:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:bearer">
<!-- Parameter InResponseTo needs to be the same as the ID configuration item of
AuthnRequest in the samlRequest message. -->
<saml2:SubjectConfirmationData
InResponseTo="_dck4mm08qmdhc8k4nuir07hghetdqqg8umg5"
NotBefore="2018-10-28T08:21:41.740Z" NotOnOrAfter="2018-11-01T08:21:41.740Z"
Recipient="https://auth.huaweicloud.com/authui/saml/SAMLAAssertionConsumer" />
</saml2:SubjectConfirmation>
</saml2:Subject>
<saml2:Conditions NotBefore="2018-10-28T08:21:41.740Z"
NotOnOrAfter="2018-11-01T08:21:41.740Z">
<saml2:AudienceRestriction>
<!-- Must be the same as the entityID value in the SP Metadata.xml file. -->
<saml2:Audience>https://auth.huaweicloud.com/</saml2:Audience>
</saml2:AudienceRestriction>
</saml2:Conditions>
<saml2:AttributeStatement>
<!-- For values between<saml2:AttributeValue> and </saml2:AttributeValue>, see the
following table. -->
<saml2:Attribute FriendlyName="xUserId" Name="xUserId"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
<saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
</saml2:Attribute>
<!-- The values of xAccountId and xUserId must be the same. -->
<saml2:Attribute FriendlyName="xAccountId" Name="xAccountId"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
<saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="bpId" Name="bpId"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
<saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string">*****</saml2:AttributeValue>
</saml2:Attribute>
<saml2:Attribute FriendlyName="email" Name="email"
NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
<saml2:AttributeValue xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="xsd:string" />
</saml2:Attribute>

```



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

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

The signature procedure is as follows.

i. Obtain the signature object (**Assertion**).

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

ii. Obtain the tag object (**Signature**).

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

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

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

The signature is displayed as follows.

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

Table 13-1 Description of parameters between **<saml2:AttributeValue>** and **</saml2:AttributeValue>**

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

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

 NOTE

Table 13-1 involves the account ID and user ID because HUAWEI CLOUD IAM has account and user concepts. For details about the two concepts, see "Account" and "IAM User" in [Basic Concepts](#).

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

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



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

3. Create a HUAWEI CLOUD account and bind it with the customer account on the partner sales platform.

After the SAML response message is returned, IAM checks whether there is a HUAWEI CLOUD account already bound with the customer account on the partner sales platform based on the response message. If the required HUAWEI CLOUD account exists, the partner can directly log in to HUAWEI CLOUD. If the required HUAWEI CLOUD account does not exist, the page for creating and binding a HUAWEI CLOUD account is displayed.

- **Figure 13-2** shows the page for creating a HUAWEI CLOUD account. The partner configures the required parameters on the page for creating a HUAWEI CLOUD account and clicks **Create And Bind** to create a HUAWEI CLOUD account and bind the account with the customer account on the partner sales platform.

Figure 13-2 Page for creating a HUAWEI CLOUD account

Create Account

Set the following information to create a HUAWEI CLOUD account and bind it.
Already have an account? [Bind Account](#)

Hong Kong (China) ▼

Cannot be changed once registered.

Account name

Email

Verification code

Get Code

☐ I have read and agree to the [Privacy Statement](#) and [HUAWEI CLOUD Customer Agreement](#)

Create And Bind

☒ Receive promotional information

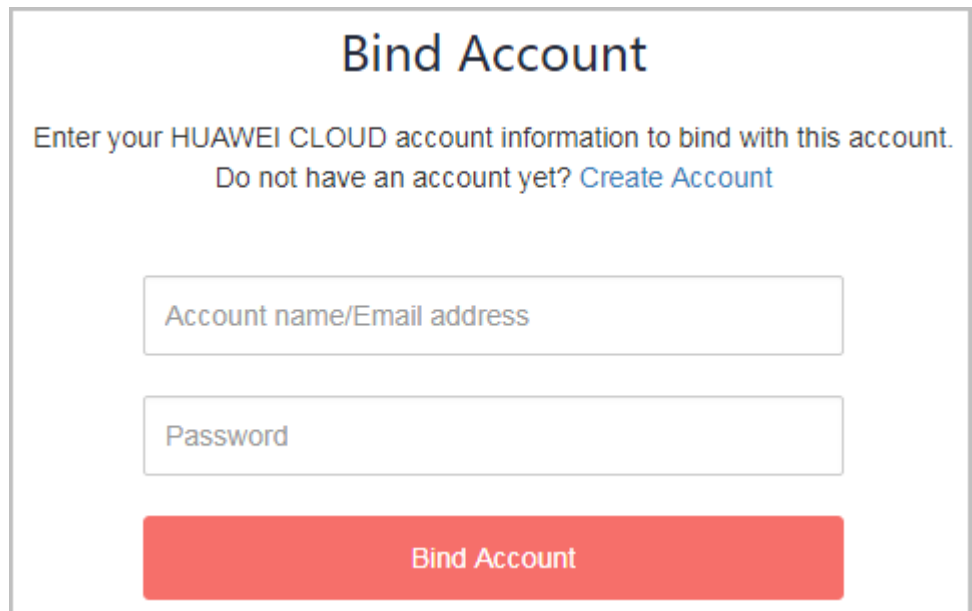
- If the partner's customer already has a HUAWEI CLOUD account, click **Bind Account** on the page shown in [Figure 13-3](#). On the displayed page, configure the required parameters as prompt and click **Bind Account** to bind the HUAWEI CLOUD account with the customer account on the partner sales platform.

NOTE

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

- In arrears
- Associated to another partner
- Used to sign a special contract with HUAWEI CLOUD, such as offline directly-signed contract, authorized telemarketing contract with discounts, or directly-signed special offer contract) with HUAWEI CLOUD
- A consulting partner account in use or pending approval
- An enterprise subaccount or an enterprise primary account associated with an enterprise subaccount
- Containing consumption records or resource provisioned
- Containing valid reserved instances

Figure 13-3 Page for binding a HUAWEI CLOUD account



4. HUAWEI CLOUD notifies the account binding result using the binding notification API provided by the partner through browser redirection.
 - a. Obtain the request parameters **bindRequest**, **SigAlg**, and **Signature**.
 - b. Decode the signature using Base64 and use the signature algorithm **SigAlg** to perform signature verification for the **bindRequest** parameters.

NOTE

HUAWEI CLOUD uses the private key used for SAML interconnection to verify the signature. The partner uses the public key (value of the `<ds:X509Certificate></ds:X509Certificate>` tag in the **SP Metadata.xml** file) used by HUAWEI CLOUD for SAML interconnection to verify the signature.

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

13.3 How Do I Obtain the xaccountType Value?

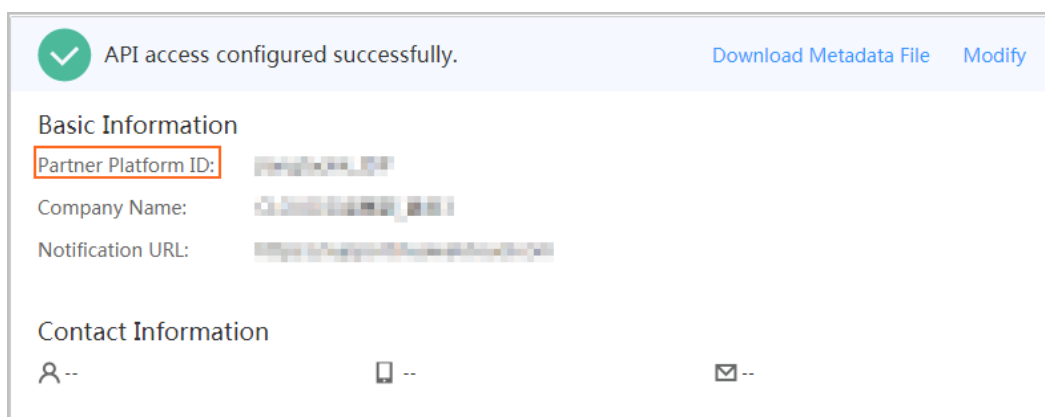
The xaccountType value is the system ID of your partner sales platform. You can obtain the ID of your partner sales platform on the **Configure** page.

NOTICE

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

For details, see [Configuring the Access Parameters](#).

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



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

Operations

1. Invoke the IAM API to obtain your Huawei Cloud account token. For details, see [Obtaining a User Token Through Password Authentication](#).

