Billing Management

Product Documentation

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User Guide
Product Introduction
Product Introduction

Account Overview

- Support displaying the available cash balance and the invoiceable amount of the account.
- Support displaying monthly resource bills, including the bill month, bill amount, amount payable (paid), and amount payable (unpaid).
- Support accessing the Recharging, Withdrawing, and Transaction Details pages from the Account Overview page.

Order Management

Order Management records a tenant's order operations for a specific product, including activation, reconfiguration, and termination. It supports order queries and order export for download.

- Support paginated display of order information and enable querying orders by time range, account UIN, product name, subproduct name, resource ID, and creator ID.
- Support filtering orders by order type and status. Order types: Purchase, Renewal, and Upgrade. Prepaid order statuses: Unpaid, Processing, Completed, Canceled, Expired, and Failed. Postpaid order statuses: Processing, Failed, and Completed.
- Support viewing order details, including the sub-order ID, product name, subproduct name, specific configurations, quantity, payment method, status, and other information.
- Support downloading order records generated within a specified time range. The file is generated asynchronously and can be downloaded from Download Center.

Fund Management

Account Top-Up

Support viewing public remittance information.

Transaction Details

- Support viewing account transaction details and filtering them by time range.
- Support viewing two types of transaction details: billing and repayment. Billing details include the bill month, bill amount, repayment date, outstanding amount, and bill status. Repayment details include the repayment time, repayment amount, and repayment transaction type.
- Support viewing repayment details to determine the corresponding monthly bills, paid amount, and balance.

Bank Remittance Query

- Support submitting remittance information.
- Support viewing bank remittance records, including the remitter name, remittance account, remitting bank, remittance amount, remittance time, remittance status, and remarks.

Bill Management

Bill Overview

- Support selecting a bill month to query the bill overview.
- Support selecting a historical monthly bill or a bill for the current month that has not been issued (as of the previous day) to view the bill amount.
- Support displaying bill amount trends of the last six months or the last year in a histogram.
- Support aggregating data by product, region, billing mode, and tag to visually view the bill overview, as well as change percentage and trend of fees compared with the previous month.

Bill Details

- Support querying order information by product, subproduct, region, and transaction type.
- Support querying order information by resource ID.
- Support customizing the displayed fields, such as Resource Alias/ID, Product Name, Operator - Account Name, Operator UIN, Billing Mode, Region, Subproduct Name, Transaction Type, Order ID, Transaction ID, Usage of Product Sub-items, Usage Unit of Product Sub-items, Usage Duration, and Duration Unit.
- Support downloading historical monthly bills that have been issued. Files are generated asynchronously and can be downloaded from Download Center.

Bill Download

- Support customizing the bill viewing scope.
- Support viewing the relevant information, such as the bill month, payable amount, payment amount with vouchers, total fees, status, and operations.
- Support downloading historical monthly bills that have been issued.

Cost Allocation Tags

- Support setting cost allocation tags. Once set, each tag key will be displayed as a separate column in the bill, with the corresponding tag value shown in each row. These tags serve as dimensions for grouping and filtering bills.
- Support searching for set cost allocation tags.

Download Center

- Support downloading resource bills, detailed bills, summary bills, transaction details, promo voucher details, and quota management data.
- Support the paginated display of Download Center records and filtering records by file type and file status.
- Display the file type, file name, status, file generation time, last download time, and operations for download records.

Quota Management

- Support the paginated display of the quota information on tenants.
- Support querying quota information on tenants by product name, including the set quota and used quota.
- Support setting user groups for sub-account quotas and filtering sub-accounts that belong to multiple user groups.

Vouchers

- Support viewing information on vouchers in all statuses, including Available, Expired, Not used up, and Used up.
- Support filtering and querying voucher information by voucher code and applicable product.
- Support sorting vouchers by expiration time in ascending or descending order.
- Support viewing voucher usage records by time range.

Operation Guide
Account Overview

Through the Account Overview page, users can view: related information such as available account credit, fixed credit, used credit, cash balance, invoiceable amount, and monthly resource bill.
Available credit explanation: Available Credit = Fixed Credit + Cash Balance – Used Credit
Available Credit Alarm Setting: Users can customize credit alarm threshold. When the available credit is lower than the specified alarm value, notification will be sent automatically. After the available credit alarm is reminded for 5 consecutive days, no further notifications will be sent.

Order Management

Order Management records the order information for a tenant's activation, configuration adjustment, and termination of a specific product, including order inquiry and order export and download.
The Order Management page displays order records and allows for searches by account UIN, product name, sub-product name, resource ID, and creator ID. It supports filtering orders by date with quick filter options for the past month, last 3 months, last 6 months, last year, and a custom time range.

- Supports filtering orders by order type and status, and sorts orders by creation time. Click Details to view the details of an order.
- Supports viewing order details, which include sub-order number, product name, sub-product name, specific configuration, quantity, payment method, status, etc. The details displayed vary slightly between prepaid and postpaid order statuses.

Renewal Management

Renewal Management is applicable for order management in yearly/monthly subscription scenarios but not for pay-as-you-go scenarios.
Renewal Management enables tenants to renew one or more products and view their renewal settings, including manual renewal, automatic renewal, and no renewal upon expiration.

- You can filter the renewal list by expiration time, product name, region, and resource ID.
- Manual renewal and automatic renewal can be separately configured for products in the Operation column in the renewal list. You can also select multiple products in the renewal list to complete product renewal settings in batches. The Set Auto-Renewal and Decide Not to Renew buttons are provided.
- For no renewal upon expiration, a Batch Restore button is provided.

Fund Management
Revenue and Expenditure Details

- Support viewing account transaction details and querying them by time range.
- Support viewing two types of transaction details: billing and repayment. Billing details include the bill month, bill amount, repayment date, outstanding amount, and bill status. Repayment details include the repayment time, repayment amount, and repayment transaction type.
- Support viewing repayment details to determine the corresponding monthly bills, paid amount, and balance.

Offline Remittance Query

- Support viewing bank remittance records in pagination mode, including the remitter name, remittance account, remitting bank, remittance amount, remittance time, remittance status, and remarks.
- Support filtering and querying bank remittance information by status.

Bill Management
Bill Overview

On the Bill Overview page, it supports monthly query for the fee trend of the account. It supports quick filtering to view the total cost, payable amount, and cash coupon payment amount for the past six months or past one year. Summarizing by month supports four ways: summarizing by product name, summarizing by region, summarizing by billing mode, summarizing by tag, to display visualized graphs for the month queried by the user and the percentage change in costs compared to the last month.

- Enter the Billing Overview Management page and select the bill month that needs to view, and you can view the total costs, payable amount, and cash coupon payment amount of the bill corresponding to the bill month.
- Summarize by product, and it displays, by using a monthly billing pie chart, product usage distribution for historical months and the trend of changes (in percentage) for total costs of the same type of products compared to the previous month.
- Summarize by region, and it displays region usage distribution for historical months and the trend of changes (in percentage) for total costs of regions compared to the previous month;
- Summarize by billing mode, and it displays product distribution based on billing mode for historical months and the trend of changes (in percentage) for total costs of the billing mode compared to the previous month;
- Summarize by tag, and it displays, by using a bar chart for resource tag key used in historical months, tag usage for historical months and the trend of changes (in percentage) for total costs of the tag keys compared to the previous month.
  Supports filtering by tag key and displaying data for the selected tag key. After the tag key is changed, the product data automatically refreshes. It supports displaying the data on a secondary menu page. The primary display page displays the product tag data, and the secondary display page displays details of the product data under the corresponding primary tag.

Bill Details

Supports filtering resources by month. The filtered details are displayed in the resource ID bill and the detailed bill.
Bill by Instance:

- Supports filtering/downloading usage data for all products or a specific product by month. You can customize the display fields, such as resource alias/ID, product name, operator (account name), operator UIN, subproduct name, region, AZ, billing mode, and tag key: xxxxd. The selected fields will be displayed in a column-based format.
- Supports filtering resources by tag key.
  Content Display:
- Supports filtering and displaying resources by product, region, transaction type, and tag. Product resources with a fee of 0USD can be hidden.
  Bill Details
- Supports querying order information by product, subproduct, region, and transaction type.
- Supports querying order information by resource ID.
- Supports customizing the display fields, including resource alias/ID, product name, operator (account name), operator UIN, billing mode, region, subproduct name, transaction type, order ID, transaction ID, product detail usage, product detail usage unit, usage duration, and duration unit.
- Supports downloading billed files for historical months. Files are generated asynchronously and can be downloaded from the Download Center.

Cost Allocation Tags

Tags serve as identifiers for resource allocation on the cloud platform. They can be used for managing resources or allocating fees in billing.

Creating Cost Allocation Tags

1. Go to the Cost Allocation Tag page and click Create Tag Key.
2. Click Tag List in the left menu to go to the Tag List page, and then click Create.
3. Add a tag by entering the tag key name and setting the tag value.
4. Click OK to complete the tag creation. You can view the result in the table on this page.

Setting Cost Allocation Tags

The Bill-Splitting Tag page displays a list of created tag keys.

1. Select the tag keys you want to display.
2. Click Set as Cost Allocation Tag to apply the selected tag key as a cost allocation tag in the bill.
3. The tag key set as a cost allocation tag will appear as a separate column in the bill, allowing the bill to be filtered and classified by that tag. Customers can set one or more tag keys as cost allocation tags, with a maximum of five allowed.

Canceling Cost Allocation Tags

The Cost Allocation Tag page displays a list of created tag keys.

1. Select the tag keys you want to cancel.
2. Click Cancel Cost Allocation Tag to remove the tag key from the cost allocation tags in the bill. Once canceled, the tag key will no longer appear in the user's bill.

Display of Cost Allocation Tags in Billing Files

On the Creating Bill-Splitting Tag page, all tag keys under the customer account will be retrieved. Tag keys that are set as cost allocation tags will be displayed as additional columns in the billing file, with each key

forming a separate column that lists the corresponding tag value for each billing record. Tag information will be included in the billing file starting from the month in which the cost allocation tag is configured. Tag keys that are not set as cost allocation tags will not appear in the billing file.
The billing file contains three tables presenting billing details: L3 Billing Details, L2 Resource ID Summary, and L1 Product-Level Summary.

1. Tags in L3-Level Billing Details

The billing details include additional columns for cost allocation tags, with each tag key occupying one column. The corresponding tag values for each resource are displayed below. These values reflect the latest tag status of the resource ID at the time of each transaction, thereby dynamically capturing tag value changes within the bill.
For example, on July 1, 2019, the resource ins-sfasf12h had not yet been assigned a department tag, so transactions generated on that date show an empty tag value in the billing details. On July 10, 2019, the resource ins-sfasf12h was tagged with Game Department, and subsequent transactions reflect this tag value in the billing details. On July 20, 2019, the tag value was updated to Operations Department, and all transactions thereafter display this updated tag in the billing details.

2. Display of Tags in L2-Level Resource ID Summary

Two new columns, start time and end time, are added to the L2 Resource ID Summary table. Based on the existing aggregation logic, when records are summarized by resource ID, those with different tag values are displayed in separate rows, while those with the same tag values are combined into a single row.

3. Display of Tags in L1-Level Billing Summary

In the L1-level document, a sheet named Tag + Product Name Summary is available, where each tag key is displayed as a separate column.
Fields included in the L1 table display the relevant information, such as the account UIN, tag key xxxx (subject to actual settings, with no more than five tags), product name, original total price, discounted total price, payment amount with promo vouchers, and payable amount.

Download Center

- Supports filtering the download files by all file types and all status.
- Supports sorting the download record list by last download time.
- Supports paging to view, and provides file type, file name, status, file generation time, last download time, and operation information.
- Click Download, and you can download the corresponding file.

Quota Management

Supports filtering cloud services, viewing specified quotas and used quotas, and setting quotas for sub-accounts.
Set sub-account quotas: You can customize the quotas for all sub-accounts. The sum of quotas for sub-accounts should be less than the total quota of the main account. The system supports filtering by user groups, and the filtering results are displayed in the total column. If a sub-account belongs to multiple user groups, they are identified by commas, for example, Group1, Group2.

Cash Coupons

Cash Coupon List

The cash coupon list is divided into four options: all, available, expired, and exhausted, each displaying cash coupons of the corresponding state. Supports filtering and querying cash coupon information by cash coupon number and applicable products. It supports sorting cash coupons in ascending or descending order by expiration time.

> Note: Expired cash coupons only include cash coupons that are unused but have expired.

Usage Records

Supports viewing the usage records of cash coupons by usage time.

Product Introduction

Account Overview

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Order Management

Order Management records a tenant's order operations for a specific product, including activation, reconfiguration, and termination. It supports order queries and order export for download.

- Support paginated display of order information and enable querying orders by time range, account UIN, product name, subproduct name, resource ID, and creator ID.
- Support filtering orders by order type and status. Order types: Purchase, Renewal, and Upgrade. Prepaid order statuses: Unpaid, Processing, Completed, Canceled, Expired, and Failed. Postpaid order statuses: Processing, Failed, and Completed.
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Fund Management

Account Top-Up

Support viewing public remittance information.

Transaction Details

- Support viewing account transaction details and filtering them by time range.
- Support viewing two types of transaction details: billing and repayment. Billing details include the bill month, bill amount, repayment date, outstanding amount, and bill status. Repayment details include the repayment time, repayment amount, and repayment transaction type.
- Support viewing repayment details to determine the corresponding monthly bills, paid amount, and balance.

Bank Remittance Query

- Support submitting remittance information.
- Support viewing bank remittance records, including the remitter name, remittance account, remitting

bank, remittance amount, remittance time, remittance status, and remarks.

Bill Management

Bill Overview

- Support selecting a bill month to query the bill overview.
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- Support displaying bill amount trends of the last six months or the last year in a histogram.
- Support aggregating data by product, region, billing mode, and tag to visually view the bill overview, as well as change percentage and trend of fees compared with the previous month.

Bill Details

- Support querying order information by product, subproduct, region, and transaction type.
- Support querying order information by resource ID.
- Support customizing the displayed fields, such as Resource Alias/ID, Product Name, Operator - Account Name, Operator UIN, Billing Mode, Region, Subproduct Name, Transaction Type, Order ID, Transaction ID, Usage of Product Sub-items, Usage Unit of Product Sub-items, Usage Duration, and Duration Unit.
- Support downloading historical monthly bills that have been issued. Files are generated asynchronously and can be downloaded from Download Center.

Bill Download

- Support customizing the bill viewing scope.
- Support viewing the relevant information, such as the bill month, payable amount, payment amount with vouchers, total fees, status, and operations.
- Support downloading historical monthly bills that have been issued.

Cost Allocation Tags

- Support setting cost allocation tags. Once set, each tag key will be displayed as a separate column in the bill, with the corresponding tag value shown in each row. These tags serve as dimensions for grouping and filtering bills.
- Support searching for set cost allocation tags.

Download Center

- Support downloading resource bills, detailed bills, summary bills, transaction details, promo voucher details, and quota management data.
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- Support querying quota information on tenants by product name, including the set quota and used quota.
- Support setting user groups for sub-account quotas and filtering sub-accounts that belong to multiple user groups.

Vouchers

- Support viewing information on vouchers in all statuses, including Available, Expired, Not used up, and Used up.
- Support filtering and querying voucher information by voucher code and applicable product.
- Support sorting vouchers by expiration time in ascending or descending order.
- Support viewing voucher usage records by time range.