NOTE

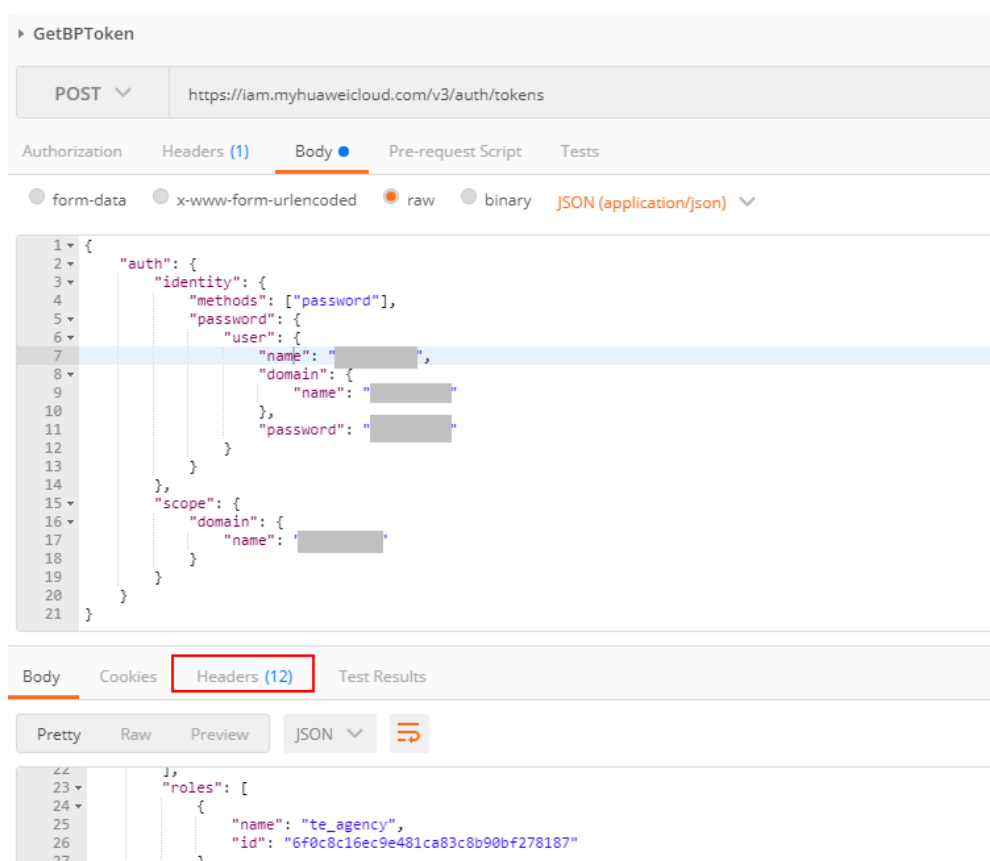
For details about the IAM API endpoints, see [Regions and Endpoints](#). If the **scope** field in the request body is **domain**, use the endpoint with **Region** being **All**. If the **scope** field is set to **project**, you can use the endpoint with **Region** being **All**, or the endpoint of the region to which the project belongs.

In this step, no token needs to be transferred. You only need to add **Content-Type** to the header, and set its value to **application/json**. As shown in [Figure 13-4](#), the **x-subject-token** field in the red box on the **Headers** tab is your account token.

Example request

```
{
  "auth": {
```

```
{
  "identity": {
    "methods": [
      "password"
    ],
    "password": {
      "user": {
        "name": "Partner's Huawei Cloud account",
        "domain": {
          "name": "Partner's Huawei Cloud account",
        },
        "password": "XXXXX"
      }
    }
  },
  "scope": {
    "domain": {
      "name": "Partner's Huawei Cloud account",
    }
  }
}
```

Figure 13-4 Obtaining partner's HUAWEI CLOUD account token

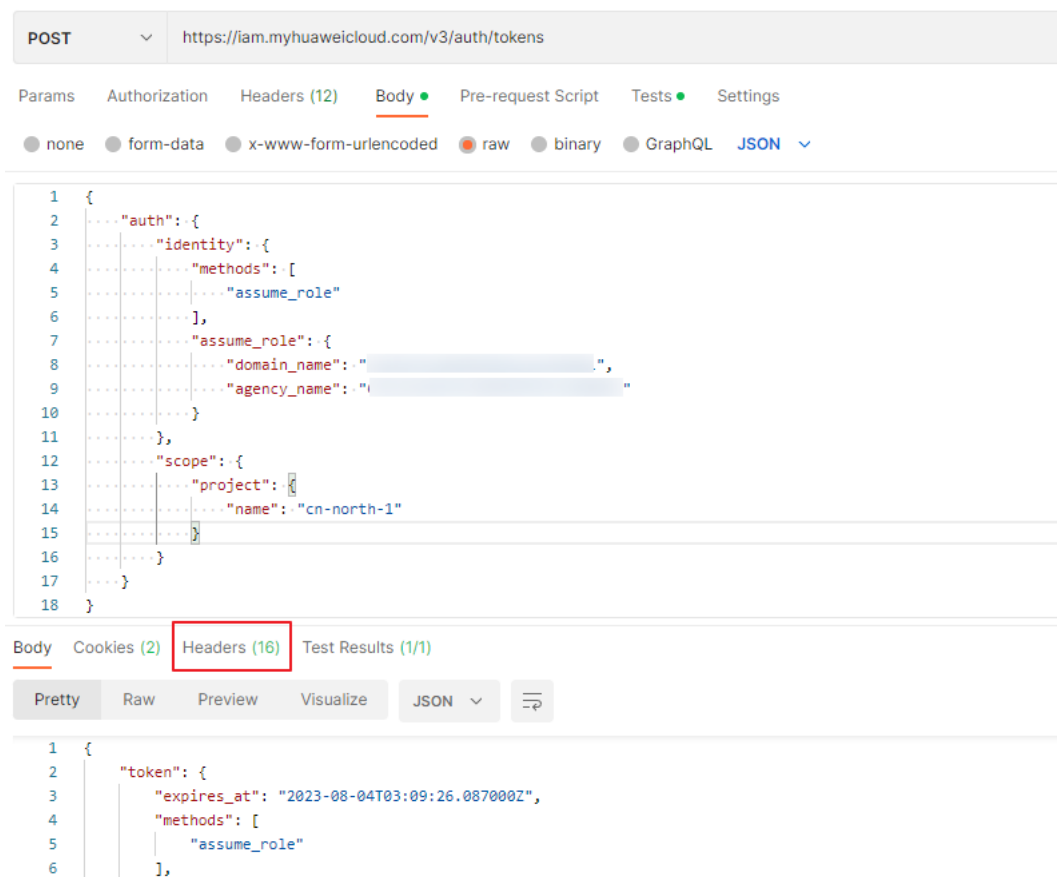
2. Invoke the IAM API to obtain the customer account token. For details, see [Obtaining an Agency Token](#).

Add **Content-Type** and **X-Auth-Token** to the request header. Set **Content-Type** to **application/json** and **X-Auth-Token** to the BP token obtained in 1. As shown in [Figure 13-5](#), the **x-subject-token** field in the red box on the **Headers** tab is the customer account token. A partner can use the customer's HUAWEI CLOUD account token to perform operations on resources in the customer's HUAWEI CLOUD account.

Example request:

```
{
  "auth": {
    "identity": {
      "methods": [
        "assume_role"
      ],
      "assume_role": {
        "domain_name": "Customer's Huawei Cloud account",
        "agency_name": "Agency name (xaccountType)"
      }
    },
    "scope": {
      "project": {
        "name": "The name of the project to which the customer's resources belong"
      }
    }
  }
}
```

Figure 13-5 Obtaining customer's HUAWEI CLOUD account token



Response body descriptions

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

Figure 13-6 Permissions descriptions



- Information marked in the red box in Figure 13-7 is the project ID.

Figure 13-7 Project ID



13.5 File Subscription

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

NOTE

- A reseller partner can subscribe to the files that contain customer resource usage details and the files that contain customer resource usage details and partner bill.
- Do not enable **Default Encryption** when other tenants have obtained the permission to access your OBS bucket.

Default Encryption ☐ Enable

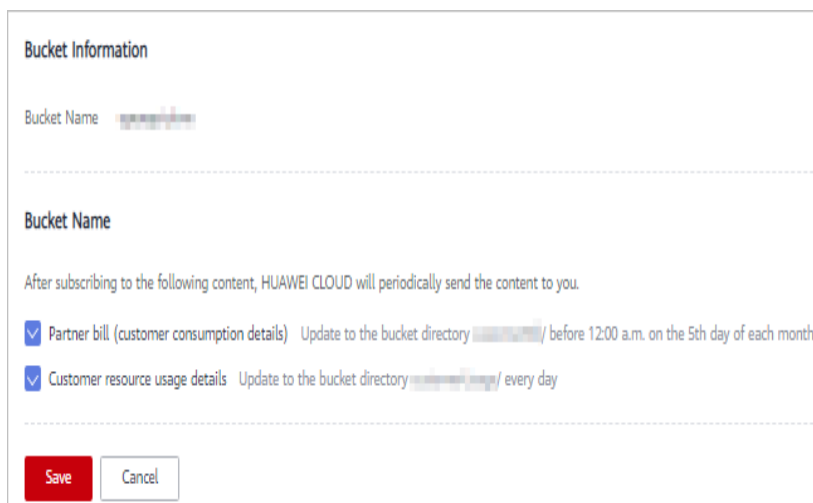
Procedure

Step 1 Use the partner account to log in to Partner Center. In the navigation pane on the left, choose Benefits and Support > API Management.

Step 2 Click **File Subscription**.

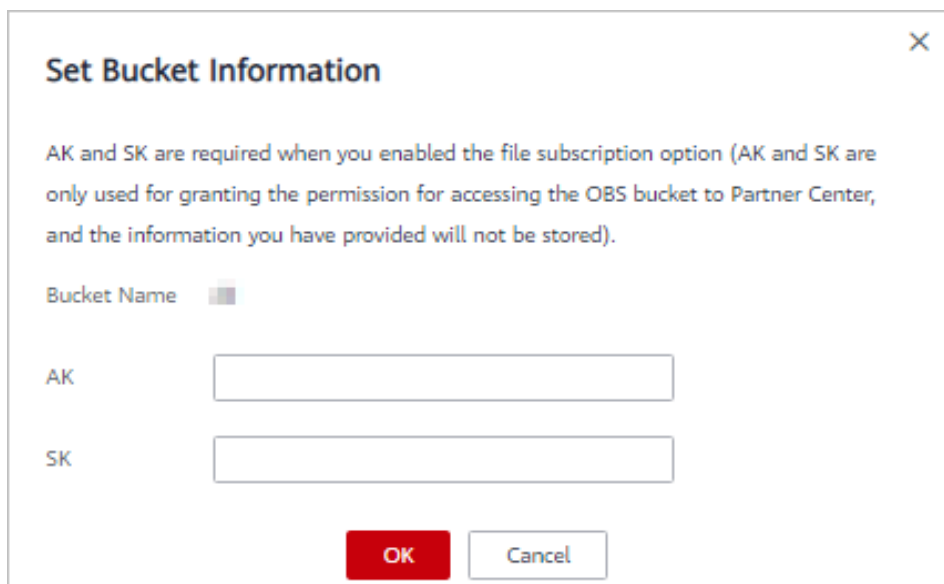
Step 3 If the partner has enabled real-name authentication, the bucket information is displayed on the **File Subscription** page.

Select the files to be subscribed to and click **Save**.



The screenshot shows a web interface titled "Bucket Information". It contains a "Bucket Name" field with a blurred value. Below this, there is a section titled "Bucket Name" followed by a descriptive text: "After subscribing to the following content, HUAWEI CLOUD will periodically send the content to you." There are two checked checkboxes: "Partner bill (customer consumption details)" with a note "Update to the bucket directory [blurred] before 12:00 a.m. on the 5th day of each month." and "Customer resource usage details" with a note "Update to the bucket directory [blurred] every day". At the bottom, there are "Save" and "Cancel" buttons.

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



The screenshot shows a dialog box titled "Set Bucket Information" with a close button (X) in the top right corner. It contains a text block explaining that AK and SK are required for file subscription and are only used for granting permissions. Below this, there is a "Bucket Name" field with a blurred value. There are two input fields labeled "AK" and "SK". At the bottom, there are "OK" and "Cancel" buttons.

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

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

Bucket Information

* Bucket Name

Bucket Name

After subscribing to the following content, HUAWEI CLOUD will periodically send the content to you.

☒ Partner bill (customer consumption details) Update to the bucket directory / before 12:00 a.m. on the 5th day of each month.
 ☒ Customer resource usage details Update to the bucket directory / every day

Save

Cancel

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

Set Bucket Information

AK and SK are required when you enabled the file subscription option (AK and SK are only used for granting the permission for accessing the OBS bucket to Partner Center, and the information you have provided will not be stored).

Bucket Name

AK

SK

OK

Cancel

⚠ CAUTION

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

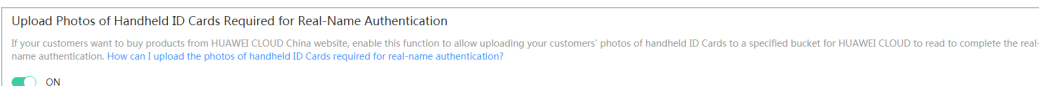
----End

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

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

Procedure

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



NOTE

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

- Step 3** For details about how to create an OBS bucket, see [Creating a Bucket](#).

NOTE

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

- Step 4** Upload the attachment for real-name authentication to the OBS bucket created by the partner. For details, see [Object Upload Overview](#).

-----End

13.7 Support for Discounts or Coupons

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

- If the **isAutoPay** parameter is set to **1**, automatic payment is enabled. Discounts and coupons can be used in automatic payment.
For details about the payment rules, see **Rule Description** in [Auto-Renewal Rules](#).

13.8 Status Codes and Retry Policies

 NOTE

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

[Table 13-2](#) describes the HTTP status codes and retry policies.

Table 13-2 HTTP status codes and retry policies

Status Code	Message	Description	Retr y Polic y
100	Continue	Continue sending requests. This temporary response is used to inform the client that initial part of the request has been received and has not yet been rejected by the server.	Retr y up to three time s withi n six hour s.
101	Switching Protocols	Switching protocols. The target protocol must be more advanced than the original one. For example, the protocol in use is switched to a later version of HTTP.	Retr y is not perf orm ed.
200	OK	The request was successfully processed. It is generally used for GET and POST requests.	Retr y is not perf orm ed.
201	Created	The request has been fulfilled and has resulted in one or more new resources being created.	Retr y is not perf orm ed.

Status Code	Message	Description	Retry Policy
202	Accepted	The request has been accepted for processing, but the processing has not been completed.	Retry is not performed.
203	Non-Authoritative Information	The request was successful but the response has been modified by a transforming proxy.	Retry is not performed.
204	NoContent	The server has successfully fulfilled the request, but did not return any response body. The status code is returned in response to an HTTP OPTIONS request.	Retry is not performed.
205	Reset Content	The server has fulfilled the request and requires the client to reset the content.	Retry is not performed.
206	Partial Content	The server has fulfilled a range GET request.	Retry up to three times within six hours
300	Multiple Choices	There are multiple options for the requested resource. The response contains a list of resource characteristics and addresses from which the customer or customer agent (such as a browser) can choose the most appropriate one.	Retry is not performed.

Status Code	Message	Description	Retry Policy
301	Moved Permanently	The requested resource has been assigned with a new permanent URI. This new URI is contained in the response.	Retry is not performed.
302	Found	The requested resource resides temporarily under a different URI.	Retry is not performed.
303	See Other	The response to the request can be found under a different URI. It is expected to be accessed using a GET or POST method.	Retry is not performed.
304	Not Modified	The requested resource has not been modified. When the server returns this status code, it does not return any resources.	Retry is not performed.
305	Use Proxy	The requested resource must be accessed through a proxy.	Retry is not performed.
306	Unused	This HTTP status code is no longer used.	Retry is not performed.
400	BadRequest	Invalid request. Modify the request and retry.	Retry is not performed.

Status Code	Message	Description	Retry Policy
401	Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.	Retry up to three times within six hours
402	Payment Required	This status code is reserved for future use.	Retry is not performed.
403	Forbidden	The request has been rejected. The server has received and understood the request; yet it refused to respond, because the request is set to deny access. Do not retry the request before modification.	Retry is not performed.
404	NotFound	The requested resource could not be found. Modify the request and retry.	Retry is not performed.
405	MethodNotAllowed	The request contains one or more methods not supported by the resource. Modify the request and retry.	Retry is not performed.
406	Not Acceptable	The server cannot fulfill the request according to the content characteristics of the request.	Retry is not performed.

Status Code	Message	Description	Retry Policy
407	Proxy Authentication Required	This status code is similar to 401, but the client must be authenticated using a proxy.	Retry is not performed.
408	Request Time-out	The client does not produce a request within the time that the server was prepared to wait. The client may repeat the request without modifications at any time later.	Attempt one retry at an interval of one minute within six hours.
409	Conflict	The request cannot be processed due to a conflict. The resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.	Retry is not performed.
410	Gone	The requested resource is no longer available. The requested resource has been deleted permanently.	Retry is not performed.
411	Length Required	The server fails to process the request which does not contain the Content-Length header field.	Retry is not performed.

Status Code	Message	Description	Retry Policy
412	Precondition Failed	The server does not meet one of the requirements that the requester puts on the request.	Retry is not performed.
413	Request Entity Too Large	The request is larger than that the server can process. The server may close the connection to prevent the client from continuously sending the request. If the server cannot process the request temporarily, the response will contain a Retry-After header field.	Retry is not performed.