Operation Guide
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Order Management records the order information for a tenant's activation, configuration adjustment, and termination of a specific product, including order inquiry and order export and download.
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- Supports filtering orders by order type and status, and sorts orders by creation time. Click Details to view the details of an order.
- Supports viewing order details, which include sub-order number, product name, sub-product name, specific configuration, quantity, payment method, status, etc. The details displayed vary slightly between prepaid and postpaid order statuses.

Renewal Management

Renewal Management is applicable for order management in yearly/monthly subscription scenarios but not for pay-as-you-go scenarios.
Renewal Management enables tenants to renew one or more products and view their renewal settings, including manual renewal, automatic renewal, and no renewal upon expiration.

- You can filter the renewal list by expiration time, product name, region, and resource ID.
- Manual renewal and automatic renewal can be separately configured for products in the Operation column in the renewal list. You can also select multiple products in the renewal list to complete product renewal settings in batches. The Set Auto-Renewal and Decide Not to Renew buttons are provided.
- For no renewal upon expiration, a Batch Restore button is provided.

Fund Management
Transaction Details

- Support viewing account transaction details and querying them by time range.
- Support viewing two types of transaction details: billing and repayment. Billing details include the bill month, bill amount, repayment date, outstanding amount, and bill status. Repayment details include the repayment time, repayment amount, and repayment transaction type.
- Support viewing repayment details to determine the corresponding monthly bills, paid amount, and balance.

Bank Remittance Query

- Support viewing bank remittance records in pagination mode, including the remitter name, remittance account, remitting bank, remittance amount, remittance time, remittance status, and remarks.
- Support filtering and querying bank remittance information by status.

Bill Management
Bill Overview

On the Bill Overview page, it supports monthly query for the fee trend of the account. It supports quick filtering to view the total cost, payable amount, and cash coupon payment amount for the past six months or past one year. Summarizing by month supports four ways: summarizing by product name, summarizing by region, summarizing by billing mode, summarizing by tag, to display visualized graphs for the month queried by the user and the percentage change in costs compared to the last month.

- Enter the Billing Overview Management page and select the bill month that needs to view, and you can view the total costs, payable amount, and cash coupon payment amount of the bill corresponding to the bill month.
- Summarize by product, and it displays, by using a monthly billing pie chart, product usage distribution for historical months and the trend of changes (in percentage) for total costs of the same type of products compared to the previous month.
- Summarize by region, and it displays region usage distribution for historical months and the trend of changes (in percentage) for total costs of regions compared to the previous month;
- Summarize by billing mode, and it displays product distribution based on billing mode for historical months and the trend of changes (in percentage) for total costs of the billing mode compared to the previous month;
- Summarize by tag, and it displays, by using a bar chart for resource tag key used in historical months, tag usage for historical months and the trend of changes (in percentage) for total costs of the tag keys compared to the previous month.
  Supports filtering by tag key and displaying data for the selected tag key. After the tag key is changed, the product data automatically refreshes. It supports displaying the data on a secondary menu page. The primary display page displays the product tag data, and the secondary display page displays details of the product data under the corresponding primary tag.

Bill Details

Supports filtering resources by month. The filtered details are displayed in the resource ID bill and the detailed bill.
Bill by Instance:

- Supports filtering/downloading usage data for all products or a specific product by month. You can customize the display fields, such as resource alias/ID, product name, operator (account name), operator UIN, subproduct name, region, AZ, billing mode, and tag key: xxxxd. The selected fields will be displayed in a column-based format.
- Supports filtering resources by tag key.
  Content Display:
- Supports filtering and displaying resources by product, region, transaction type, and tag. Product resources with a fee of 0USD can be hidden.
  Bill Details
- Supports querying order information by product, subproduct, region, and transaction type.
- Supports querying order information by resource ID.
- Supports customizing the display fields, including resource alias/ID, product name, operator (account name), operator UIN, billing mode, region, subproduct name, transaction type, order ID, transaction ID, product detail usage, product detail usage unit, usage duration, and duration unit.
- Supports downloading billed files for historical months. Files are generated asynchronously and can be downloaded from the Download Center.

Cost Allocation Tags

Tags serve as identifiers for resource allocation on the cloud platform. They can be used for managing resources or allocating fees in billing.

Creating Cost Allocation Tags

1. Go to the Cost Allocation Tag page and click Create Tag Key.
2. Click Tag List in the left menu to go to the Tag List page, and then click Create.
3. Add a tag by entering the tag key name and setting the tag value.
4. Click OK to complete the tag creation. You can view the result in the table on this page.

Setting Cost Allocation Tags

The Bill-Splitting Tag page displays a list of created tag keys.

1. Select the tag keys you want to display.
2. Click Set as Cost Allocation Tag to apply the selected tag key as a cost allocation tag in the bill.
3. The tag key set as a cost allocation tag will appear as a separate column in the bill, allowing the bill to be filtered and classified by that tag. Customers can set one or more tag keys as cost allocation tags, with a maximum of five allowed.

Canceling Cost Allocation Tags

The Cost Allocation Tag page displays a list of created tag keys.

1. Select the tag keys you want to cancel.
2. Click Cancel Cost Allocation Tag to remove the tag key from the cost allocation tags in the bill. Once canceled, the tag key will no longer appear in the user's bill.

Display of Cost Allocation Tags in Billing Files

On the Creating Bill-Splitting Tag page, all tag keys under the customer account will be retrieved. Tag keys that are set as cost allocation tags will be displayed as additional columns in the billing file, with each key

forming a separate column that lists the corresponding tag value for each billing record. Tag information will be included in the billing file starting from the month in which the cost allocation tag is configured. Tag keys that are not set as cost allocation tags will not appear in the billing file.
The billing file contains three tables presenting billing details: L3 Billing Details, L2 Resource ID Summary, and L1 Product-Level Summary.

1. Tags in L3-Level Billing Details

The billing details include additional columns for cost allocation tags, with each tag key occupying one column. The corresponding tag values for each resource are displayed below. These values reflect the latest tag status of the resource ID at the time of each transaction, thereby dynamically capturing tag value changes within the bill.
For example, on July 1, 2019, the resource ins-sfasf12h had not yet been assigned a department tag, so transactions generated on that date show an empty tag value in the billing details. On July 10, 2019, the resource ins-sfasf12h was tagged with Game Department, and subsequent transactions reflect this tag value in the billing details. On July 20, 2019, the tag value was updated to Operations Department, and all transactions thereafter display this updated tag in the billing details.

2. Display of Tags in L2-Level Resource ID Summary

Two new columns, start time and end time, are added to the L2 Resource ID Summary table. Based on the existing aggregation logic, when records are summarized by resource ID, those with different tag values are displayed in separate rows, while those with the same tag values are combined into a single row.

3. Display of Tags in L1-Level Billing Summary

In the L1-level document, a sheet named Tag + Product Name Summary is available, where each tag key is displayed as a separate column.
Fields included in the L1 table display the relevant information, such as the account UIN, tag key xxxx (subject to actual settings, with no more than five tags), product name, original total price, discounted total price, payment amount with promo vouchers, and payable amount.

Download Center

- Supports filtering the download files by all file types and all status.
- Supports sorting the download record list by last download time.
- Supports paging to view, and provides file type, file name, status, file generation time, last download time, and operation information.
- Click Download, and you can download the corresponding file.

Quota Management

Supports filtering cloud services, viewing specified quotas and used quotas, and setting quotas for sub-accounts.
Set sub-account quotas: You can customize the quotas for all sub-accounts. The sum of quotas for sub-accounts should be less than the total quota of the main account. The system supports filtering by user groups, and the filtering results are displayed in the total column. If a sub-account belongs to multiple user groups, they are identified by commas, for example, Group1, Group2.

Cash Coupons

Cash Coupon List

The cash coupon list is divided into four options: all, available, expired, and exhausted, each displaying cash coupons of the corresponding state. Supports filtering and querying cash coupon information by cash coupon number and applicable products. It supports sorting cash coupons in ascending or descending order by expiration time.

> Note: Expired cash coupons only include cash coupons that are unused but have expired.

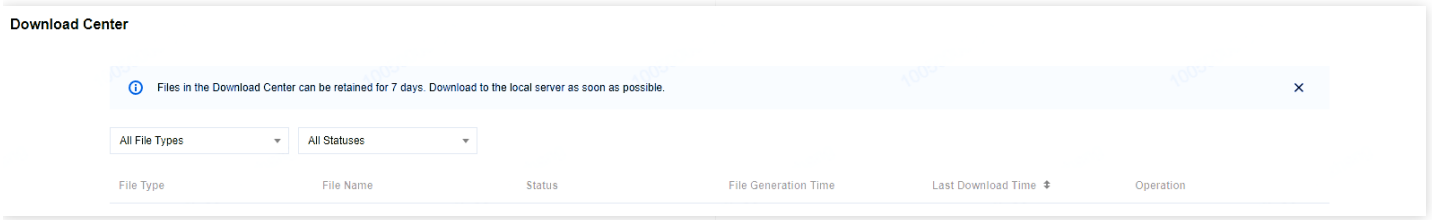
Usage Records

Supports viewing the usage records of cash coupons by usage time.

Download Center

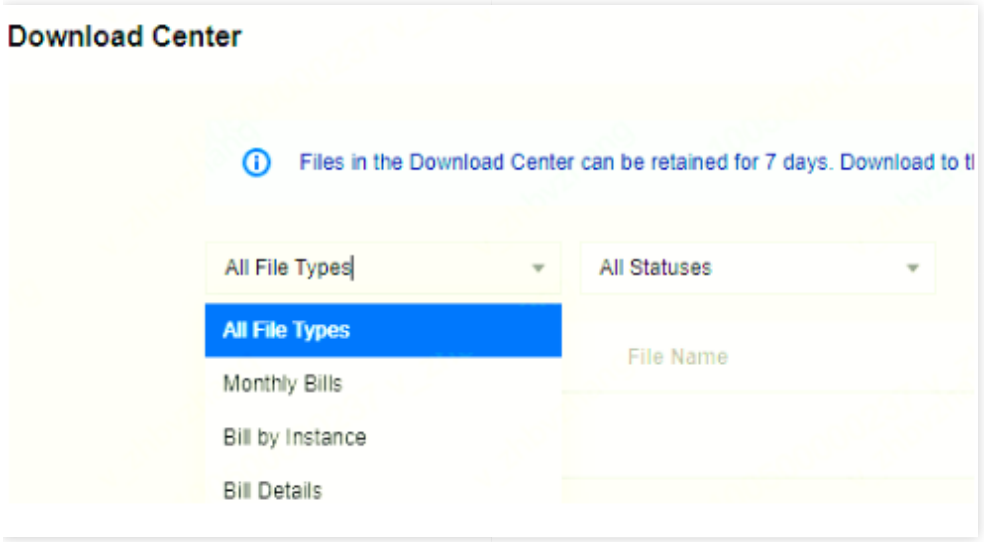
Download Record List

Views the download record list, including file type, file name, status, generation time, etc.



Download Records Filtering

Filters the download records by file type and status.



File Download

Can view and download files in the list.

API Documentation
Billing(bill)
version(2018-10-25)
API overview

API version

V3

Billing

Interface name	Interface function
CouponInfo	CouponInfo
CreateDownloadRecordGateway	CreateDownloadRecordGateway
CreateRemitRecordGateway	CreateRemitRecordGateway
CreateWarningGateway	CreateWarningGateway
DescribeAccountWater	DescribeAccountWater
DescribeBillDownloadByResourceGateway	DescribeBillDownloadByResourceGateway
DescribeBillDownloadCommonSummaryGateway	DescribeBillDownloadCommonSummaryGateway
DescribeBillDownloadListGateway	DescribeBillDownloadListGateway
DescribeBillDownloadRecordListGateway	DescribeBillDownloadRecordListGateway
DescribeBillDownloadResourceDetailGateway	DescribeBillDownloadResourceDetailGateway
DescribeBillFeeByPayModeGateway	DescribeBillFeeByPayModeGateway
DescribeBillFeeByProductGateway	DescribeBillFeeByProductGateway
DescribeBillFeeByRegionGateway	DescribeBillFeeByRegionGateway
DescribeBillFeeByTagGateway	DescribeBillFeeByTagGateway

Interface name	Interface function
DescribeBillSummaryByResourceGateway	DescribeBillSummaryByResourceGateway
DescribeBillSummaryByTagGateway	DescribeBillSummaryByTagGateway
DescribeBillTrendByMonthGateway	DescribeBillTrendByMonthGateway
DescribeConsolidatedBillDownloadUrlGateway	DescribeConsolidatedBillDownloadUrlGateway
DescribeDealListGateway	DescribeDealListGateway
DescribeDownloadQuotasListGateway	DescribeDownloadQuotasListGateway
DescribeDownloadWithAuthGateway	DescribeDownloadWithAuthGateway
DescribeProductRelationsGateway	DescribeProductRelationsGateway
DescribeProductsGateway	DescribeProductsGateway
DescribeProperties	DescribeProperties
DescribeRegion	DescribeRegion
DescribeRemitRecordGateway	DescribeRemitRecordGateway
DescribeResourceBillDetailGateway	DescribeResourceBillDetailGateway
DescribeUserAccount	DescribeUserAccount
DescribeUserAccountGateway	DescribeUserAccountGateway
DescribeUserDebtBill	DescribeUserDebtBill
DescribeWarningGateway	DescribeWarningGateway
ExportDealListGateway	ExportDealListGateway

CallingMethod signaturev1

Converge Cloud authenticates each access request, i.e. each request needs to include authentication information (Signature) in the common parameters to verify the identity of the requester.
The Signature is generated by the security credentials which include SecretId and SecretKey. If you don't have the security credentials yet, go to the API Key page to apply for them; otherwise, you cannot invoke the API.

1. Applying for Security Credentials

Before using the API for the first time, go to the API Key page to apply for security credentials.
Security credentials consist of SecretId and SecretKey:

- SecretId is used to identify the API requester.
- SecretKey is used to encrypt the signature string and verify it on the server.
- You must keep your security credentials private and avoid disclosure.

You can apply for the security credentials through the following steps:

1. Log in to the Converge Cloud Console.
2. Go to the Cloud API Key page.
3. On the API Key Management page, click Create Key to create a SecretId/SecretKey pair.

Note: Each account can have up to two pairs of SecretId/SecretKey.

2. Generating a Signature

With the SecretId and SecretKey, a signature can be generated. The following describes how to generate a signature:

Assume that the SecretId and SecretKey are:

- SecretId: AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE
- SecretKey: Gu5t9xGARNpq86cd98joQYCN3EXAMPLE

Note: This is just an example. For actual operations, please use your own SecretId and SecretKey.

Take the Cloud Virtual Machine's request to view the instance list (DescribeInstances) as an example. When

you invoke this API, the request parameters may be as follows:

Parameter name	Description	Parameter value
Action	Method name	DescribeInstances
SecretId	Key ID	AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE
Timestamp	Current timestamp	1465185768
Nonce	Random positive integer	11886
Region	Region where the instance is located	luzon
InstanceIds.0	ID of the instance to query	ins-09dx96dg
Offset	Offset	0
Limit	Allowed maximum output	20
Version	API version number	2017-03-12

2.1. Sorting Parameters

First, sort all the request parameters in an ascending lexicographical order (ASCII code) by their names. Notes: (1) Parameters are sorted by their names instead of their values; (2) The parameters are sorted based on ASCII code, not in an alphabetical order or by values. For example, InstanceIds.2 should be arranged after InstanceIds.12. You can complete the sorting process using a sorting function in a programming language, such as the ksort function in PHP. The parameters in the example are sorted as follows:

```
{
    'Action' : 'DescribeInstances',
    'InstanceIds.0' : 'ins-09dx96dg',
    'Limit' : 20,
    'Nonce' : 11886,
    'Offset' : 0,
    'Region' : 'luzon',
    'SecretId' : 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE',
    'Timestamp' : 1465185768,
    'Version': '2017-03-12',
}
```

When developing in another programming language, you can sort these sample parameters and it will work as long as you obtain the same results.