414	Request-URI Too Large	The Request-URI is too long for the server to process.	Retry is not performed.
415	Unsupported Media Type	The server cannot process the media format in the request.	Retry is not performed.
416	Requested range not satisfiable	The requested range is invalid.	Retry is not performed.
417	Expectation Failed	The server fails to meet the requirements of the Expect request header field.	Retry is not performed.
422	UnprocessableEntity	The request is well-formed but is unable to be processed due to semantic errors.	Retry is not performed.

Status Code	Message	Description	Retry Policy
429	TooManyRequests	Too many requests have been made within the allowed time. In this case, the client should retry after the time period specified in the Retry-After response header.	Attempt one retry at an interval of one minute within six hours.
500	InternalServerError	The server is able to receive the request but unable to understand it.	Attempt one retry at an interval of one minute within six hours.
501	Not Implemented	The server does not support the function required to fulfill the request.	Retry is not performed.
502	Bad Gateway	The server was acting as a gateway or proxy and received an invalid request from a remote server.	Retry is not performed.

Status Code	Message	Description	Retry Policy
503	ServiceUnavailable	The requested service is invalid. Modify the request and retry.	Retry is not performed.
504	ServerTimeout	The request cannot be fulfilled within a given amount of time. The response will reach the client only if the request carries a timeout parameter.	Attempt one retry at an interval of one minute within six hours.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.	Retry is not performed.

13.9 Error Codes

Function Description

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

NOTICE

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

Error Code Structure Format

```
{
  "error_code": "xxxx",
  "error_msg": "xxxx"
}
```

Error Codes

Table 13-3 Error codes

Status Code	Error Code	Error Message	Description
200	CBC.0000	Success.	Succeeded.
403	CBC.0156	Access denied. The customer does not belong to the website you are now at.	Access failed. You are not a client of this website.
400	CBC.18000016	Insufficient permissions. Contact your associated partner.	Insufficient permissions. Contact your partner.
400	CBC.18000048	Too many independent accounting members. Specify a member account for query.	Too many independent accounting members. Specify a member account for query.
200	CBC.3002	The resource has been locked.	The resource has been locked.
200	CBC.3006	Unsupported cloud service type.	Unsupported cloud service type.
200	CBC.3016	Expired resources exist.	Expired resources exist.

Status Code	Error Code	Error Message	Description
200	CBC.30050007	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.30050008	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.30050009	The resources do not exist or has been deleted due to expiration.	The resources have expired and been deleted or do not exist.
200	CBC.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.

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

Status Code	Error Code	Error Message	Description
400	CBC.50000030	Setting budgets not supported. This reseller's budget quota is insufficient.	Setting budgets not supported. This reseller's budget quota is insufficient.
400	CBC.50000033	Budget setting permissions have been revoked. This reseller cannot set budgets.	Budget setting permissions have been revoked. This reseller cannot set budgets.
200	CBC.50000045	No frequent operations are allowed for the same coupon quota.	No frequent operations are allowed for the same coupon quota. You are in the process of allocating coupon quotas. Wait until the process ends.
200	CBC.5006	The customer type (individual/enterprise) is different from the customer type stored in HUAWEI CLOUD.	The customer type (individual/enterprise) is different from the customer type stored in HUAWEI CLOUD.
200	CBC.5007	The subscribed products must belong to the same region.	The subscribed products must belong to the same region.
200	CBC.5020	Partial failure.	Partial failure.
200	CBC.5023	The account type does not match the association type.	The account type does not match the association type.
200	CBC.5024	This API cannot be invoked because the association type of the customer is incorrect.	This API cannot be invoked because the association type of the customer is incorrect.
200	CBC.5041	Resources in this order have been unsubscribed.	Resources in this order have been unsubscribed.
200	CBC.5042	Resources cannot be found.	Resources cannot be found.

Status Code	Error Code	Error Message	Description
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.
400	CBC.0101	Invalid parameter.	Invalid parameter.
400	CBC.18000014	Inactive Cost Management.	Cost Center not enabled.
400	CBC.18000053	Insufficient permissions. Contact your enterprise master.	Insufficient permissions. Contact your enterprise master.
400	CBC.30000010	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.30000067	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.	Unsubscription not supported. This resource has been deleted or the subscription to this resource has not been synchronized to CBC.
400	CBC.30000052	The resource or account has been already frozen.	Operation not allowed. Your resource has been frozen.
400	CBC.30000053	Unsubscription not supported. The billing mode of the resource is Savings Plans.	Unsubscription not supported. The billing mode of the resource is Savings Plans.
400	CBC.30010035	resource deleted.	Resource deleted.

Status Code	Error Code	Error Message	Description
400	CBC.30010036	Renewal is only supported for primary resources.	Renewal is only supported for primary resources.
400	CBC.30010069	The renewal period does not exist.	The renewal period does not exist.
400	CBC.30050006	Automatic order payment failed.	Automatic order payment failed.
400	CBC.30050012	Duplicate resource ID.	There are duplicate resource IDs.
400	CBC.5001	You has not been a partner.	You are not a partner yet.
400	CBC.5002	The customer does not exist.	The customer does not exist.
400	CBC.5003	Insufficient balance.	Insufficient balance.
400	CBC.5004	You do not have the operation permission to the customer.	You do not have the operation permission to the customer.
200	CBC.50000053	Unfreezing customer account failed. Selected object and the frozen object do not match.	Unfreeze customer account failed. Selected object and the frozen object do not match.
400	CBC.50010059	Customer association not supported for distributors.	Customer association not supported for distributors.
400	CBC.50010085	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.50010120	Customer development not supported. There are no credits granted for the partner.	Customer development not supported. There are no credits granted for the partner.
200	CBC.70300007	Account frozen. To change the frozen scope, unfreeze the account first.	Changing freezing objects failed. Unfreeze this account first.
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.70600032	The operation has failed due to abnormal identity information, which could result in non-compliance risks. If you have any questions, please submit a service ticket to the customer service.	The operation has failed due to abnormal identity information, which could result in non-compliance risks. If you have any questions, please submit a service ticket to the customer service.
400	CBC.7151	Expired verification code.	Expired verification code.
400	CBC.7152	Incorrect verification code.	Incorrect verification code.

Status Code	Error Code	Error Message	Description
400	CBC.7188	The customer has passed real-name authentication or is being reviewed.	This customer has completed real-name authentication or is currently being authenticated.
400	CBC.7191	The number of real-name authentication times of the customer exceeds the upper limit.	The number of real-name authentication times of the customer exceeds the upper limit.
400	CBC.7202	Real-name authentication failed.	Real-name authentication failed.
400	CBC.7219	Real-name authentication information does not match the facial image.	Real-name authentication information does not match the facial image.
400	CBC.7253	The picture of the ID card is invalid or blurred.	The picture of the ID card is invalid or blurred.
400	CBC.7254	Currently, registration with HUAWEI CLOUD is not available to users in this country.	Currently, registration with HUAWEI CLOUD is not available to users in this country.
400	CBC.7255	The ID information or mobile number is incorrect.	The ID information or mobile number is incorrect.
400	CBC.7256	The legal entity information is incorrect.	The legal entity information is incorrect.
400	CBC.7257	The enterprise information is incorrect.	The enterprise information is incorrect.
400	CBC.7265	You are a partner and cannot be authenticated as an individual using your real name.	You are a partner and cannot be authenticated as an individual using your real name.

Status Code	Error Code	Error Message	Description
400	CBC.7267	The member account is being associated with a master account and cannot perform real-name authentication again.	The member account is being associated with a master account and cannot perform real-name authentication again.
400	CBC.7281	Renewal, payment, or unsubscription not supported. Your account has been frozen.	Renewal, unsubscription, or payment not supported. Your account has been frozen.
400	CBC.99000000	You do not have the operation permission to the customer.	You do not have the operation permission to the customer.
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.
400	CBC.99000034	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.

Status Code	Error Code	Error Message	Description
400	CBC.99000035	This customer has not been associated with you.	You are not a customer of a partner yet.
400	CBC.99000036	Invalid password.	Invalid password.
400	CBC.99000037	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.99000038	The account name already exists.	The account name already exists.
400	CBC.99000039	xAccountld exists.	Duplicate xAccountld.
400	CBC.99000046	Insufficient budget.	Insufficient budget.
400	CBC.99000049	BindType cannot be resale.	The customer associated in Reseller model has no account balance.
400	CBC.99000051	Customer creation failed because this mobile number or email address has been preregistered by Huawei.	Customer creation failed because this mobile number or email address has been pre-registered by Huawei.
400	CBC.99000055	Referral model not supported.	Referral model not supported.
400	CBC.99000082	You have exceeded the maximum verification code requests allowed.	Maximum verification code requests reached.
400	CBC.99000088	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.

Status Code	Error Code	Error Message	Description
400	CBC.99000089	The current operation can only be performed on combined orders.	Operation failed. Sub-orders of a combine order cannot be processed independently.
400	CBC.99000092	Incorrect subscription period.	Incorrect subscription period.
400	CBC.99000099	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.	The certificate attachment the customer submitted for real-name authentication exceeded the maximum size allowed.
400	CBC.99000100	Incorrect format of the certificate attachment the customer submitted for real-name authentication.	Incorrect format of the certificate attachment the customer submitted for real-name authentication.
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.

Status Code	Error Code	Error Message	Description
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.
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.	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.99003124	Resources have been unsubscribed from.	Resources have been unsubscribed from.

Status Code	Error Code	Error Message	Description
400	CBC.99003128	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.99003141	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.99003143	The product in this order is no longer available.	The product in this order is no longer available.
400	CBC.99003144	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.99003147	Discounts and cash coupons cannot be used together.	Discounts and cash coupons cannot be used together.
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.

Status Code	Error Code	Error Message	Description
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.
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 grace or retention period cannot be converted into pay-per-use.

Status Code	Error Code	Error Message	Description
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.
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.

Status Code	Error Code	Error Message	Description
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 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 in 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.
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.

Status Code	Error Code	Error Message	Description
400	CBC.99003656	Operation not allowed. Your account has been frozen.	Operation not allowed. Your resource has been frozen.
400	CBC.99004001	The template does not exist.	The template does not exist.
400	CBC.99004002	Failed to generate the verification code.	Failed to generate the verification code.
400	CBC.99004003	The verification code is successfully generated but fails to be sent.	The verification code is successfully generated but fails to be sent.
400	CBC.99004004	Empty email address./Invalid format.	Empty email address./Invalid format.
400	CBC.99004005	Empty mobile number./Invalid format.	Empty mobile number./Invalid format.
400	CBC.99004007	Failed to verify the email address.	Failed to verify the email address.
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.99004015	The number of verification code sending times has reached the upper limit (15 times per hour, 60 times per day).	The number of verification code sending times has reached the upper limit (15 times per hour, 60 times per day).
400	CBC.99005003	Your balance is insufficient.	Insufficient balance.

Status Code	Error Code	Error Message	Description
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.99005024	This API cannot be invoked because the association type of the customer is incorrect.	This API cannot be invoked because the association type of the customer is incorrect.
400	CBC.99005026	The order is not a degrade or unsubscription order.	The order is not a degrade or unsubscription order.
400	CBC.99005030	The partner did not complete real-name authentication or bucket authentication.	The partner did not complete real-name authentication or bucket authentication.
400	CBC.99005035	This API cannot be used by a sandbox account.	This API cannot be used by a sandbox account.
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.
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.

Status Code	Error Code	Error Message	Description
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.99007188	The customer has passed real-name authentication or is being reviewed.	This customer has completed real-name authentication or is currently being authenticated.
400	CBC.99007189	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.
400	CBC.99007191	The number of real-name authentication times of the customer exceeds the upper limit.	The number of real-name authentication times of the customer exceeds the upper limit.
400	CBC.99007193	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.

Status Code	Error Code	Error Message	Description
400	CBC.99007253	The picture of the ID card is invalid or blurred.	The picture of the ID card is invalid or blurred.
400	CBC.99007256	The legal entity information is incorrect.	The legal entity information is incorrect.
400	CBC.99007257	The enterprise information is incorrect.	The enterprise information is incorrect.
400	CBC.99007261	This bank is not supported. Please try other bank cards.	The bank card is not supported. Try another bank card.
400	CBC.99007265	Other errors.	Other errors.
400	CBC.99007267	The member account is being associated with a master account and cannot perform real-name authentication again.	The member account is being associated with a master account and cannot perform real-name authentication again.
400	CBC.99008040	Too many attempts.	Too many attempts.
400	CBC.99008056	The maximum number of transactions allowed today has been reached.	The maximum number of transactions allowed today has been reached.
401	CBC.0154	Invalid or expired token.	Invalid or expired token.
403	CBC.0150	Invalid operation.	Invalid operation.
403	CBC.0151	Access denied.	Access denied.
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.

Status Code	Error Code	Error Message	Description
429	CBC.0250	Connection request control triggered.	Connection request control triggered.
500	CBC.0999	Other errors.	Other errors.
500	CBC.4001	The template does not exist.	The template does not exist.
500	CBC.4002	Failed to generate the verification code.	Failed to generate the verification code.
500	CBC.4003	The verification code is successfully generated but fails to be sent.	The verification code is successfully generated but fails to be sent.
500	CBC.4004	The email address is empty.	The email address is empty.
500	CBC.4005	Empty mobile number./Invalid format.	Empty mobile number/Invalid format.
500	CBC.4006	Failed to verify the mobile number.	Failed to verify the mobile number.
500	CBC.4007	Failed to verify the email address.	Failed to verify the email address.
500	CBC.4008	Invalid verification code.	Invalid verification code.
500	CBC.4009	The verification code is available, but the number of verification failures is greater than 3.	The verification code is available, but the number of verification failures is greater than 3.
500	CBC.4015	The number of verification code sending times has reached the upper limit.	The number of verification code sending times has reached the upper limit.

Status Code	Error Code	Error Message	Description
500	CBC.50000036	Credit limit adjustment for customers is not allowed because the partner is now in the credit control state.	Setting budgets for customers is not allowed because the partner is now in the credit control state.
500	CBC.5012	The account name already exists.	The account name already exists.
500	CBC.5013	The email address already exists.	The email address already exists.
500	CBC.5014	The mobile number already exists.	The mobile number already exists.
500	CBC.5015	Invalid account name.	Invalid account name.
500	CBC.5016	Invalid email address.	Invalid email address.
400	CBC.5017	Invalid mobile number.	Invalid mobile number.
500	CBC.5018	Duplicate xAccountId.	Duplicate xAccountId .
500	CBC.5019	The number of customers exceeds the license limit.	The number of customers exceeds the license limit.
500	CBC.5025	An exception occurred when the customer authorized rights to the partner.	An exception occurred when the customer authorized rights to the partner.
500	CBC.7001	Failed to allocate money to the member account because the primary account is not associated with the sub-account.	Failed to allocate money to the member account because the primary account is not associated with the sub-account.

Status Code	Error Code	Error Message	Description
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.7189	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.	The number of users who used the certificate ID for real-name authentication has reached the maximum limit.
500	CBC.7193	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.	The certificate ID is from an invalid certificate and cannot be used for real-name authentication.
500	CBC.7228	Invalid password.	Invalid password.
500	CBC.99000050	Query for the result of associating partner and its sub-customer timed out. Use the API for querying customers to check the association result.	Query for the result of associating partner and its sub-customer timed out. Use the API for querying customers to check the association result.

13.10 SDK Overview

This document provides the SDKs of different programming languages for partners and the addresses for obtaining the latest SDK versions.

Generating SDK Code Online

Use [API Explorer](#) to dynamically generate SDK code.

SDKs

Table 1 lists the SDK versions supported by partners. You can view SDK updates, obtain installation packages, and view user guides in GitHub.

Table 13-4 SDKs

Programming Languages	GitHub Address	Documentation
Java	huaweicloud-sdk-java-v3	Java SDK Usage Guide
Python	huaweicloud-sdk-python-v3	Python SDK Usage Guide
Go	huaweicloud-sdk-go-v3	Go SDK User Guide
PHP	huaweicloud-sdk-php-v3	PHP SDK User Guide'

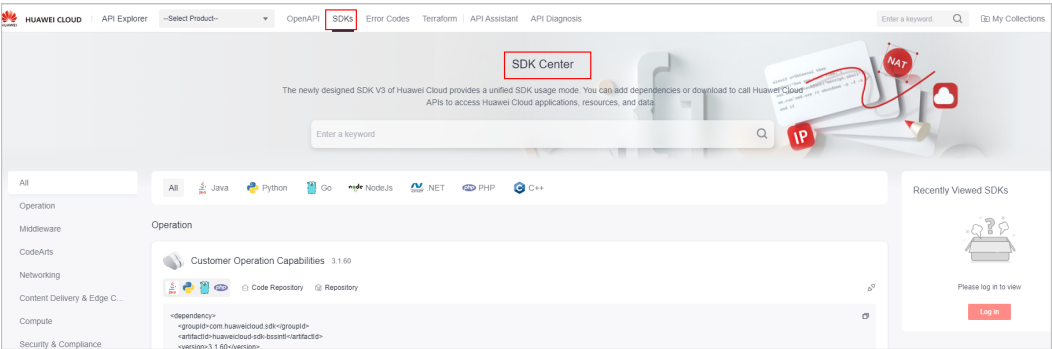
13.11 SDK-related FAQ

How Do I Update the SDK Version?