2.2. Concatenating a Request String

This step generates a request string.
Format the request parameters sorted in the previous step into the form of "parameter name"="parameter value". For example, for the Action parameter, its parameter name is "Action" and its parameter value is "DescribeInstances", so it will become Action=DescribeInstances after formatted.
Note: The "parameter value" is the original value but not the value after URL encoding.

Then, concatenate the formatted parameters with "&". The resulting request string is as follows:

```
Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=luzon&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE&Timestamp=1465185768&Version=2017-03-12
```

2.3. Concatenating the Signature Original String

This step generates a signature original string.
The signature original string consists of the following parameters:

1. HTTP method: POST and GET modes are supported, and GET is used here for the request. Please note that the method name should be in all capital letters.
2. Request host: the domain name of the request to view the list of instances (DescribeInstances) is cvm.convergecloud.com. The actual request domain name varies by the module to which the API belongs. For more information, see the instructions of the specific API.
3. Request path: The request path in the current version of Cloud API is fixed to / .
4. Request string: the request string generated in the previous step.

The concatenation rule of the signature original string is: Request method + request host + request path + ? + request string

The concatenation result of the example is:

```
GETcvm.convergecloud.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=luzon&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE&Timestamp=1465185768&Version=2017-03-12
```

2.4. Generating a Signature String

This step generates a signature string.
First, use the HMAC-SHA1 algorithm to sign thesignature original stringobtained in the previous step, and then encode the generated signature using Base64 to obtain the final signature.

The specific code is as follows with the PHP language being used as an example:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3EXAMPLE';
$srcStr = 'GETcvm.convergecloud.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit
=20&Nonce=11886&Offset=0&Region=luzon&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPL
E&Timestamp=1465185768&Version=2017-03-12';
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));
echo $signStr;
```

The final signature is:

```
EliP9YW3pW28FpsEdkXt/+WcGeI=
```

When developing in another programming language, you can sign and verify the original in the example above and it works as long as you get the same results.

3. Encoding a Signature String

The generated signature string cannot be directly used as a request parameter and must be URL encoded.

For example, if the signature string generated in the previous step is EliP9YW3pW28FpsEdkXt/+WcGeI= , the final signature string request parameter (Signature) is EliP9YW3pW28FpsEdkXt%2f%2bWcGeI%3d, which will be used to generate the final request URL.

**Note: If your request method is GET, or the request method is POST and the Content-Type is application/x-www-form-urlencoded, then all the request parameter values need to be URL encoded (except the parameter key and the symbol of =) when sending the request. Non-ASCII characters need to be encoded with UTF-8 before URL encoding. **

Note: The network libraries of some programming languages automatically URL encode all parameters, in which case there is no need to URL encode the signature string; otherwise, two rounds of URL encoding will cause the signature to fail.

Note: Other parameter values also need to be encoded using RFC 3986. Use %XY in percent-encoding for special characters such as Chinese characters, where "X" and "Y" are hexadecimal characters (0-9 and uppercase A-F), and using lowercase will cause an error.

4. Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error code	Error description
AuthFailure.SignatureExpire	The signature is expired

Error code	Error description
AuthFailure.SecretIdNotFound	The key does not exist
AuthFailure.SignatureFailure	Signature error
AuthFailure.TokenFailure	Token error
AuthFailure.InvalidSecretId	Invalid key (not a Cloud API key type)

5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Converge Cloud SDK 3.0, Swhich encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See SDK Center for more information. Currently, the following programming languages are supported:

- Python
- Java
- PHP
- Go
- Node

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: https://cvm.convergecloud.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=luzon&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE&Signature=EliP9YW3pW28FpsEdkXt%2F%2BWcGeI%3D&Timestamp=1465185768&Version=2017-03-12

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

Java

```
import java.io.UnsupportedEncodingException;
import java.net.URLEncoder;
import java.util.Random;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class CloudAPIDemo {
    private final static String CHARSET = "UTF-8";

    public static String sign(String s, String key, String method) throws Exception {
        Mac mac = Mac.getInstance(method);
        SecretKeySpec secretKeySpec = new SecretKeySpec(key.getBytes(CHARSET), mac.getAlgorithm());
        mac.init(secretKeySpec);
        byte[] hash = mac.doFinal(s.getBytes(CHARSET));
        return DatatypeConverter.printBase64Binary(hash);
    }

    public static String getStringToSign(TreeMap<String, Object> params) {
        StringBuilder s2s = new StringBuilder("GETcvm.convergecloud.com/?");
        // When signing, the parameters need to be sorted in lexicographical order. TreeMap is used here
to guarantee the correct order.
        for (String k : params.keySet()) {
            s2s.append(k).append("=").append(params.get(k).toString()).append("&");
        }
        return s2s.toString().substring(0, s2s.length() - 1);
    }

    public static String getUrl(TreeMap<String, Object> params) throws UnsupportedEncodingException
{
        StringBuilder url = new StringBuilder("https://cvm.convergecloud.com/?");
        // There is no requirement for the order of the parameters in the actual request URL.
        for (String k : params.keySet()) {
            // The request string needs to be URL encoded. As the Key is all in English letters, only the valu
e is URL encoded here.
            url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHARSET)).app
end("&");
        }
        return url.toString().substring(0, url.length() - 1);
```

```
    }

    public static void main(String[] args) throws Exception {
        TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap enables automati
c sorting
        // A random number should be used when actually calling, for example: params.put("Nonce", new
Random().nextInt(java.lang.Integer.MAX_VALUE));
        params.put("Nonce", 11886); // Common parameter
        // The current time of the system should be used when actually calling, for example:   params.put
("Timestamp", System.currentTimeMillis() / 1000);
        params.put("Timestamp", 1465185768); // Common parameter
        params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE"); // Common parameter
        params.put("Action", "DescribeInstances"); // Common parameter
        params.put("Version", "2017-03-12"); // Common parameter
        params.put("Region", "luzon"); // Common parameter
        params.put("Limit", 20); // Business parameter
        params.put("Offset", 0); // Business parameter
        params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
        params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE
", "HmacSHA1")); // Common parameter
        System.out.println(getUrl(params));
    }
}
```

Python

Note: If running in a Python 2 environment, the following requests dependency package must be installed first: pip install requests .

```
# -*- coding: utf8 -*-
import base64
import hashlib
import hmac
import time

import requests

secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE"

def get_string_to_sign(method, endpoint, params):
    s = method + endpoint + "/?"
    query_str = "&".join("%s=%s" % (k, params[k]) for k in sorted(params))
    return s + query_str

def sign_str(key, s, method):
```

```
    hmac_str = hmac.new(key.encode("utf8"), s.encode("utf8"), method).digest()
    return base64.b64encode(hmac_str)

if __name__ == '__main__':
    endpoint = "cvm.convergecloud.com"
    data = {
        'Action' : 'DescribeInstances',
        'InstanceIds.0' : 'ins-09dx96dg',
        'Limit' : 20,
        'Nonce' : 11886,
        'Offset' : 0,
        'Region' : 'luzon',
        'SecretId' : secret_id,
        'Timestamp' : 1465185768, # int(time.time())
        'Version': '2017-03-12'
    }
    s = get_string_to_sign("GET", endpoint, data)
    data["Signature"] = sign_str(secret_key, s, hashlib.sha1)
    print(data["Signature"])
    # n actual invocation would occur here, which may incur fees after success
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)
```

signaturev3

Converge Cloud The API will authenticate each access request, meaning that each request must include signature information (Signature) in the public request parameters to verify the requester's identity.
The signature information is generated by the security credentials, which include SecretId and SecretKey . If the user does not have security credentials, please apply for them on the Cloud API Key page, otherwise they cannot call the Cloud API interfaces.

1. Apply for security credentials.

Before using the Cloud API for the first time, please go to the Cloud API Key page to apply for a security credential.
Security credentials include SecretId and SecretKey:

- SecretId The security credentials are used to identify the identity of the API caller.
- SecretKey The secret key is used to encrypt and sign the string for server-side verification of the signature.
- Users must strictly protect their security credentials and avoid disclosure them.

The specific steps to apply for security credentials are as follows:

1. Log in to Converge Cloud Administration Center Console
2. Go to the console page for cloud API keys
3. On the Cloud API Key page, click New to create a pair of SecretId/SecretKey

Note: Developer accounts can have up to two pairs SecretId / SecretKey.

2. TC3-HMAC-SHA256 signature method

Note: For GET method, only Content-Type: application/x-www-form-urlencoded protocol format is supported. For POST method, Content-Type: application/json and Content-Type: multipart/form-data are currently supported. By default, all business interfaces are supported in json format. Only specific business interfaces are supported in multipart format. In this case, the interface cannot be called in json format. Refer to the specific business interface document description.

The following takes Cloud Virtual Machine querying Region-1 instance list as an example to introduce the signature calculation process step by step. We only use two parameters for the query instance list: Limit and Offset, called using the GET method.

Assume that the SecretId and SecretKey of the user are AKIDz 8krbsJ 5yKBZQpn 74WFkmLPx 3EXAMPLE and Gu 5t9xGARNpq 86cd 98joQYCN3EXAMPLE, respectively.

2.1. splice specification request string

Concatenate CanonicalRequest strings in the following format:

```
CanonicalRequest =
  HTTPRequestMethod + '\n' +
  CanonicalURI + '\n' +
  CanonicalQueryString + '\n' +
  CanonicalHeaders + '\n' +
  SignedHeaders + '\n' +
  HashedRequestPayload
```

- HTTPRequestMethod: HTTP request methods (GET, POST), GET in this example;
- CanonicalURI: URI parameter, API 3.0 fixed to forward slash (/);
- CanonicalQueryString: Query string in the URL that initiates the HTTP request. For POST requests, it is fixed as an empty string. For GET requests, it is the question mark (?) in the URL. The following string content, this example value is: Limit=10&Offset=0. Note: CanonicalQueryString needs to be URL encoded.
- CanonicalHeaders: The header information of participating signature, at least including host and content-type, can also be added with customized header to improve the uniqueness and security of its own request. Splicing rules: 1) head key and value are uniformly converted to lowercase, and the first and last spaces are removed, and spliced according to the format of key:value\n;2) multiple heads are spliced according to the dictionary sorting of head key (lowercase). In this example: content-type: application/x-www-form-urlencoded\nhost: cvm.convergecloud.com\n
- SignedHeaders: The header information involved in the signature indicates which headers participate in the signature of this request, and the header content contained in CanonicalHeaders is one-to-one corresponding. content-type and host are required headers. constructed as: 1) The head key is uniformly converted to lowercase; 2) Multiple header keys (lowercase) are concatenated according to dictionary sorting and separated by semicolons (;). In this case: content-type;host
- HashedRequestPayload: The hash value of the request body, calculated as Lowercase(HexEncode(Hash.SHA256(RequestPayload))), SHA256 hash the entire payload of the HTTP request body, then hexadecimal encoding, and finally converting the encoding string to lowercase letters. Note: For GET requests, RequestPayload is fixed as an empty string. For POST requests, RequestPayload is the payload of the HTTP request body.

According to the above rules, the resulting canonical request string in the example is as follows (for clarity, \nnewlines are replaced by a new line printed separately):

```
GET
```

```
/
Limit=10&Offset=0
content-type:application/x-www-form-urlencoded
host:cvm.convergecloud.com

content-type;host
e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
```

2.2. Concatenate the string to be signed

Concatenate the string to be signed in the following format:

```
StringToSign =
  Algorithm + \n +
  RequestTimestamp + \n +
  CredentialScope + \n +
  HashedCanonicalRequest
```

- Algorithm: Signature algorithm, currently fixed as TC3-HMAC-SHA256;
- RequestTimestamp: Request timestamp, i.e. the X-TC-Timestamp value of the request header. The request in the example above is 1539084154;
- CredentialScope: Credential range in the format Date/service/tc3_request, containing date, requested service and termination string (tc3_request). **Date is the date of UTC standard time, the value needs to be consistent with UTC standard time converted by common parameter X-TC-Timestamp **;service is the product name, which must be consistent with the product domain name called, such as cvm. The above example request, the value is 2018-10-09/cvm/tc3_request;
- HashedCanonicalRequest: The hash value of the canonical request string obtained by concatenating the above steps is calculated by Lowercase(HexEncode(Hash.SHA256(CanonicalRequest))).

note:

> 1. Date must be calculated from timestamp X-TC-Timestamp and time zone UTC+0. Adding local time zone information to the system, such as East Zone 8, will cause calls to succeed during the day and night, but calls to fail in the early hours of the morning. Assuming the timestamp is 1551113065, the time in the East Eight District is 2019-02-26 00:44:25, but the calculated Date with UTC+0 should be 2019-02-25 instead of 2019-02-26.
> 2. Timestamp must be the current system time and ensure that the system time and standard time are synchronized. If the difference exceeds five minutes, it will fail. If it is not synchronized with the standard time for a long time, it may cause the request to fail after running for a period of time (return signature expiration error).

According to the above rules, the string to be signed in the example is as follows (for clarity,\nnewlines are

replaced by new lines printed):

```
TC3-HMAC-SHA256
1539084154
2018-10-09/cvm/tc3_request
91c9c192c14460df6c1ffc69e34e6c5e90708de2a6d282cccf957dbf1aa7f3a7
```

2.3. calculate the signature

1. Compute the derived signature key, pseudocode as follows

```
SecretKey = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE"
SecretDate = HMAC_SHA256("TC3" + SecretKey, Date)
SecretService = HMAC_SHA256(SecretDate, Service)
SecretSigning = HMAC_SHA256(SecretService, "tc3_request")
```

- SecretKey: Original SecretKey;
- Date: That is, the Date field information in Credential, as shown in the example above, is 2018-10-09.;
- Service: That is, the Service field information in Credential, as shown in the example above, is cvm;

2. Calculate the signature, pseudocode as follows

```
Signature = HexEncode(HMAC_SHA256(SecretSigning, StringToSign))
```

- SecretSigning: That is, the derivative signature key calculated above;
- StringToSign: That is, the character string to be signed calculated in step 2;

2.4. Splicing Authorization

Splice as follows Authorization:

```
Authorization =
    Algorithm + ' ' +
    'Credential=' + SecretId + '/' + CredentialScope + ', ' +
    'SignedHeaders=' + SignedHeaders + ', '
    'Signature=' + Signature
```

- Algorithm: Signature method, fixed as TC3-HMAC-SHA256;
- SecretId: SecretId in key pair;
- CredentialScope: See above, Scope of Voucher;
- SignedHeaders: See above, header information for participating signatures;
- Signature: signature value

According to the above rules, the values obtained in the example are:

```
TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
```

The final complete invocation information is as follows:

```
https://cvm.convergecloud.com/?Limit=10&Offset=0

Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
Content-Type: application/x-www-form-urlencoded
Host: cvm.convergecloud.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1539084154
X-TC-Region: luzon
```

3. signing failed

According to the actual situation, there are the following signature failure error codes, please handle according to the actual situation

error code	error description
AuthFailure.SignatureExpire	signature expiration
AuthFailure.SecretIdNotFound	key is not present
AuthFailure.SignatureFailure	signature error
AuthFailure.TokenFailure	token error
AuthFailure.InvalidSecretId	Illegal key (not cloud API key type)

4. Signature Demo

Java

```
import java.io.BufferedReader;
import java.io.InputStream;
```

```
import java.io.InputStreamReader;
import java.net.URL;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.Map;
import java.util.TimeZone;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.net.ssl.HttpsURLConnection;
import javax.xml.bind.DatatypeConverter;

import org.apache.commons.codec.digest.DigestUtils;

public class CloudAPITC3Demo {
    private final static String CHARSET = "UTF-8";
    private final static String ENDPOINT = "cvm.convergecloud.com";
    private final static String PATH = "/";
    private final static String SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE";
    private final static String SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE";
    private final static String CT_X_WWW_FORM_URLENCODED = "application/x-www-form-urlencode
d";
    private final static String CT_JSON = "application/json";
    private final static String CT_FORM_DATA = "multipart/form-data";

    public static byte[] sign256(byte[] key, String msg) throws Exception {
        Mac mac = Mac.getInstance("HmacSHA256");
        SecretKeySpec secretKeySpec = new SecretKeySpec(key, mac.getAlgorithm());
        mac.init(secretKeySpec);
        return mac.doFinal(msg.getBytes(CHARSET));
    }

    public static void main(String[] args) throws Exception {
        String service = "cvm";
        String host = "cvm.convergecloud.com";
        String region = "luzon";
        String action = "DescribeInstances";
        String version = "2017-03-12";
        String algorithm = "TC3-HMAC-SHA256";
        String timestamp = "1539084154";
        //String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
        SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
        // Pay attention to the time zone, otherwise it is easy to make mistakes.
        sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
        String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));

        // ************* Step 1: Assemble the specification request string *************
```

```
        String httpRequestMethod = "GET";
        String canonicalUri = "/";
        String canonicalQueryString = "Limit=10&Offset=0";
        String canonicalHeaders = "content-type:application/x-www-form-urlencoded\n" + "host:" + host
+ "\n";
        String signedHeaders = "content-type;host";
        String hashedRequestPayload = DigestUtils.sha256Hex("");
        String canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryStri
ng + "\n"
                + canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
        System.out.println(canonicalRequest);

        // ************* Step 2: Stitching the string to be signed *************
        String credentialScope = date + "/" + service + "/" + "tc3_request";
        String hashedCanonicalRequest = DigestUtils.sha256Hex(canonicalRequest.getBytes(CHARSET));
        String stringToSign = algorithm + "\n" + timestamp + "\n" + credentialScope + "\n" + hashedCan
onicalRequest;
        System.out.println(stringToSign);

        // ************* Step 3: Calculate the signature *************
        byte[] secretDate = sign256(("TC3" + SECRET_KEY).getBytes(CHARSET), date);
        byte[] secretService = sign256(secretDate, service);
        byte[] secretSigning = sign256(secretService, "tc3_request");
        String signature = DatatypeConverter.printHexBinary(sign256(secretSigning, stringToSign)).toLow
erCase();
        System.out.println(signature);

        // ************* Step 4: Splicing Authorization *************
        String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
                + "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
        System.out.println(authorization);

        TreeMap<String, String> headers = new TreeMap<String, String>();
        headers.put("Authorization", authorization);
        headers.put("Host", host);
        headers.put("Content-Type", CT_X_WWW_FORM_URLENCODED);
        headers.put("X-TC-Action", action);
        headers.put("X-TC-Timestamp", timestamp);
        headers.put("X-TC-Version", version);
        headers.put("X-TC-Region", region);
    }
}
```

Python

```
# -*- coding: utf-8 -*-
```

```
import hashlib, hmac, json, os, sys, time
from datetime import datetime

# key parameters
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3EXAMPLE"

service = "cvm"
host = "cvm.convergecloud.com"
endpoint = "https://" + host
region = "luzon"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
timestamp = 1539084154
date = datetime.utcfromtimestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 10, "Offset": 0}

# ************* Step 1: Assemble the specification request string *************
http_request_method = "GET"
canonical_uri = "/"
canonical_querystring = "Limit=10&Offset=0"
ct = "x-www-form-urlencoded"
payload = ""
if http_request_method == "POST":
    canonical_querystring = ""
    ct = "json"
    payload = json.dumps(params)
canonical_headers = "content-type:application/%s\nhost:%s\n" % (ct, host)
signed_headers = "content-type;host"
hashed_request_payload = hashlib.sha256(payload.encode("utf-8")).hexdigest()
canonical_request = (http_request_method + "\n" +
                     canonical_uri + "\n" +
                     canonical_querystring + "\n" +
                     canonical_headers + "\n" +
                     signed_headers + "\n" +
                     hashed_request_payload)
print(canonical_request)

# ************* Step 2: Stitching the string to be signed *************
credential_scope = date + "/" + service + "/" + "tc3_request"
hashed_canonical_request = hashlib.sha256(canonical_request.encode("utf-8")).hexdigest()
string_to_sign = (algorithm + "\n" +
                  str(timestamp) + "\n" +
                  credential_scope + "\n" +
                  hashed_canonical_request)
print(string_to_sign)
```

```
# ************* Step 3: Calculate the signature *************
# Compute signature digest function
def sign(key, msg):
    return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()
secret_date = sign(("TC3" + secret_key).encode("utf-8"), date)
secret_service = sign(secret_date, service)
secret_signing = sign(secret_service, "tc3_request")
signature = hmac.new(secret_signing, string_to_sign.encode("utf-8"), hashlib.sha256).hexdigest()
print(signature)

# ************* Step 4: Splicing Authorization *************
authorization = (algorithm + " " +
                 "Credential=" + secret_id + "/" + credential_scope + ", " +
                 "SignedHeaders=" + signed_headers + ", " +
                 "Signature=" + signature)
print(authorization)

# Common parameters added to request header
headers = {
    "Authorization": authorization,
    "Host": host,
    "Content-Type": "application/%s" % ct,
    "X-TC-Action": action,
    "X-TC-Timestamp": str(timestamp),
    "X-TC-Version": version,
    "X-TC-Region": region,
}
```

request

1. Service Address

Region refers to the geographical area of a physical data center. Converge Cloud ensures complete isolation between different regions, providing maximum stability and fault tolerance. To reduce access latency and improve download speed, it is recommended to choose the region closest to your customers.

You can view the complete region list by using the API interface "DescribeRegions".

2. Communications Protocol

All the Converge Cloud APIs communicate via HTTPS, providing highly secure communication tunnels.

3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

PThe Content-Type types supported by POST requests:

- application/json (recommended). The TC3-HMAC-SHA256 signature algorithm must be used.
- application/x-www-form-urlencoded. The HmacSHA1 or HmacSHA256 signature algorithm must be used.
- multipart/form-data (only supported by certain APIs). You must use TC3-HMAC-SHA256 to calculate the signature.

The size of a GET request packet is up to 32 KB. The size of a POST request is up to 1 MB when the HmacSHA1 or HmacSHA256 signature algorithm is used, and up to 10 MB when TC3-HMAC-SHA256 is used.

4. Character Encoding

Only UTF-8 encoding is used.

result

Response for Successful Requests

For example, when calling CAM API (version: 2017-03-12) to view the status of instances (DescribeInstancesStatus), if the request has succeeded, you may see the response as shown below:

```
{
    "Response": {
        "TotalCount": 0,
        "InstanceStatusSet": [],
        "RequestId": "b5b41468-520d-4192-b42f-595cc34b6c1c"
    }
}
```

- The API will return Response, which contains RequestId, as long as it processes the request. It does not matter if the request is successful or not.
- RequestId is the unique ID of an API request. Contact us with this ID when an exception occurs.
- Except for the fixed fields, all fields are action-specified. For the definitions of action-specified fields, see the corresponding API documentation. In this example, TotalCount and InstanceStatusSet are the fields specified by the API DescribeInstancesStatus. 0 TotalCount means that the requester owns 0 CVM instance so the InstanceStatusSet is empty.

Response for Failed Requests

If the request has failed, you may see the response as shown below:

```
{
    "Response": {
        "Error": {
            "Code": "AuthFailure.SignatureFailure",
            "Message": "The provided credentials could not be validated. Please check your signature is cor
rect."
        },
        "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
    }
}
```

- The presence of the Error field indicates that the request has failed. A response for a failed request will include Error, Code and Message fields.

- Code is the code of the error that helps you identify the cause and solution. There are two types of error codes so you may find the code in either common error codes or API-specified error codes.
- Message explains the cause of the error. Note that the returned messages are subject to service updates. The information the messages provide may not be up-to-date and should not be the only source of reference.
- RequestId is the unique ID of an API request. Contact us with this ID when an exception occurs.

Common Error Codes

If there is an Error field in the response, it means that the API call failed. The Code field in Error indicates the error code. The following table lists the common error codes that all actions can return.

Error Code	Description
AuthFailure.InvalidSecretId	Invalid key (not a API key type).
AuthFailure.MFAFailure	MFA failed.
AuthFailure.SecretIdNotFound	The key does not exist.
AuthFailure.SignatureExpire	Signature expired.
AuthFailure.SignatureFailure	Signature error.
AuthFailure.TokenFailure	Token error.
AuthFailure.UnauthorizedOperation	The request does not have CAM authorization.
DryRunOperation	DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidAction	The API does not exist.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	Quota limit exceeded.
MissingParameter	A parameter is missing.
NoSuchVersion	The API version does not exist.

Error Code	Description
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	hHTTPS request method error. Only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

PublicParameter

Common parameters are parameters used to identify users and interface authentication purposes. If not necessary, these parameters are not described in the separate interface document of each interface, but these parameters need to be carried in each request before the request can be normally initiated.

signature method v3

When using TC3-HMAC-SHA256 signature method, the common parameters need to be uniformly placed in the HTTP Header request header, as follows:

parameter name	type	required	described
X-TC-Action	String	Yes	The name of the operation interface. Refer to the description of the public parameter Action in the input parameters of the interface documentation for the value. For example, the value for the query instance list interface of the cloud server is DescribeInstances.
X-TC-Region	String	Yes	region parameters, Data used to identify which region you wish to operate on. The region value accepted by the interface refers to the description of the input parameter common parameter Region in the interface document. Note: Some interfaces do not need to pass this parameter, which is specifically stated in the interface documentation. In this case, even passing this parameter will not take effect.
X-TC-Timestamp	Integer	Yes	The current UNIX timestamp, which records the time when the API request was initiated. for example 1529223702. Note: If the time difference from the server exceeds 5 minutes, it will cause a signature expiration error.
X-TC-Version	String	Yes	Version of API for operation. Refer to the description of the public parameter Version in the interface document for the value. For example, the version of the cloud server. 2017-03-12.
Authorization	String	Yes	HTTP The standard authentication header field is "Authorization". For example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_request, SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc963176630326f1024 Here, - TC3-HMAC-SHA256: Signature method, currently fixed as this value, - Credential: Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is a date in UTC time, and this value must match the value of X-TC-Timestamp (a common parameter) in UTC time format; service is the name of the product/service, and is generally a domain name prefix. For example,cvm; - SignedHeaders: The headers that contains the authentication information; content-type and host are the required headers; - Signature: Signature digest.
X-TC-Token	String	No	The token used for temporary certificates needs to be used in conjunction with a temporary key. Temporary keys and tokens need to be obtained by calling the access management service interface. Long-term keys do not require tokens.

signature method v1

When using HmacSHA1 and HmacSHA256 signature methods, common parameters need to be placed uniformly in the request string, as follows

parameter name	type	required	described
Action	String	Yes	The name of the interface to be operated. The value refers to the explanation of the public parameter Action in the interface documentation. For example, for the cloud server's query instance list interface, the value is DescribeInstances .
Region	String	Yes	The region parameter is used to identify which region's data you want to operate on. The region value accepted by the interface is specified in the input parameter of the public parameter Region in the interface documentation. Note: Some interfaces do not require this parameter to be passed, which will be specifically mentioned in the interface documentation. Even if this parameter is passed, it will not take effect in this case.
Timestamp	Integer	Yes	The current UNIX timestamp, which can record the time when the API request is initiated. For example, 1529223702. If the difference between the current time is too large, it will cause a signature expiration error.
Nonce	Integer	Yes	A random positive integer combined with Timestamp is used to prevent replay attacks.
SecretId	String	Yes	The SecretId is an identifier applied for the cloud API key to identify the user's identity. A SecretId corresponds to a unique SecretKey , and the SecretKey is used to generate the request signature Signature .
Signature	String	Yes	Request signature is used to verify the legitimacy of this request. Users need to calculate it based on the actual input parameters. The specific calculation method can be found in the interface authentication documentation.
Version	String	Yes	The version of the API being operated on. The value refers to the description of the public parameter Version in the interface documentation. For example, the version of the cloud server. 2017-03-12.
SignatureMethod	String	No	Signature method, currently supports HmacSHA256 and HmacSHA1. HmacSHA256 algorithm is used to verify signatures only if this parameter is specified as HmacSHA 256, otherwise HmacSHA1 is used to verify signatures.
Token	String	No	Token used for temporary certificate needs to be used together with temporary key. The temporary key and Token need to be obtained from the Access Management service invocation interface. Long-term keys do not require tokens.

zone list

A region (Region) refers to the geographical area of a physical data center. Converge Cloud Translation: To deliver verification that completely isolates different regions, ensuring maximum stability and fault tolerance between regions. In order to reduce access latency and improve download speed, it is recommended that you choose the region closest to your customers.

You can view the complete region list by using the API interface Query Region List.

Billing
CouponInfo

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying the information about the voucher

Default interface request rate limit: 20 times per second.

Interface update time: 2020-12-25 18:21:49.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: CouponInfo
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
MidasAppId	Yes	No	String	The Midas app ID. Example: 1341057229
SpStatus	No	No	String	Specified query status. 1: to be used; 2: frozen; 3: voided; 9: used; 15: expired; 16: not yet valid. Example: 1
ProductCode	No	No	String	The designated product. Example: p_cvm
SpId	No	No	String	The voucher number. Example: 1341057229_20241101001100000001090945271 0bat672366379274a_001
SortField	No	No	String	SortField Example: EndTime
SortOrder	No	No	String	The sorting method. Valid values: asc and desc. asc: ascending order. desc: descending order. Example: desc
Limit	Yes	No	Int64	The number of entries to be returned on each page. Default value: 10. Example: 20
Offset	Yes	No	Int64	The number of the page to return. Default value: 1. Example: 0
EndTime	No	No	String	The point in time when the voucher expires. Example: 2018-10-24 10:00:00
LargestEndTime	No	No	String	The point in time when the voucher will expire. Example: 2018-10-25 00:00:00
ProductInfo	No	No	String	The product definition. Example: [{"name": "\u89c4\u683c\u7c7b\u578b", "value": "\u6807\u51c6\u7248"}, {"name": "\u4ea7\u54c1\u578b\u53f7", "value": "\u5165\u95e8\u578b"}, {"name": "\u5cf0\u503c\u5e26\u5bbd", "value": "1MB/s"}, {"name": "\u78c1\u76d8\u5bb9\u91cf", "value": "10GB"}, {"name": "\u7f51\u7edc", "value": "vpc-ofn1s40f"}, {"name": "\u5b50\u7f51", "value": "subnet-cgh97d9w"}, {"name": "\u96c6\u7fa4", "value": "yf1 cluster"}, {"name": "\u5b9e\u4f8b\u540d", "value": "drms-4df61cdc"}, {"name": "\u6d88\u606f\u4fdd\u7559\u65f6\u957f", "value": "1440\u5206"}]
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
CouponsList	Array of CouponInfo	Information about the vouchers. Example:View
TotalNum	Int64	Total number of records. Example: 10000
TotalBalance	Int64	Total number of records. Example: 10000
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
InvalidParameter	Parameter error.
InvalidParameterValue	Parameter value error.
FailedOperation	Operation failed.

CreateDownloadRecordGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for notifying the backend when a user click the download button.

Default interface request rate limit: 20 times per second.

Interface update time: 2020-02-27 10:45:24.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: CreateDownloadRecordGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
FileId	Yes	No	String	The file ID. Example: 9ecdb930-06e8-9f92-558b-ff548d359626

3. Output Parameters

Parameter name	Type	Description

Parameter name	Type	Description
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

CreateRemitRecordGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for adding a remittance record

Default interface request rate limit: 20 times per second.

Interface update time: 2019-12-12 10:48:07.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: CreateRemitRecordGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
Bank	Yes	No	String	The bank name. Example: Bank
AccountNum	Yes	No	String	The bank account number of the beneficiary. Example: 4392268888888888
AccountName	Yes	No	String	The account name of the beneficiary. Example: John Doe
Amount	Yes	No	String	Remittance amount (unit: cent) Example: 4000000
Tel	Yes	No	String	The phone number of the contact. Example: +861004564879

Parameter name	Required	Allow NULL	Type	Description
Desc	No	No	String	Description. Example: Phone notification upon receipt of funds.
RemitDate	Yes	No	Date	The point in time when the remittance was performed. Example: 2018-10-24

3. Output Parameters

Parameter name	Type	Description
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

CreateWarningGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to add or update alarm information on available quotas.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:42:09.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: CreateWarningGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
Status	No	No	Uint64	Alarm status code. 0: disabled; 1: enabled. Example: 0
BalanceThreshold	No	No	Float	Alarm threshold. Example: 1000000

3. Output Parameters

Parameter name	Type	Description

Parameter name	Type	Description
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
InvalidParameter	Parameter error.
FailedOperation	Operation failed.

DescribeAccountWater

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

Queries repayment records and write-off records of an account.

Default interface request rate limit: 20 times per second.

Interface update time: 2019-07-05 18:15:20.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeAccountWater
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
AcctId	Yes	No	String	The unique identifier of the account. Example: 1001
SubAcctid	Yes	No	String	The identifier of the credit-fixed sub-account. CREDIT_FIXED Example: CREDIT_FIXED
Device	Yes	No	Int64	The type of the device that sends the request. 0: PC. 1: mobile phone. Example: 1
Ts	Yes	No	Int64	The UNIX timestamp representing the number of milliseconds that have elapsed since the epoch time January 1, 1970, 00:00:00 UTC. Example: 1730702488
StartTime	No	No	String	The beginning of the time range to query. The value is a number representing the point in time, such as 20150617 or 20150617111855. Example: 20150617111855
EndTime	No	No	String	The end of the time range to query. The value is a number representing the point in time, such as 20150617 or 20150617111855. Example: 20150617111855
Limit	No	No	Uint64	The number of transaction records to be returned. The maximum value is 20. Example: 20
Offset	No	No	Uint64	The number of the page to be returned. Example: 0
WaterFilter	No	No	String	If this parameter is specified, the system queries transaction records based on the specify type. Valid values: RefundDebt: repayment records. WriteOff: write-off records. Example: nRefundDebt
BillNo	No	No	String	The ID of the write-off transaction. If the WaterFilter parameter is set to WriteOff, this parameter is required. Example: 20240912110368

3. Output Parameters

Parameter name	Type	Description
AllNum	String	The total number of transaction records. Example: 1000
RetNum	String	The number of transaction records that are returned. Example: 1000
Offset	String	The number of the page returned. Example: 0
WaterSet	Array of WaterListData	List of transaction records. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
FailedOperation	Operation failed.
InvalidParameter	Parameter error.

DescribeBillDownloadByResourceGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to download the resource bill data and summarize it by purchased instance ID.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:58:36.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillDownloadByResourceGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Conditions	No	No	Conditions	The fields that need to be exported. Example:View
ProjectSet	No	No	Array of ProjectSet	Project and directory list Example:View
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates where the task is completed. 0: uncompleted. 1: completed. Example: 1
Name	String	The file name. If the task is completed, this parameter is returned. Example: 100004603270-2024-11-06-Quotas-Lists-1730875608.zip_billing6a24e5f4-746d-d0d7-ff15-e2ba07ce11be
DownloadUrl	String	The download URL. If the task is completed, this parameter is returned. Example: http://example.com
TaskId	String	The task ID. Example: 10010
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillDownloadCommonSummaryGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to download the bill summary in both the product dimension and the tag dimension.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:56:20.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillDownloadCommonSummaryGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
TaxSwitch	No	No	Uint64	Tax status. 0: disabled; 1: enabled. Example: 0
TaskId	No	No	String	TaskId parameter returned in the last call of this API. Example: 0
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates where the task is completed. 0: uncompleted. 1: completed. Example: 1
Name	String	The file name. If the task is completed, this parameter is returned. Example: 100004603270-2024-11-06-Quotas-Lists-1730875608.zip_billing6a24e5f4-746d-d0d7-ff15-e2ba07ce11be
DownloadUrl	String	The download URL. If the task is completed, this parameter is returned. Example: http://example.com
TaskId	String	Download task ID. Example: 10010
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillDownloadListGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the list of monthly bills.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 16:02:09.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillDownloadListGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginMonth	No	No	String	The start month. Example: 2018-09
EndMonth	No	No	String	The end month. Example: 2018-10

3. Output Parameters

Parameter name	Type	Description
DownloadList	Array of GetPkgDownloadListItem	The download URLs. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillDownloadRecordListGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying download records.

Default interface request rate limit: 20 times per second.

Interface update time: 2020-09-04 20:25:35.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillDownloadRecordListGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
GroupMemberOrgId	No	No	String	Account ID Example: 1000102441223
Limit	Yes	No	Uint64	The number of entries to be returned. Example: 20
Offset	Yes	No	Uint64	Offset. Example: 1
NeedRecordNum	No	No	Uint64	Specifies whether to return the number of the records. 0: Yes. 1: No. Default value: 1. Example: 1
Sort	No	No	GetDownloadListSort	Sort rules. Example:View
Conditions	No	No	Conditions	Valid filter keys: FIleIds, FileTypes, and Status. Example:View
NeedConditionValue	No	No	String	Specifies whether to return values of the conditions. 0: No. 1: Yes. Default value: 0. Example: 1

3. Output Parameters

Parameter name	Type	Description
RecordNum	String	The number of records. If the value of the NeedRecordNum parameter is 0, the value of this parameter is null. Example: 1000
Records	Array of GetDownloadListRecordItem	The download records returned. Example:View
ConditionValue	GetDownloadListConditionValue	The filter condition. If the value of the NeedConditionValue parameter is 0, the value of this parameter is null. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillDownloadResourceDetailGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to download detailed bills at the billing sub-item level.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:59:04.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillDownloadResourceDetailGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	No	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	No	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Conditions	No	No	Conditions	The fields that need to be exported. Example:View
ProjectSet	No	No	Array of ProjectSet	Project and directory list Example:View
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates where the task is completed. 0: uncompleted. 1: completed. Example: 1
Name	String	The file name. If the task is completed, this parameter is returned. Example: 100004603270-2024-11-06-Quotas-Lists-1730875608.zip_billing6a24e5f4-746d-d0d7-ff15-e2ba07ce11be
DownloadUrl	String	The download URL. If the task is completed, this parameter is returned. Example: http://example.com
TaskId	String	TaskId parameter. Example: 0
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillFeeByPayModeGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the detailed fees summarized by billing mode.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:49:01.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillFeeByPayModeGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
SummaryDetail	Array of PayModeSummaryDetailItem	The payment summary details sorted by billing method. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillFeeByProductGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the detailed fees summarized by product.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:46:28.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillFeeByProductGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Limit	Yes	No	Uint64	The number of entries to be returned. Example: 20
Offset	Yes	No	Uint64	Offset. Example: 0
NeedRecordNum	No	No	Uint64	Whether to return the maximum page number. It is recommended to return this parameter only after the initial request or PageSize change to improve interoperability. 1: yes; 0: no. Example: 1
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
RecordNum	Uint64	The number of records. If the NeedRecordNum parameter is not specified or the value of the NeedRecordNum parameter is 0, the value of this parameter is null. Example: 1000
SummaryDetail	Array of BusinessSummaryDetailItem	The payment summary details sorted by product. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillFeeByRegionGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the detailed fees summarized by region.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:48:26.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillFeeByRegionGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Limit	Yes	No	Uint64	The number of entries to be returned. Example: 20
Offset	Yes	No	Uint64	Offset. Example: 0
NeedRecordNum	No	No	Uint64	Whether to return the maximum page number. It is recommended to return this parameter only after the initial request or PageSize change to improve interoperability. 1: yes; 0: no. Example: 1
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
SummaryDetail	Array of RegionSummaryDetailItem	The payment summary details sorted by region. Example:View
RecordNum	Uint64	The number of records. If the NeedRecordNum parameter is not specified or the value of the NeedRecordNum parameter is 0, the value of this parameter is null. Example: 1000
PayAmountIncludedTax	String	Tax-included amount. Example: 10010
TaxAmount	String	Tax. Example: 0.00000000
ValueIncludedTax	String	Tax. Example: 0.00000000
PreMonthPayAmountIncludedTax	String	Tax. Example: 0.00000000
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillFeeByTagGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to query the detailed data summarized by tag.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:50:38.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillFeeByTagGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Limit	Yes	No	Uint64	The number of entries to be returned. Example: 20
Offset	Yes	No	Uint64	Offset. Example: 0
NeedRecordNum	No	No	Uint64	Whether to return the maximum page number. It is recommended to return this parameter only after the initial request or PageSize change to improve interoperability. 1: yes; 0: no. Example: 1
TagKey	No	No	String	Tag key. Example: Cloud Virtual Machine
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
RecordNum	Uint64	The number of records. If the NeedRecordNum parameter is not specified or the value of the NeedRecordNum parameter is 0, the value of this parameter is null. Example: 1000
SummaryDetail	Array of BusinessSummaryDetailItem	The payment summary details sorted by product. Example:View
Total	DescribeBillFeeByTagGatewayTotal	Total amount. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillSummaryByResourceGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the resource bill data and summarize it by purchased instance ID.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:58:04.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillSummaryByResourceGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Limit	Yes	No	Uint64	The number of entries to be returned. Example: 20
Offset	Yes	No	Uint64	Offset. Example: 0
NeedRecordNum	No	No	Uint64	Specifies whether to return the total number of records. 0: No. 1: Yes. Example: 1
NeedConditionValue	No	No	Uint64	Specified whether to return the filter conditions. 0: Yes. 1: No. Example: 1
Conditions	No	No	Conditions	Valid filter keys: BusinessCodes, ProductCodes, PayModes, ProjectIds, RegionIds, PayModes, ActionTypes, HideFreeCost, ResourceKeyword, and OrderByCost. Example:View
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
Data	Array of SummaryByResourceDataItem	The summary of resources. Example:View
Total	SummaryByResourceTotal	The expense summary of resources. Example:View
RecordNum	Uint64	The number of records. If the value of the NeedRecordNum parameter is 0, the value of this parameter is null. Example: 1000
ConditionValue	SummaryByResourceConditionValue	The filter condition. If the value of the NeedConditionValue parameter is 0, the value of this parameter is null. Example:View
PayAmountIncludedTax	String	Tax-included amount. Example: 10010
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillSummaryByTagGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the distribution of fees summarized by tag.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:49:49.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillSummaryByTagGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
TagKey	Yes	No	String	Tag key. Example: Cloud Virtual Machine
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
SummaryOverview	Array of BusinessSummaryOverviewItem	The payment summary. Example:View
SummaryTotal	BusinessSummaryTotal	The expense distribution of each product. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeBillTrendByMonthGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to query the consumption trend of monthly bills.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:46:04.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeBillTrendByMonthGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	Uint64	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Conditions	No	No	Conditions	Only TimeRange is supported. Example:View
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Ready	Uint64	Indicates whether data is ready. 0: not ready. 1: ready. Example: 1
Detail	TrendByMonthDetail	The monthly payment summary details. Example:View
Stat	TrendByMonthStat	The average expense. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
FailedOperation.InvalidVoucher	The voucher is not supported.
FailedOperation.NotAllowToRefund	The order is non-refundable.
FailedOperation.InvalidDeal	The order in the current state does not support this operation. Only unpaid orders can be paid.
FailedOperation.SummaryDataNotReady	Summarizing data. Please wait.
InvalidParameterValue	Parameter value error.
FailedOperation	Operation failed.
FailedOperation.BalanceInsufficient	Insufficient account balance.
UnauthorizedOperation.NotFinanceAuth	The account does not have the permission for payment. Payment failed.
FailedOperation.PaySuccDeliverFailed	Paid successfully, but shipment failed. Contact the cloud platform staff for handling.
FailedOperation.ConfirmBillCheckFail	Download the bill before you confirm.
FailedOperation.PayPriceError	Payment failed. Contact the cloud platform staff for handling.
InvalidParameter	Parameter error.
FailedOperation.AgentPayDealCannotDown	The specification of the agent payment device cannot be downgraded.
FailedOperation.DeviceHasExpired	The device is expired.
FailedOperation.NeedPayTogeter	You must pay for the items in the same order at the same time.
UnauthorizedOperation.NotCertification	The account has not completed identity verification. Payment failed.

DescribeConsolidatedBillDownloadUrlGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to generate a monthly bill. After the generation is completed, you can call DescribeBillDownloadListGateway to query the generation status and call DescribeDownloadWithAuthGateway to obtain the task by task ID.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 16:18:49.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeConsolidatedBillDownloadUrlGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
ChildUins	No	No	Array of String	The UINs of sub-users. Example: ["130000000170"]
InnerOperator	No	No	String	The operator. Example: 130000000170

3. Output Parameters

Parameter name	Type	Description
TaskFinished	Bool	Whether task is completed. False: not completed; true: completed. Example: false
DownloadUrl	String	The file download URL. Example: http://example.com
FileName	String	The file name. Example: 100004603270-2024-11-06-Quotas-Lists-1730875608.zip_billing6a24e5f4-746d-d0d7-ff15-e2ba07ce11be
TaskId	String	The task ID. Example: 96553
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeDealListGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying the list of orders

Default interface request rate limit: 20 times per second.

Interface update time: 2020-09-04 16:56:04.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeDealListGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
DealId	No	No	String	The child order ID. Example: 20240912110368
BigDealId	No	No	String	The parent order ID. Example: 20240912110368
StartTime	No	No	Datetime	Start time. Example: 2018-10-24 10:00:00
EndTime	No	No	Datetime	End time. Example: 2018-10-24 10:00:00
Payer	No	No	Uint64	The UIN of the payer. Example: 100004603015
ResourceId	No	No	String	Resource ID. Example: ins-08cxpupy
DealAction	No	No	String	Order type. tc_open: purchase; tc_change: configuration adjustment; tc_destroy: termination. Example: tc_destroy
Status	No	No	Uint64	Status. 2: completed; 1: ongoing; 3: allocation failed. Example: 2
Order	No	No	String	The sorting method. Valid values: asc and desc. asc: ascending order. desc: descending order. Example: desc
OrderField	No	No	String	Sort field. Example: createTime
Offset	Yes	No	Uint64	Offset. Example: 0
Limit	Yes	No	Uint64	The maximum entries to be returned. Example: 20
DealOrBigDealId	No	No	String	Parent orders or child orders. Example: 20240912110368
PayMode	No	No	Int64	The billing method. 0: postpaid. 1: prepaid. Example: 0
ProductCodeName	No	No	String	Product name. Example: p_cvm
ActionName	No	No	String	The operation. Optional operations: freeze, release, refund, purchase, renew, downgrade, and upgrade. Example: Isolation

Parameter name	Required	Allow NULL	Type	Description
Creater	No	No	String	The UIN of the creator. Example: 100004603015
SubProductCodeName	No	No	String	The name of the sub-product. Example: sp_cvm_s3

3. Output Parameters

Parameter name	Type	Description
TotalNum	Uint64	Total number. Example: 10000
List	Array of BigDealListData	Order list. Example:View
Timestamp	Uint64	The current timestamp on the server. Example: 1730702488
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeDownloadQuotasListGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

Exports the quota of tenants.

Default interface request rate limit: 20 times per second.

Interface update time: 2021-05-14 16:48:53.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeDownloadQuotasListGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
ProductCode	No	No	String	The product code is used for filtering. Example: p_cvm
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
version	Int64	Version

Parameter name	Type	Description
		Example: 1
componentName	String	Component name. Example: billing
eventId	Uint64	Event ID Example: 412339855
timestamp	Uint64	Timestamp Example: 1752133278
returnValue	Int64	Response value. Example: 0
returnCode	Int64	Response code Example: 0
returnMsg	String	Response Information Example: ok
returnMessage	String	Response Information Example: ok
data	DescribeDownloadQuotasListGatewayData	Data Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeDownloadWithAuthGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to query the file download address based on the task ID. To obtain the task ID, you can call the DescribeBillDownloadListGateway API for monthly bills and call the DescribeBillDownloadRecordListGateway API for other bills.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 16:10:15.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeDownloadWithAuthGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
TaskId	Yes	No	String	The task ID. Example: 1001
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015

3. Output Parameters

Parameter name	Type	Description
DownloadUrl	String	The file download URL. Example: http://example.com
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeProductRelationsGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the product definition list that contains the product codes, sub-product codes, billing items, billing sub-items, and units.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:41:20.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeProductRelationsGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
SearchProduct	No	No	String	The product code or name. Example: p_cvm
SearchSubProduct	No	No	String	The sub-product code or name. Example: sp_cvm_s1
SearchBillingItem	No	No	String	The billable item code or name. Example: v_cvm_cpu
SearchSubBillingItem	No	No	String	The billable sub-item code or name. Example: sv_cvm_cpu
Status	No	No	Int64	The status of the production definition. 1: effective. 0: ineffective. Example: 0
Offset	No	No	Int64	Page number. Example: 0
Limit	No	No	Int64	Page size. Example: 20
MidasAppId	Yes	No	String	The Midas app ID. Example: 1341057229
SearchProductCodes	No	No	Array of String	The codes of the products. Example: ["p_cvm"]
SearchSubProductCodes	No	No	Array of String	The codes of the sub-products. Example: ["sp_cvm"]
SearchBillingItemCodes	No	No	Array of String	The codes of the billable items. Example: ["v_cvm_cpu"]
SearchSubBillingItemCodes	No	No	Array of String	The codes of the billable sub-items. Example: ["sv_cvm_cpu_s3"]
SourceType	No	No	String	The type of the data source. local: the current system. third: a third-party data source. Default value: local. Example: local
ExceptHidden	No	No	Bool	Whether to filter hidden data. True indicates yes. Example: true
IfBilling	No	No	Int64	Flag for filtering hidden measurement or billing data. 1: billing, 0: measurement. No parameter input indicates all are hidden. Example: 1

3. Output Parameters

Parameter name	Type	Description
TotalCount	Int64	Total number. Example: 1000

Parameter name	Type	Description
List	Array of ProductDefineList	API for querying product definitions. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeProductsGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain the product list that only contains the product information.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:41:43.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeProductsGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
ProductCodes	No	No	Array of String	You can specify multiple product codes. For example, you can set the value to ['p_cvm','p_cvm2'...]. Example: ["p_cvm"]
MidasAppId	No	No	String	The Midas app ID. Example: 1341057229
ExceptHidden	No	No	Bool	Whether to filter hidden data. True indicates yes. Example: true
IfBilling	No	No	Int64	Flag for filtering hidden measurement or billing data. 1: billing, 0: measurement. No parameter input indicates all are hidden. Example: 1

3. Output Parameters

Parameter name	Type	Description
List	Array of Product	The products. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeProperties

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying product sales attributes.

Default interface request rate limit: 20 times per second.

Interface update time: 2020-09-04 20:47:21.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeProperties
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
KeyCode	No	No	String	The key of the attribute. If you do not specify this parameter, the system queries all attributes. Example: timeUnit
Offset	No	No	Int64	Page number. Example: 0
Limit	No	No	Int64	Page size Example: 20
MidasAppId	Yes	No	String	The Midas app ID. Example: 1341057229
PropertyType	No	No	Int64	The attribute type. Valid values: 0: general attributes. 1: custom attributes. Default value: 0. Example: 0

3. Output Parameters

Parameter name	Type	Description
TotalCount	Int64	The total number of attributes. Example: 1000
List	Array of ProductPropertyList	The attributes. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeRegion

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

Queries the region. Specify the user's ID through common parameter UIN.

Default interface request rate limit: 20 times per second.

Interface update time: 2019-11-08 19:24:29.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeRegion
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
MidasAppId	Yes	No	String	The app ID. Example: 1341057229
PayMode	Yes	No	String	The billing method. 0: postpaid. 1: prepaid. Example: 0
Type	Yes	No	String	The query type. Set the value to query_region_by_uin. Example: query_region_by_uin

3. Output Parameters

Parameter name	Type	Description
RegionDetail	RegionDetail	List of region information. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
FailedOperation	Operation failed.

DescribeRemitRecordGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying remittance records

Default interface request rate limit: 20 times per second.

Interface update time: 2020-09-04 17:26:49.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeRemitRecordGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
AccountName	No	No	String	The account name of the beneficiary. Example: John Doe
AccountNum	No	No	Uint64	The account number of the beneficiary. Example: 4392268888888888
Offset	No	No	Uint64	Offset. Example: 0
Limit	No	No	Uint64	Number of entries. Example: 20
Status	No	No	Uint64	The status. Valid values: 0, 1, and 2. 0: processing. 1: successful. 2: failed. Example: 0

3. Output Parameters

Parameter name	Type	Description

Parameter name	Type	Description
TotalNum	Uint64	Total number. Example: 10000
List	Array of RemitRecordData	The remittance information. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeResourceBillDetailGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to obtain detailed bills at the billing sub-item level.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:51:57.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeResourceBillDetailGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
PayerUin	Yes	No	String	The UIN of the user who are querying bill data. Example: 100004603015
BeginTime	Yes	No	String	The start time. The value must be the start time of the month and must be in the same month as the value of the EndTime parameter. Example: 2018-09-01 00:00:00. Example: 2018-10-24 10:00:00
EndTime	Yes	No	String	The end time. The value must be the end time of the month and must be in the same month as the value of the BeginTime parameter. Example: 2018-09-30 23:59:59. Example: 2018-10-24 10:00:00
Limit	Yes	No	Uint64	The number of entries to be returned. Example: 20
Offset	Yes	No	Uint64	Offset. Example: 0
NeedRecordNum	No	No	Uint64	Specifies whether to return the total number of records. 0: No. 1: Yes. Example: 1
NeedConditionValue	No	No	Uint64	Specified whether to return the filter conditions. 0: Yes. 1: No. Example: 1
Conditions	No	No	Conditions	The following filter keys are supported: BusinessCodes, ProductCodes, ComponentCodes, PayMode, ProjectIds, RegionIds, PayModes, ActionTypes, BillIds, HideFreeCost, and ResourceKeyword. Example:View
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
DisplayData	Uint64	Indicates whether to display the data. 0: not display. 1: display. Example: 1