The SDK version will be updated in parallel after a product is updated. If the current version is not the latest, you are advised to update the SDK version.

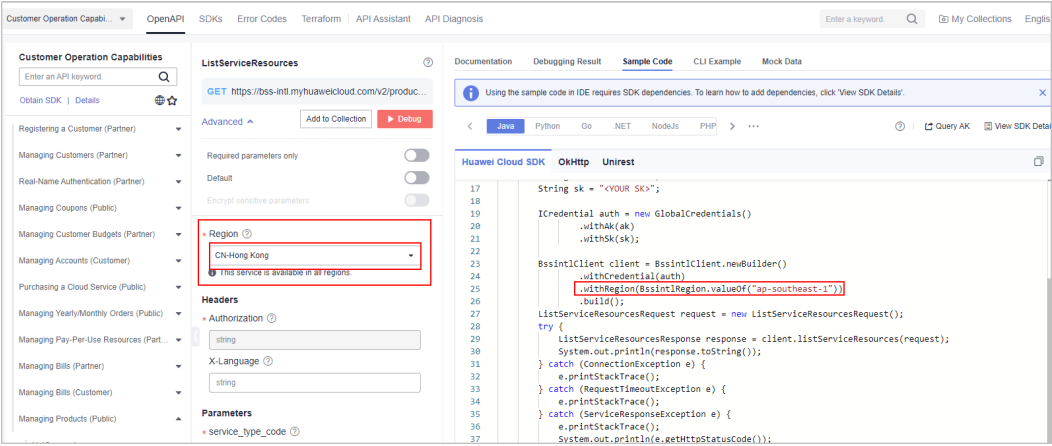
After logging in to the [SDK Center](#), you can access and use SDK V3.

You can select an SDK by service and language in SDK Center. The code repository, Nuget repository, and related APIs are included.



Can I Modify the Region of an SDK?

The region of an SDK is a global domain name and cannot be modified. If you modify the region, APIs cannot be debugged. The following figure shows an example in Java.



13.12 Cipher Suites Allowed in TLS1.2 and TLS1.3

The Internet Assigned Numbers Authority (IANA) is responsible for assigning numbers to all TLS cipher suites. The following table lists all secure IANA cipher suites that comply with Huawei's specifications. (The cipher suites recommended by IANA are not universally accepted by all standard organizations. Therefore, Huawei has conducted a screening process to select suites that meet the requirements of various organizations.) Cipher suites are classified into two security levels: high and medium. A cipher suite is considered high-level if it supports Perfect Forward Secrecy and AES symmetric encryption algorithms (GCM/CCM/CHACHA20-POLY1305). However, this criterion may change in the future based on the security level of TLS industry practices. Cipher suites that meet Huawei specifications but do not meet the high-level criteria are considered medium-level cipher suites.

Cipher Suites Allowed in TLS1.2

IANA Code	IANA Cipher Suite	Security Level
0x00,0x9E	TLS_DHE_RSA_WITH_AES_128_GCM_SHA256	HIGH
0x00,0x9F	TLS_DHE_RSA_WITH_AES_256_GCM_SHA384	HIGH
0x00,0xA2	TLS_DHE_DSS_WITH_AES_128_GCM_SHA256	HIGH
0x00,0xA3	TLS_DHE_DSS_WITH_AES_256_GCM_SHA384	HIGH
0x00,0xA9	TLS_PSK_WITH_AES_256_GCM_SHA384	MEDIUM
0x00,0xAA	TLS_DHE_PSK_WITH_AES_128_GCM_SHA256	HIGH
0x00,0xAB	TLS_DHE_PSK_WITH_AES_256_GCM_SHA384	HIGH

IANA Code	IANA Cipher Suite	Security Level
0xCC,0xAD	TLS_DHE_PSK_WITH_CHACHA20_POLY1305_SHA256	HIGH
0xC0,0x2B	TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256	HIGH
0xC0,0x2C	TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384	HIGH
0xC0,0x2F	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256	HIGH
0xC0,0x30	TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384	HIGH
0xCC,0xA8	TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256	HIGH
0xCC,0xAC	TLS_ECDHE_PSK_WITH_CHACHA20_POLY1305_SHA256	HIGH
0xD0,0x01	TLS_ECDHE_PSK_WITH_AES_128_GCM_SHA256	HIGH
0xD0,0x02	TLS_ECDHE_PSK_WITH_AES_256_GCM_SHA384	HIGH
0xD0,0x05	TLS_ECDHE_PSK_WITH_AES_128_CCM_SHA256	HIGH
0xC0,0x9E	TLS_DHE_RSA_WITH_AES_128_CCM	HIGH
0xC0,0x9F	TLS_DHE_RSA_WITH_AES_256_CCM	HIGH
0xCC,0xAA	TLS_DHE_RSA_WITH_CHACHA20_POLY1305_SHA256	HIGH
0xC0,0xA5	TLS_PSK_WITH_AES_256_CCM	MEDIUM
0xC0,0xA6	TLS_DHE_PSK_WITH_AES_128_CCM	HIGH
0xC0,0xA7	TLS_DHE_PSK_WITH_AES_256_CCM	HIGH
0xC0,0xAC	TLS_ECDHE_ECDSA_WITH_AES_128_CCM	HIGH
0xC0,0xAD	TLS_ECDHE_ECDSA_WITH_AES_256_CCM	HIGH
0xCC,0xA9	TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256	HIGH

Cipher Suites Allowed in TLS1.3

IANA Code	IANA Cipher Suite	Security Level
0x13,0x01	TLS_AES_128_GCM_SHA256	HIGH
0x13,0x02	TLS_AES_256_GCM_SHA384	HIGH
0x13,0x03	TLS_CHACHA20_POLY1305_SHA256	HIGH
0x13,0x04	TLS_AES_128_CCM_SHA256	HIGH

According to RFC 8998, the SM series cryptographic algorithm suite is added to TLS1.3. The following two algorithm suites cannot be used in other TLS versions.

IANA Code	IANA Cipher Suite
0x00,0xC6	TLS_SM4_GCM_SM3
0x00,0xC7	TLS_SM4_CCM_SM3

13.13 Price Inquiry API Guide

13.13.1 Price Inquiry Example of Yearly/Monthly Products (Using the Price Calculator)

The request parameters for querying the price of a yearly/monthly product using an API can be obtained through the [price calculator](#).