RecordNum	Uint64	The number of records. If the value of the NeedRecordNum parameter is 0 in the request, the value of this parameter is null. Example: 1000
ConditionValue	DetailConditionValue	The filter condition. If the value of the NeedConditionValue parameter is 0, the value of this parameter is null. Example:View
Total	DetailTotal	The payment summary. Example:View
Detail	Array of DetailDetailItem	The payment summary of billable items. Example:View
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

DescribeUserAccount

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

Queries payment account information of a user. The NextDueDelay parameter is returned only if SubAcctid=CREDIT_FIXED.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:36:32.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeUserAccount
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
AcctId	Yes	No	String	The unique identifier of the account. Example: 1001
SubAcctid	Yes	No	String	The identifier of the credit-fixed sub-account. CREDIT_FIXED Example: CREDIT_FIXED
Device	Yes	No	Int64	The type of the device that sends the request. 0: PC. 1: mobile phone. Example: 1
Ts	Yes	No	Int64	The UNIX timestamp representing the number of milliseconds that have elapsed since the epoch time January 1, 1970, 00:00:00 UTC. Example: 1730702488

3. Output Parameters

Parameter name	Type	Description
Status	String	The status of the account. 0: non-opened or closed. 1: in use. Other values indicate that the account is in an abnormal state. You can know the status of the account based on the value of this parameter. Example: 1
Balance	String	The account balance available for postpaid products, including cash balance. Example: 4000000
AllIn	String	The total payment amount. Example: 0
AllOut	String	The total paid amount. Example: 26177810000000
Exptime	String	The expiration time. If the service use the pay-as-you-go billing method, the value of this parameter is 0. Otherwise, a UNIX timestamp is returned. Example: 0
ExpireinfoExtend	String	The expired order. Example: ""
Dplimit	String	The total credit amount. Example: 4000000
Dpbalance	String	The remaining available amount, including cash. Example: 4000000
Debt	String	The used credit amount, including transferred amount and pre-authorized amount. Example: 26177810000000
Cash	String	The balance of the account, including cash balance and credit amount, that can be used to pay bills. Example: 4000000
BillingDate	String	The statement closing date. Valid values: 1 - 28. Indicates the day of a month on which bills are generated. Example: 23
DueDate	String	The payment due date. Valid values: 1 - 28. Indicates the day of a month is due date for payment. Example: 1
MerchantType	String	The merchant type. 1: agent. 2: sub-customer 3: direct customer Example: 1
RelatedMerchant	String	The related merchant. If the value of the MerchantType parameter is 1 or 3, the value of this parameter is empty. If the value of the MerchantType parameter is 2, the value of this parameter is the information about the agent. Example: ""
DueDelayType	String	The unit of the payment delay period.1: months. 2: days. Example: 1
DueDelay	String	The payment delay period. If the value of the DueDelayType parameter is 1, the value of this parameter indicates the corresponding number of months. If the DueDelayType parameter is 2, the value of this parameter indicates the corresponding number of days. Example: 1
NextDueDelay	String	The new payment delay period that will take effect on the next statement closing date. Example: ""
RecoverImmediately	String	Indicate whether to restore the credit amount if bills are not paid off till the payment due date. 0: The system does not restore the credit amount. 1: The system restores the credit amount. Default value: 0. Example: 1
RefundSequence	String	Indicates whether to repay bills in sequence. 0: sequenced. 1: non-sequenced. Default value: 0. Example: 1
CashRecoverImmediately	String	Indicates whether to restore the credit amount immediately after bills are prepaid before the statement closing date. 0: The system does not immediately restore the credit amount. 1: The system immediately restores the credit amount. Default value: 0. Example: 1
BillingCycleType	String	The billing cycle type. 1: monthly. The value is 1. Example: 1
BillingCycle	String	The billing cycle. Unit: months. Example: 1
DayOut	String	The total payment amount of the current day. Example: 4000000
SubDplimit	String	The level-2 credit amount. If this field is not specified, the returned value is -1. Example: -1
UsableLimit	Uint64	The available credit amount. Example: 4000000
Fixedlimit	String	The total credit amount. Example: 4000000
CashBalance	Uint64	The cash balance. Example: 4000000
UsedLimit	Uint64	The used credit amount. Example: 4000000
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
FailedOperation	Operation failed.
InvalidParameter	Parameter error.

DescribeUserAccountGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

Queries payment account information of a user. The NextDueDelay parameter is returned only if SubAcctid=CREDIT_FIXED.

Default interface request rate limit: 20 times per second.

Interface update time: 2020-09-04 20:40:45.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeUserAccountGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
AcctId	Yes	No	String	The unique identifier of the account. Example: 1001
SubAcctid	Yes	No	String	The identifier of the credit-fixed sub-account. CREDIT_FIXED Example: CREDIT_FIXED
Device	Yes	No	Int64	The type of the device that sends the request. 0: PC. 1: mobile phone. Example: 1
Ts	Yes	No	Int64	The UNIX timestamp representing the number of milliseconds that have elapsed since the epoch time January 1, 1970, 00:00:00 UTC. Example: 1730702488
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
Status	String	The status of the account. 0: non-opened or closed. 1: in use. Other values indicate that the account is in an abnormal state. You can know the status of the account based on the value of this parameter. Example: 1
Balance	String	The account balance available for postpaid products, including cash balance. Example: 4000000
AllIn	String	The total payment amount. Example: 0
AllOut	String	The total paid amount. Example: 26177810000000
Exptime	String	The expiration time. If the service use the pay-as-you-go billing method, the value of this parameter is 0. Otherwise, a UNIX timestamp is returned. Example: 0
ExpireinfoExtend	String	The expired order. Example: ""
Dplimit	String	The total credit amount. Example: 4000000
Dpbalance	String	The remaining available amount, including cash. Example: 4000000
Debt	String	The used credit amount, including transferred amount and pre-authorized amount. Example: 26177810000000
Cash	String	The balance of the account, including cash balance and credit amount, that can be used to pay bills. Example: 4000000
BillingDate	String	The statement closing date. Valid values: 1 - 28. Indicates the day of a month on which bills are generated. Example: 12
DueDate	String	The payment due date. Valid values: 1 - 28. Indicates the day of a month is due date for payment. Example: 12
MerchantType	String	The merchant type. 1: agent. 2: sub-customer 3: direct customer Example: 1
RelatedMerchant	String	The related merchant. If the value of the MerchantType parameter is 1 or 3, the value of this parameter is empty. If the value of the MerchantType parameter is 2, the value of this parameter is the information about the agent. Example: ""
DueDelayType	String	The unit of the payment delay period.1: months. 2: days. Example: 1
DueDelay	String	The payment delay period. If the value of the DueDelayType parameter is 1, the value of this parameter indicates the corresponding number of months. If the DueDelayType parameter is 2, the value of this parameter indicates the corresponding number of days. Example: 1
NextDueDelay	String	The new payment delay period that will take effect on the next statement closing date. Example: ""
RecoverImmediately	String	Indicate whether to restore the credit amount if bills are not paid off till the payment due date. 0: The system does not restore the credit amount. 1: The system restores the credit amount. Default value: 0. Example: 1
RefundSequence	String	Indicates whether to repay bills in sequence. 0: sequenced. 1: non-sequenced. Default value: 0. Example: 1
CashRecoverImmediately	String	Indicates whether to restore the credit amount immediately after bills are prepaid before the statement closing date. 0: The system does not immediately restore the credit amount. 1: The system immediately restores the credit amount. Default value: 0. Example: 1
BillingCycleType	String	The billing cycle type. 1: monthly. The value is 1. Example: 1
BillingCycle	String	The billing cycle. Unit: months. Example: 1
DayOut	String	The total payment amount of the current day. Example: 500
SubDplimit	String	The level-2 credit amount. If this field is not specified, the returned value is -1. Example: -1
UsableLimit	Uint64	The available credit amount. Example: 90000000
Fixedlimit	String	The total credit amount. Example: 99999999900000000
CashBalance	Uint64	The cash balance. Example: 0
UsedLimit	Uint64	The used credit amount. Example: 4000000
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
FailedOperation	Operation failed.
InvalidParameter	Parameter error.

DescribeUserDebtBill

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying bills of postpaid orders.

Default interface request rate limit: 20 times per second.

Interface update time: 2019-12-27 11:42:10.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeUserDebtBill
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
AcctId	Yes	No	String	The unique identifier of the account. Example: 1001
SubAcctid	Yes	No	String	The identifier of the credit-fixed sub-account. CREDIT_FIXED Example: CREDIT_FIXED
Device	Yes	No	Int64	The type of the device that sends the request. 0: PC. 1: mobile phone. Example: 1
Ts	Yes	No	Int64	The UNIX timestamp representing the number of milliseconds that have elapsed since the epoch time January 1, 1970, 00:00:00 UTC. Example: 1730702488
BeginMonth	No	No	String	The beginning month of the time range to query. The value must be in the yyyymm format. Example: 201812
EndMonth	No	No	String	The end month of the time range to query. The value must be in the yyyymm format. Example: 201812
DebtbillStatus	No	No	Int64	The payment status of the bills that you want to query. Valid values: 1 and 2. 1: paid off. 2: unpaid. Example: 201812
OverDue	No	No	Int64	The overdue status of the bills that you want to query. Valid values: 1 and 2. 1: non-overdue. 2: overdue. Example: 1
Limit	No	No	Uint64	The number of entries to be returned on each page. The maximum value is 20. Example: 20
Offset	No	No	Uint64	The number of the page to be returned. Example: 0
MemberUin	No	No	String	Member account UIN Example: 1000102441223

3. Output Parameters

Parameter name	Type	Description
DebtBillSet	Array of DebtBillListData	The information about the bills. Example:View
AllNum	String	The total number of bills. Example: 1000
RetNum	String	The number of bills returned. Example: 1000
Offset	String	The number of the page returned. Example: 0
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
InvalidParameter	Parameter error.
FailedOperation	Operation failed.
FailedOperation.DebtBillNotExist	The bill does not exist.
FailedOperation.AcctNotExist	The account does not exist.

DescribeWarningGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

API for querying the alarm status and threshold

Default interface request rate limit: 20 times per second.

Interface update time: 2020-09-08 15:01:54.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: DescribeWarningGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.

3. Output Parameters

Parameter name	Type	Description
Status	Uint64	Alert status code. 0: off; 1: on. Example: 1
BalanceThreshold	String	Alarm threshold. Example: 1000000

Parameter name	Type	Description
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

The following lists only the error codes related to the interface business logic, For other error codes, see public ErrorCode.

Error Code	Description
FailedOperation	Operation failed.
InvalidParameter	Parameter error.

ExportDealListGateway

1. Interface Description

Interface request domain name: bill.api3.convergecloud.com.

This API is used to import the order list.

Default interface request rate limit: 20 times per second.

Interface update time: 2025-03-31 15:42:21.

The interface is both signature verification and authentication.

2. Input Parameters

The following list of request parameters only lists interface request parameters and some public parameters, For a complete list of public parameters see public request parameters.

Parameter name	Required	Allow NULL	Type	Description
Action	Yes	No	String	Public parameter, The value of this interface: ExportDealListGateway
Version	Yes	No	String	Public parameter, The value of this interface: 2018-10-25
Region	No	No	String	Public parameter,Regional information This interface does not need to pass this parameter.
DealId	No	No	Uint64	The child order ID. Example: 20240912110368
BigDealId	No	No	Uint64	The parent order ID. Example: 20240912110368
StartTime	No	No	Datetime	Start time. Example: 2018-10-24 10:00:00
EndTime	No	No	Datetime	End time. Example: 2018-10-24 10:00:00
Payer	No	No	Uint64	The user who submitted the order. Example: 100004603015
ResourceId	No	No	String	Resource ID. Example: ins-08cxpupy
DealAction	No	No	String	Order type. tc_open: purchase; tc_change: configuration adjustment; tc_destroy: termination. Example: tc_destroy
Status	No	No	Uint64	Status. 2: completed; 1: ongoing; 3: allocation failed. Example: 2
Order	No	No	String	The sorting method. Valid values: asc and desc. asc: ascending order. desc: descending order. Example: asc
OrderField	No	No	String	Sort field. Example: createTime
DealOrBigDealId	No	No	String	Parent orders or child orders. Example: 20240912110368
PayMode	No	No	Int64	The billing method. 0: postpaid. 1: prepaid. Example: 0
ProductCodeName	No	No	String	Product name. Example: p_cvm
ActionName	No	No	String	The operation. Optional operations: freeze, release, refund, purchase, renew, and update the configuration. Example: Isolation
Creater	No	No	String	Order creator UIN Example: 100004603015
SubProductCodeName	No	No	String	The name of the sub-product. Example: sp_cvm_s3

3. Output Parameters

Parameter name	Type	Description
TaskId	Uint64	The task ID. Example: 10010
RequestId	String	Unique request id, Each request will return. The RequestId of the request needs to be provided when locating the problem.

4. Error Code

There is no error code related to business logic for this interface, For other error codes, see public ErrorCode.

Data structure

ProductPropertyList

The attributes.

Referenced by the following interfaces: DescribeProperties

name	required	NULL allowed	type	description
KeyNameCn	yes	no	String	Name of the key. Example: Region
KeyNameEn	yes	no	String	The name of the key. Example: region
KeyCode	yes	no	String	The key code. It is the identifier of the attribute key specified by the backend. Example: region
Fields	yes	no	Array of ProductPropertyFields	The attribute fields. Example:View
Values	yes	no	String	Attribute value list, in the format of JSON string. There is an array after json decode, and the keys of array elements are not fixed. Example: [{ "RegionId": "80000052", "RegionCode": "ap-a-region-jcctest-ops", "ChnName": "Dual-AZ integrated test environment A", "EngName": "ap-a-region-jcctest-ops", "RegionType": "domestic", "RegionTypeName": "domestic", "Desc": "domestic", "Status": "1" }]
Modifiable	yes	no	Int64	Indicates whether it can be modified. 0: It cannot be modified. 1: It can be modified. Example: [{"RegionId":"80000052","RegionCode":"ap-a-region-jcctest-ops","ChnName":"Dual-AZ integrated test environment A","EngName":"ap-a-region-jcctest-ops","RegionType":"domestic","RegionTypeName":"domestic","Desc":"domestic","Status":"1"}]

Tag

Tag

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway

name	required	NULL allowed	type	description
TagKey	no	yes	String	Tag key. Example: aaaaaaa
TagValue	no	yes	Array of String	Tag value Example: ["aa","bb"]

RemitRecordData

The remittance information.

Referenced by the following interfaces: DescribeRemitRecordGateway

name	required	NULL allowed	type	description
Uin	yes	no	Uint64	The UIN of the user. Example: 100004603015
Bank	yes	no	String	The bank name. Example: Bank.
AccountNum	yes	no	String	The bank account number of the beneficiary. Example: 4392268888888888
AccountName	yes	no	String	The account name of the beneficiary. Example: John Doe
CreateTime	yes	no	Datetime	The point in time when the remittance was performed. Example: 2018-10-24 10:00:00
Tel	yes	no	String	The phone number of the contact. Example: 177111111
Status	yes	no	Uint64	The status. 0: processing. 1: successful. 2: failed. Example: 0
UpdateTime	yes	no	Datetime	Modification time. Example: 2018-10-24 10:00:00
Desc	yes	no	String	Description. Example: Transfer
Id	yes	no	Uint64	ID Example: 100
Creator	yes	no	String	The remittor. Example: 100004603015
Reason	yes	yes	String	Reason. Example: No reason.
Amount	yes	no	Uint64	The amount. Example: 4000000
RemitDate	yes	no	String	The point in time when the remittance was performed. Example: 2018-10-24 10:00:00

TagList

Queries the return parameter of the tag list.

Referenced by the following interfaces: GetTagListGateway

name	required	NULL allowed	type	description
TagKey	yes	no	String	Tag key. Example: Cloud Virtual Machine
Status	yes	no	Uint64	The status of the tag key. 0: not set; 1: set. Example: 1
UpdateTime	no	yes	String	Update time. Example: 2025-07-25 20:11:12

ConditionProduct

The conditions for filtering sub-products.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
SubProductCode	yes	no	String	The product code. Example: sp_cvm_s1
SubProductCodeName	yes	no	String	Product name. Example: sp_cvm_s3

SubBillingItem

Sub-product item

Referenced by the following interfaces: DescribeProductInfoGateway

name	required	NULL allowed	type	description
SubBillingItemCode	no	yes	String	Sub-product item code Example: sv_cvm_cpu_s3
SubBillingItemName	no	yes	String	Sub-product item name Example: CPU-S1
SubBillingItemEngName	no	yes	String	English name of the sub-product item Example: CPU-S1

SummaryByResourceTotal

The payment summary sorted by resource.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway

name	required	NULL allowed	type	description
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The amount deducted by using vouchers. Example: 4000000
RealTotalCost	yes	no	String	The actual amount. Example: 4000000
PayAmountIncludedTax	no	yes	String	Paid amount including tax. Example: 0.00
TaxAmount	no	no	String	Tax-deducted amount. Example: 100101

BillingItem

Product details

Referenced by the following interfaces: DescribeProductInfoGateway

name	required	NULL allowed	type	description
BillingItemCode	no	no	String	Product item code Example: v_cvm_cpu
BillingItemName	no	no	String	Product item name Example: CPU
BillingItemEngName	no	no	String	The billable sub-item name. Example: CPU
SubBillingItem	no	no	Array of SubBillingItem	Sub-product item Example:View

SummaryTrend

The expense trend.

Referenced by the following interfaces: DescribeBillFeeByPayModeGateway, DescribeBillFeeByProductGateway, DescribeBillFeeByRegionGateway, DescribeBillFeeByTagGateway

name	required	NULL allowed	type	description
Type	yes	no	String	Valid values: upward, downward, and none. Example: upward