ECS is used as an example:

Region: CN North-Beijing4

AZ: General AZ

Billing Mode: Yearly/Monthly

CPU Architecture: x86

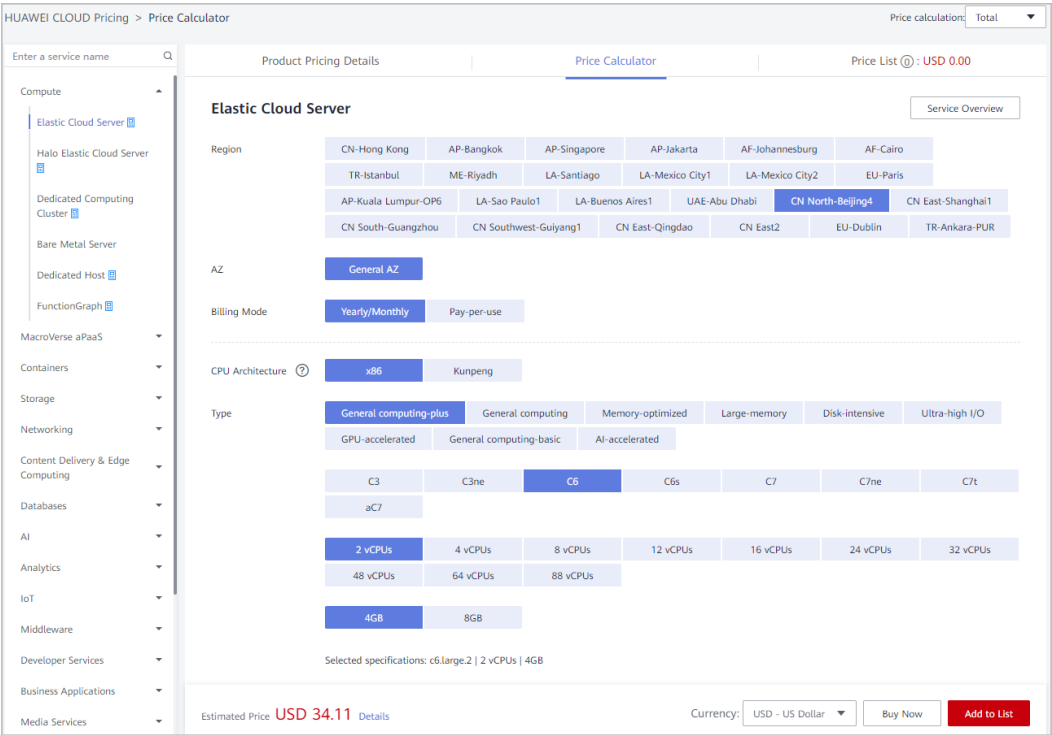
Type: General computing-plus C6 | 2 vCPUs | 4 GB

System Disk: General Purpose SSD 40 G

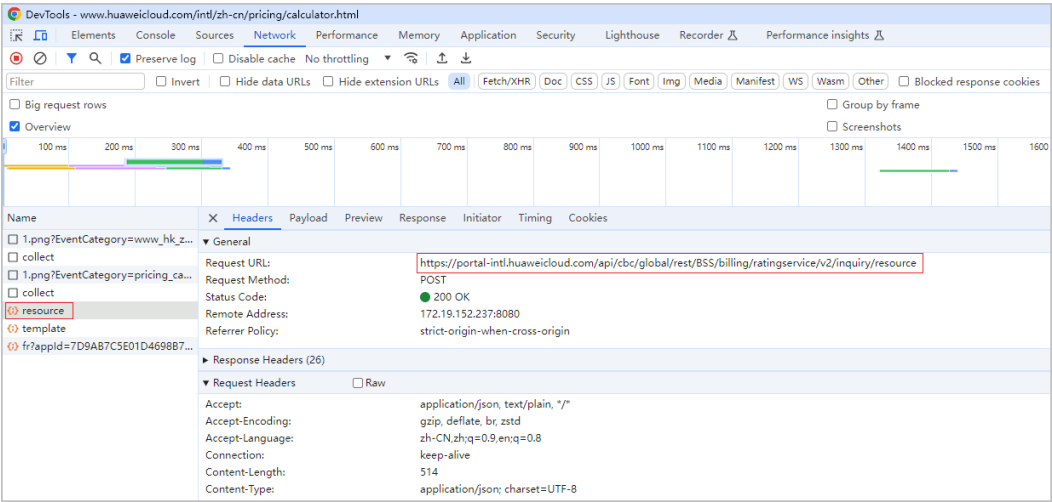
Required Duration: 1 Month

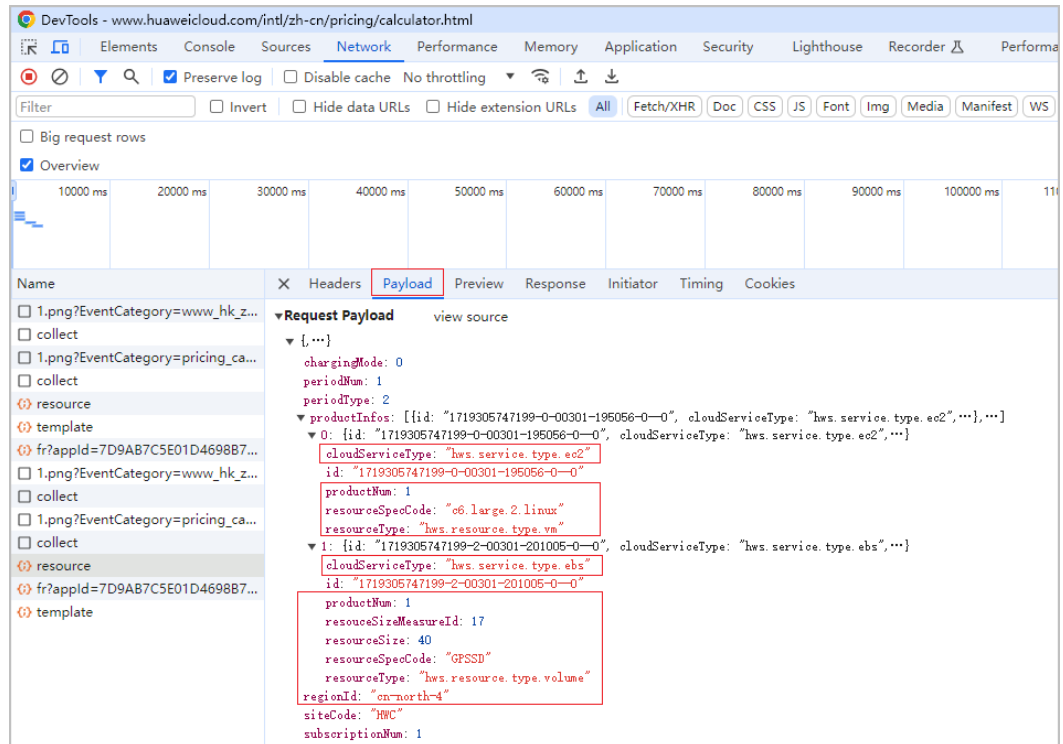
Quantity: 1

Step 1 Go to the [Price Calculator](#) page and press F12 to open the console. Set the parameters based on the example.



Step 2 Click **Network > resource > Payload** to view request parameters.



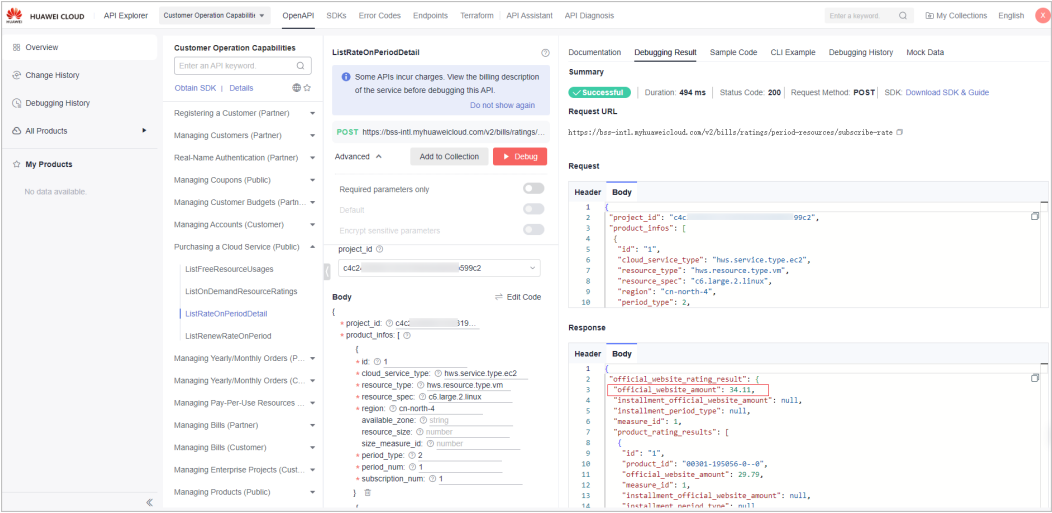


Step 3 Add the parameters obtained in **Step 2** to the request.

As there are two products, an ECS and a disk, involved, two **product_infos** structures are required. The following shows an example of a **product_infos** structure.

```
{  "project_id": "84c5*****fb2420",  "product_infos": [    {      "id": "1",      "cloud_service_type": "hws.service.type.ec2",      "resource_type": "hws.resource.type.vm",      "resource_spec": "c6.large.2.linux",      "region": "cn-north-4",      "period_type": 2,      "period_num": 1,      "subscription_num": 1    },    {      "id": "2",      "cloud_service_type": "hws.service.type.ebs",      "resource_type": "hws.resource.type.volume",      "resource_spec": "GPSSD",      "region": "cn-north-4",      "resource_size": 40,      "size_measure_id": 17,      "period_type": 2,      "period_num": 1,      "subscription_num": 1    }  ]}
```

Step 4 (Optional) Go to [API Explorer](#) and add **product_infos** to the request body. The same results will return as that obtained using the price calculator.



----End

13.13.2 Price Inquiry Example of Pay-Per-Use Products (Using the Price Calculator)

The request parameters for querying the price of a pay-per-use product using an API can be obtained through the [price calculator](#).

ECS is used as an example:

Region: CN North-Beijing4

AZ: General AZ

Billing Mode: Pay-per-use

CPU Architecture: x86

Type: General computing-plus C6 | 2 vCPUs | 4 GB

System Disk: General Purpose SSD 40 GB

Required Duration: 1 Month

Quantity: 1

Step 1 Go to the [Price Calculator](#) page and press F12 to open the console. Set the parameters based on the example.

HUAWEI CLOUD Pricing > Price Calculator

Price calculation: Total

Enter a service name

Compute

Elastic Cloud Server

Halo Elastic Cloud Server

Dedicated Computing Cluster

Bare Metal Server

Dedicated Host

FunctionGraph

MacroVerse aPaaS

Containers

Storage

Networking

Content Delivery & Edge Computing

Databases

AI

Analytics

IoT

Middleware

Developer Services

Business Applications

Media Services

Product Pricing Details

Price Calculator

Price List @ : USD 0.00

Service Overview

Elastic Cloud Server

Region

CN-Hong Kong

AP-Bangkok

AP-Singapore

AP-Jakarta

AF-Johannesburg

AF-Cairo

TR-Istanbul

ME-Riyadh

LA-Santiago

LA-Mexico City1

LA-Mexico City2

EU-Paris

AP-Kuala Lumpur-OP6

LA-Sao Paulo1

LA-Buenos Aires1

UAE-Abu Dhabi

CN North-Beijing4

CN East-Shanghai1

CN South-Guangzhou

CN Southwest-Guiyang1

CN East-Qingdao

CN East2

EU-Dublin

TR-Ankara-PUR

AZ

General AZ

Billing Mode

Yearly/Monthly

Pay-per-use

CPU Architecture

x86

Kunpeng

Type

General computing-plus

General computing

Memory-optimized

Large-memory

Disk-intensive

Ultra-high I/O

GPU-accelerated

General computing-basic

AI-accelerated

C3

C3ne

C6

C6s

C7

C7ne

C7t

aC7

2 vCPUs

4 vCPUs

8 vCPUs

12 vCPUs

16 vCPUs

24 vCPUs

32 vCPUs

48 vCPUs

64 vCPUs

88 vCPUs

4GB

8GB

Selected specifications: c6.large.2 | 2 vCPUs | 4GB

Estimated Price USD 0.07 Details

Currency: USD - US Dollar

Buy Now

Add to List

Step 2 Click **Network > resource > Payload** to view request parameters.

DevTools - www.huaweicloud.com/pricing/calculator.html

Elements Console Sources Network Performance Memory Application Security Lighthouse Recorder Performance insights

Filter

Preserve log

Disable cache

No throttling

Fetch/XHR

Doc

CSS

JS

Font

Img

Media

Manifest

WS

Wasm

Other

Blocked response cookies

Big request rows

Overview

Group by frame

Screenshots

100 ms 200 ms 300 ms 400 ms 500 ms 600 ms 700 ms 800 ms 900 ms 1000 ms 1100 ms 1200 ms 1300 ms 1400 ms 1500 ms 1600

Name

X Headers Payload Preview Response Initiator Timing Cookies

1.png?EventCategory=www_chin...

1.png?EventCategory=pricing_ca...

resource

template

fr?appid=7D9AB7C5E01D4698B7...

General

Request URL: https://portal.huaweicloud.com/api/cbc/global/rest/BSS/billing/ratingservice/v2/inquiry/resource

Request Method: POST

Status Code: 200 OK

Remote Address: 172.19.152.237:8080

Referrer Policy: strict-origin-when-cross-origin

Response Headers (26)

Request Headers

:authority: portal.huaweicloud.com

:method: POST

:path: /api/cbc/global/rest/BSS/billing/ratingservice/v2/inquiry/resource

:scheme: https

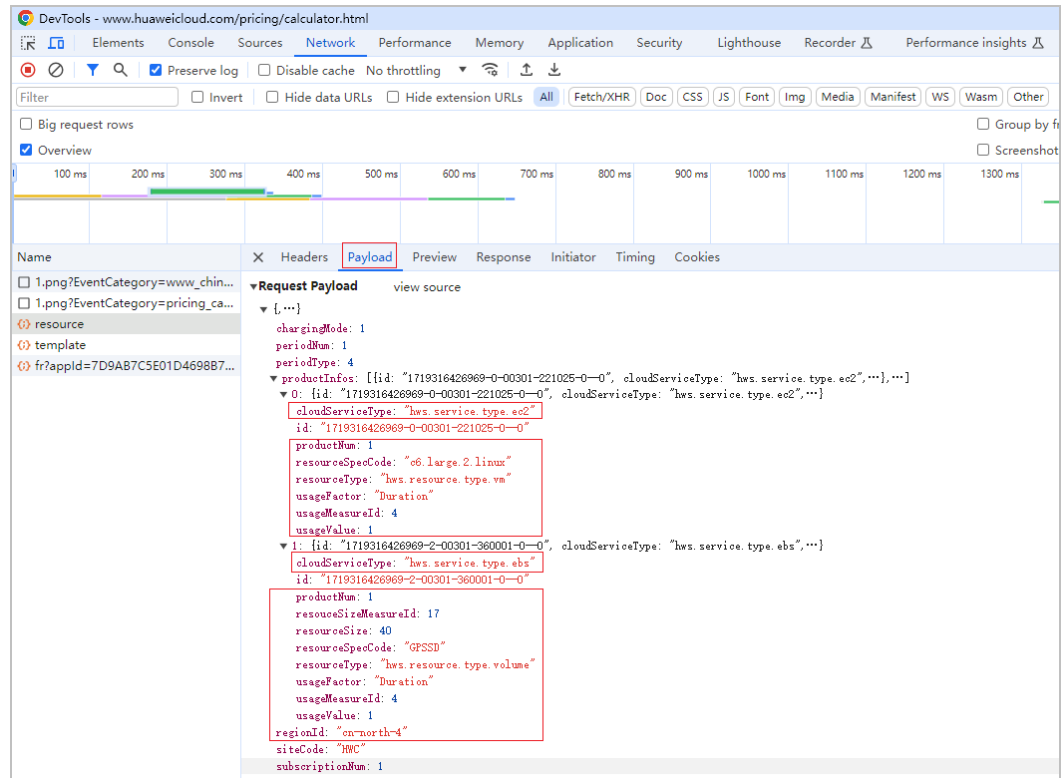
Accept: application/json, text/plain, */*

Accept-Encoding: gzip, deflate, br, zstd

Accept-Language: zh-CN,zh;q=0.9,en;q=0.8

Content-Length: 632

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

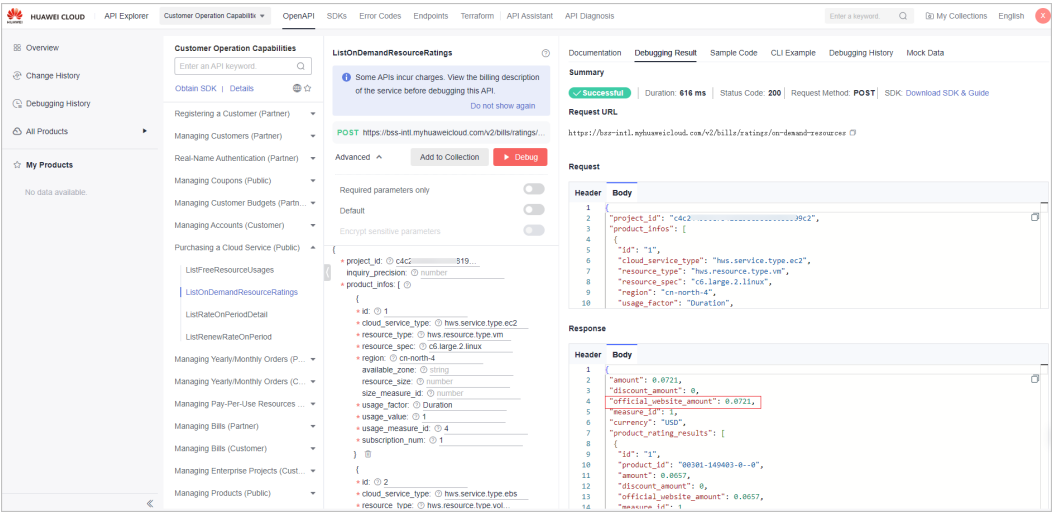


Step 3 Add the parameters obtained in **Step 2** to the request.

As there are two products, an ECS and a disk, involved, two **product_infos** structures are required. The following shows an example of a **product_infos** structure.

```
{
  "project_id": "c4c24*****599c2",
  "product_infos": [
    {
      "id": "1",
      "cloud_service_type": "hws.service.type.ec2",
      "resource_type": "hws.resource.type.vm",
      "resource_spec": "c6.large.2.linux",
      "region": "cn-north-4",
      "usage_factor": "Duration",
      "usage_value": 1,
      "usage_measure_id": 4,
      "subscription_num": 1
    },
    {
      "id": "2",
      "cloud_service_type": "hws.service.type.ebs",
      "resource_type": "hws.resource.type.volume",
      "resource_spec": "GPSSD",
      "region": "cn-north-4",
      "resource_size": 40,
      "size_measure_id": 17,
      "usage_factor": "Duration",
      "usage_value": 1,
      "usage_measure_id": 4,
      "subscription_num": 1
    }
  ]
}
```

Step 4 (Optional) Go to **API Explorer** and add **product_infos** to the request body. The same results will return as that obtained using the price calculator.



----End