Value	yes	yes	String	The change rate. The value is accurate to two decimal places. Example: 100100
PreMonthRealTotalCost	yes	no	String	The payment amount of the previous month. Example: 100100
ValueIncludedTax	no	yes	String	Trend percentage (tax included). Example: 100100
PreMonthPayAmountIncludedTax	no	yes	String	Last month's expenses (including tax). Example: 0.00

ListResourceDetailGatewayList

ListResourceDetailGatewayList

Referenced by the following interfaces: ListResourceDetailGateway

name	required	NULL allowed	type	description
ProductCode	yes	no	String	The product code. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
Num	yes	no	Uint64	The resource quantity. Example: 10
ModifyTime	no	yes	String	The point in time when the resource was last modified, including the point in time when the resource was released. Example: 2018-10-24 10:00:00
BillingItemCode	yes	no	String	The billable item code. Example: v_cvm_cpu
SubBillingItemCode	yes	no	String	The billable sub-item code. Example: sv_cvm_cpu_s3
ProductName	yes	no	String	Product name. Example: Virtual Host
ProductGroupName	no	yes	String	Product category name. Example: Compute
SubProductName	yes	no	String	The name of the sub-product. Example: Virtual host (S1 model).
BillingItemName	yes	no	String	The billable item name. Example: CPU
SubBillingItemName	yes	no	String	The billable sub-item name. Example: CPU-S1
UnitName	yes	no	String	The unit. Example: Cores
Status	no	yes	Int64	Status. 0: terminated; 1: normal. Example: 0
ProductDisplayCode	no	yes	String	Product display code. Example: p_cvm
ProductDisplayName	no	yes	String	The display name of the product. Example: CVM
SubProductDisplayCode	no	yes	String	Product display code. Example: sp_cvm_sh1
SubProductDisplayName	no	yes	String	Sub-product display name. Example: sh1 model
BillingItemDisplayCode	no	yes	String	Product item display code. Example: v_cvm_mem
BillingItemDisplayName	no	yes	String	Product item display name. Example: Memory
SubBillingItemDisplayCode	no	yes	String	Product details display code. Example: sv_cvm_mem_sh1
SubBillingItemDisplayName	no	yes	String	Product details display name. Example: Memory of sh1 model

ConditionFileStatus

The conditions for filtering file statuses.

Referenced by the following interfaces: DescribeBillDownloadRecordListGateway, DescribeBspDownloadRecordListGateway

name	required	NULL allowed	type	description
Status	yes	no	Uint64	Status. 0: generating; 1: generated. Example: 0
StatusName	yes	no	String	The status name. Example: Generating

MonthCostDetailItem

The expense information sorted by month.

Referenced by the following interfaces: DescribeBillTrendByMonthGateway

name	required	NULL allowed	type	description
Name	yes	no	String	The month. Example: December 2018. Example: December, 2018.
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
PayableAmount	yes	no	String	The amount payable. Example: 4000000
Month	yes	no	String	The month. Example: 2018-12. Example: 2018-12
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
TaxAmount	no	yes	String	Paid tax. Example: 0.00
PayAmountIncludedTax	no	yes	String	Paid amount including tax. Example: 0.00

Product

The product definition.

Referenced by the following interfaces: DescribeProductsGateway

name	required	NULL allowed	type	description
ProductCode	yes	no	String	The product code. Example: p_cvm
ChnName	yes	no	String	Name of the product. Example: Cloud Virtual Machine
EngName	no	no	String	English name of the product. Example: CVM
Status	no	no	Int64	Status. 0: invalid; 1: valid. Example: 1

DetailDetailItem

The bill details.

Referenced by the following interfaces: DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
OwnerUin	yes	no	String	The UIN of the resource holder. Example: 100004603015
PayerUin	yes	no	String	The UIN of the payer. Example: 100004603015
OperateUin	yes	no	String	The UIN of the operator. Example: 100004603015
PayMode	yes	no	String	The billing method. Example: 0
PayModeName	yes	no	String	The billing method name. Example: prePay
ResourceId	yes	no	String	Resource ID. Example: ins-08cepupy
ProjectId	no	no	String	Project ID. Example: pr-f1d8de1a
ResourceName	yes	no	String	Resource name. Example: CVM for personal use.
ProductCode	yes	no	String	The product code. Example: p_cvm
ProductCodeName	yes	no	String	Product name. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
SubProductCodeName	yes	no	String	The name of the sub-product. Example: sp_cvm_s3
BillingItemCode	yes	no	String	Component type. Example: v_cvm_cpu
BillingItemCodeName	yes	no	String	The billable item type. Example: Cores
SubBillingItemCode	yes	no	String	The billable item code. Example: sv_cvm_cpu_s3
SubBillingItemCodeName	yes	no	String	Component name. Example: Cores
ActionType	yes	no	String	Transaction type. Valid values: postpay_deduct, prepay_deduct. Example: postpay_deduct
ActionTypeName	yes	no	String	The transaction type name. Example: Pay-as-you-go deduction.
RegionId	yes	no	String	The region ID. Example: 50010
RegionName	yes	no	String	The region name. Example: Region A
RegionType	yes	no	String	Region type. Valid values: domestic, intl. Example: domestic
RegionTypeName	yes	no	String	Region type name. Valid values: domestic, international. Example: domestic
ZoneId	yes	no	String	The availability zone ID. Example: 40010
ZoneName	yes	no	String	AZ name. Example: AZ-1
PayTime	yes	no	String	The point in time when the order was paid. Example: 2018-10-24 10:00:00

name	required	NULL allowed	type	description
FeeBeginTime	yes	no	String	The beginning of the validity period. Example: 2018-10-24 10:00:00
FeeEndTime	yes	no	String	The end of the validity period. Example: 2018-10-24 10:00:00
TimeSpan	yes	no	String	The length of the validity period. Example: 3600
TimeUnit	yes	no	String	Time unit name. Valid values: year, month, day, hour, minute, second. Example: second
TimeUnitName	yes	no	String	Time unit name. Valid values: year, month, day, hour, minute, second. Example: Year
OrderId	yes	no	String	The child order ID. Example: 20240912110368
BillId	yes	no	String	The transaction ID. Example: OPENG100001-20241101-2AX39MR4fkf1
SinglePrice	yes	no	String	The unit price of the billable item. Example: 0.001
SinglePriceUnit	yes	no	String	The unit of the billable item price. Example: USD/GB/second.
UsedAmount	yes	no	String	The used amount. Example: 4000000
UsedAmountUnit	yes	no	String	The unit of the billable usage. Example: Cores
Discount	yes	no	String	The discount. Example: 1.0
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The amount deducted by using vouchers. Example: 4000000
TotalDiscount	yes	no	String	Discount. Example: 1.0
AccountName	yes	no	String	The account name. Example: John Doe
RealTotalCost	yes	no	String	The total discount price. Example: 4000000
TotalCost	yes	no	String	The total original price. Example: 4000000
AppId	yes	no	String	The account ID. Example: 1255000011
TaxAmount	no	yes	String	Paid tax. Example: 0.00
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 447.48
TaxRate	yes	no	String	Tax rate Example: 1

TrendByMonthStat

TrendByMonthStat

Referenced by the following interfaces: DescribeBillTrendByMonthGateway

name	required	NULL allowed	type	description
Average	yes	no	TrendByMonthStatItem	The average expense. Example:View

BusinessSummaryOverviewItem

The product details sorted by product.

Referenced by the following interfaces: DescribeBillSummaryByTagGateway

name	required	NULL allowed	type	description
ProductCode	no	yes	String	The product code. Example: p_cvm
ProductCodeName	no	yes	String	Product name. Example: p_cvm
RealTotalCost	yes	no	String	The total expense amount. Example: 47699.20
RealTotalCostRatio	yes	no	String	The total expense amount ratio. The value is accurate to two decimal places. Example: 100.00
PayAmountIncludedTax	yes	no	String	Payment amount including tax. Example: 47689.20
PayAmountIncludedTaxRatio	yes	no	String	Tax rate, with 2 decimal places Example: 1.0
TagValue	yes	yes	String	Tag value Example: Cloud Virtual Machine

BusinessSummaryDetailItem

The bill details sorted by product.

Referenced by the following interfaces: DescribeBillFeeByPayModeGateway, DescribeBillFeeByProductGateway, DescribeBillFeeByRegionGateway, DescribeBillFeeByTagGateway

name	required	NULL allowed	type	description
ProductCode	no	yes	String	The product code. Example: p_cvm
ProductCodeName	no	yes	String	Product name. Example: p_cvm
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
Trend	yes	no	SummaryTrend	The comparison to the previous month. Example:View
TagKey	no	yes	String	Tag key. Example: key
TagValue	no	yes	String	Tag value Example: value
TaxAmount	no	yes	String	Tax-deducted amount. Example: 0.00
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 447.48
Product	no	no	Array of DescribeBillFeeByTagSummaryProduct	Product Information Example:View

CouponInfo

Information about the vouchers.

Referenced by the following interfaces: CouponInfo

name	required	NULL allowed	type	description
UserNum	yes	no	String	The holder. Example: 100004603015
Name	yes	no	String	The voucher name. Example: CVM voucher.
CodeId	yes	no	String	The voucher ID. Example: card241031191255600
BatchId	yes	no	String	The batch ID. Example: batb572366379274a
Value	yes	no	Uint64	The face-value. Example: 200
Balance	yes	no	Uint64	The remaining value. Example: 100
Status	yes	no	Int64	Status. 1: usable; 3: voided; 9: exhausted; 15: expired. Example: 1
BeginTime	yes	no	String	Start time. Example: 2018-10-24 10:00:00
EndTime	yes	no	String	The point in time when it expires. Example: 2018-10-24 10:00:00
PayMode	yes	no	String	The billing method. 0: postpaid; 1: prepaid. Example: 0
CreateTime	yes	no	String	The point in time when it was issued. Example: 2018-10-24 10:00:00
ProductInfo	yes	no	String	The products supporting the voucher. Example: [{"name": "\u89c4\u683c\u7c7b\u578b", "value": "\u6807\u51c6\u7248"}, {"name": "\u4ea7\u54c1\u578b\u53f7", "value": "\u5165\u95e8\u578b"}, {"name": "\u5cf0\u503c\u5e26\u5bbd", "value": "1MB/s"}, {"name": "\u78c1\u76d8\u5bb9\u91cf", "value": "10GB"}, {"name": "\u7f51\u7edc", "value": "vpc-ofn1s40f"}, {"name": "\u5b50\u7f51", "value": "subnet-cghf97d9a"}, {"name": "\u96c6\u7fa4", "value": "yf1 cluster"}, {"name": "\u5b9e\u4f8b\u540d", "value": "drms-4df61cdc"}, {"name": "\u6d88\u606f\u4fdd\u7559\u65f6\u957f", "value": "1440\u5206"}]
SpId	yes	no	String	The voucher ID. Example: 1341057229_20241101001000000010909452710ba672366379274a_001
BatchCreateTime	yes	no	Datetime	Batch creation time. Example: 2018-10-24 10:00:00
CreateUin	yes	no	String	The issuer. Example: 100004603015
Type	no	yes	String	card: coupon; balance: balance voucher. Example: balance
DrmActionId	no	yes	String	DrmActionId Example: 100004603015

RegionDetail

List of region information.

Referenced by the following interfaces: DescribeRegion

name	required	NULL allowed	type	description
TotalNum	yes	no	String	Total number. Example: 100
RegionList	yes	no	Array of String	The regions. Example: ["Region A"]

RegionSummaryDetailItem

The payment summary details sorted by region.

Referenced by the following interfaces: DescribeBillFeeByRegionGateway

name	required	NULL allowed	type	description
Product	yes	no	Array of BusinessSummaryDetailItem	The payment summary of the products in the project. ExampleView
RegionId	yes	no	Uint64	The region ID. Example: 50010
RegionName	yes	no	String	The region name. Example: Region A
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
Trend	yes	no	SummaryTrend	The comparison to the previous month. ExampleView
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 0.00
TaxAmount	no	yes	String	Tax-deducted amount. Example: 0.00

ExtraParam

Additional Parameters

Referenced by the following interfaces: DescribeProductInfoGateway

name	required	NULL allowed	type	description
Source	no	no	String	Whether it is measurement or billing. bsp: measurement; billing: billing. Example: bsp
StartTime	no	no	Datetime	Start time. Example: 2018-10-24 10:00:00
EndTime	no	no	Datetime	End time. Example: 2018-10-24 10:00:00

GetDownloadListConditionValue

The conditions for filtering file download records.

Referenced by the following interfaces: DescribeBillDownloadRecordListGateway, DescribeBspDownloadRecordListGateway

name	required	NULL allowed	type	description
FileType	yes	no	Array of ConditionFileType	File type. Valid values: QuotasList, CustomizedBillResourceSummary, CustomizedBillDetail, BillCommonSummary, DealList, VouchersDetail, QuotasChangeList, MonthlyBills. ExampleView
Status	yes	no	Array of ConditionFileStatus	The conditions for filtering file statuses. ExampleView

ConditionBusiness

The conditions for filtering products.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
ProductCode	yes	no	String	The product code. Example: p_cvm
ProductCodeName	yes	no	String	Product name. Example: p_cvm

ConditionActionType

The conditions for filtering transaction types.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
ActionType	yes	no	String	Transaction type. Valid values: postpay_deduct, prepay_deduct. Example: postpay_deduct
ActionTypeName	yes	no	String	The transaction type name. Example: Pay-as-you-go deduction.

DebtBillListData

The postpaid bill details.

Referenced by the following interfaces: DescribeUserDebtBill

name	required	NULL allowed	type	description
DebtBillNo	yes	no	String	The bill number. Example: OPENG100001-20241031-K5x39MRoefkf
DebtBillStatus	yes	no	String	The status of the bill. 1: paid off. 2: unpaid off. Example: 1
BillDate	yes	no	String	The billing month. The value is in the yyyymm format. Example: 202110
BillDateEnd	yes	no	String	The end date of each billing cycle. The value is in the yyyymmdd format. This parameter takes effect if the flexible billing cycle mode is used. Example: 20211010
DueDate	yes	no	String	The payment due date. The value is a UNIX timestamp. Example: 1730702488
DebtInterest	yes	no	String	The overdue interest amount. Example: 80000
TotalDebt	yes	no	String	The total debt amount. Example: 80000
CurrentDebt	yes	no	String	The remaining debt amount. Example: 80000
TotalRefund	yes	no	String	The amount paid. Example: 80000
RefundRecord	yes	no	String	The payment records in the following format: time1,refundbillno1,amt1;time2,refundbillno2,amt2;.... The value of the time parameter is a UNIX timestamp. Example: 1730702488
DuedelayType	yes	no	String	The unit of the payment delay period.1: months. 2: days. Example: 1
DueDelay	yes	no	String	The payment delay period. If the value of the DueDelayType parameter is 1, the value of this parameter indicates the corresponding number of months. If the DueDelayType parameter is 2, the value of this parameter indicates the corresponding number of days. Example: Month
CreateTime	yes	no	String	The point in time when the bill was generated. The value is a UNIX timestamp. Example: 1730702488
LastChgTimes	yes	no	String	The point in time when the bill was last updated. The value is a UNIX timestamp. Example: 1730702488
Remark	yes	no	String	The remarks. Example: Outstanding for 10 months.
Reserve2	no	yes	String	Reserved field 2. Example: Reserve2

GetPkgDownloadListItem

The details of bills.

Referenced by the following interfaces: DescribeBillDownloadListGateway

name	required	NULL allowed	type	description
MonthName	yes	no	String	The billing month. Example: 2024-11
BeginTime	yes	no	String	The beginning of the billing month. Example: 2018-10-24 10:00:00
EndTime	yes	no	String	The end of the billing month. Example: 2018-10-24 10:00:00
BillStatus	yes	no	Uint64	The status. 0: unsettled. 1: settled but the bill not generated. 2: settled and the bill is being generated. 4. settled and the bill generated. Example: 0
PayableAmount	yes	yes	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	yes	String	The amount deducted by using vouchers. Example: 4000000
DownloadUrl	yes	yes	String	The download URL. This value of this parameter is valid only if the value of the Status parameter is 4. Example: http://example.com
PeriodType	yes	no	String	Cycle type of the current month. Valid values: byUsedTime, byPayTime. Example: byUsedTime
BillDate	yes	no	Uint64	The statement closing date. Example: 3
RealTotalCost	yes	yes	String	The billing cost. If the bill is unsettled, the value of this parameter is null. Example: 4000000
AutoConfirmTime	yes	no	String	Time when a bill is confirmed automatically. Example: 2018-12-18 00:00:00
FileStatus	yes	no	Uint64	Bill file status. 1: not generated; 2: generating. Example: 1
TaskId	yes	yes	String	The task ID. Example: 1213
ConfirmTime	yes	no	String	The confirmation time of a bill. Example: ""
IsDeferConfirm	yes	no	Uint64	Whether to delay confirmation. 0: no; 1: yes. Example: 0

ConditionComponent

The conditions for filtering billable items.

Referenced by the following interfaces: DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
BillingItemCode	yes	no	String	The billable item code. Example: v_cvm_cpu
BillingItemCodeName	yes	no	String	Component name. Example: Cores

ListResourceModifyLogGatewayList

ListResourceModifyLogGatewayList

Referenced by the following interfaces: ListResourceModifyLogGateway

name	required	NULL allowed	type	description
ProductCode	yes	no	String	The product code. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
BillingItemCode	yes	no	String	The billable item code. Example: v_cvm_cpu
SubBillingItemCode	yes	no	String	The billable sub-item code. Example: sv_cvm_cpu_s3
Num	yes	no	Uint64	The resource quantity. Example: 10
ModifyTime	no	yes	String	The point in time when the resource was last modified, including the point in time when the resource was released. Example: 2018-10-24 10:00:00
ProductName	yes	no	String	Product name. Example: Virtual Host
ProductGroupName	no	yes	String	Product category name. Example: Compute
SubProductName	yes	no	String	The name of the sub-product. Example: Virtual host (S1 model).
BillingItemName	yes	no	String	The billable item name. Example: CPU
SubBillingItemName	yes	no	String	The billable sub-item name. Example: CPU-S1
UnitName	yes	no	String	The unit. Example: Cores
ProductDisplayCode	no	yes	String	Product display code. Example: p_cvm
ProductDisplayName	no	yes	String	The display name of the product. Example: CVM
SubProductDisplayCode	no	yes	String	Product display code. Example: sp_cvm_sh1
SubProductDisplayName	no	yes	String	Sub-product display name. Example: sh1 model
BillingItemDisplayCode	no	yes	String	Product item display code. Example: v_cvm_mem
BillingItemDisplayName	no	yes	String	Product item display name. Example: Memory
SubBillingItemDisplayCode	no	yes	String	Product details display code. Example: sv_cvm_mem_sh1
SubBillingItemDisplayName	no	yes	String	Product details display name. Example: Memory of sh1 model

ProductCodeList

Product information mapping

Referenced by the following interfaces: DescribeProductInfoGateway

name	required	NULL allowed	type	description
ProductCode	no	no	String	The product code. Example: p_cvm
ProductName	no	no	String	Product name. Example: Virtual Host
ProductEngName	no	no	String	English name of the product. Example: CVM
SubProduct	no	no	Array of SubProduct	Sub-product information Example:View

SubProduct

Subproduct

Referenced by the following interfaces: DescribeProductInfoGateway

name	required	NULL allowed	type	description
SubProductCode	no	no	String	The sub-product code. Example: sp_cvm_s1
SubProductName	no	no	String	The name of the sub-product. Example: Virtual host (S1 model).
SubProductEngName	no	no	String	The sub-product name. Example: CVM-S1
BillingItem	no	no	Array of BillingItem	Product details Example:View

DescribeBillFeeByTagGatewayTotal

Total amount.

Referenced by the following interfaces: DescribeBillFeeByTagGateway

name	required	NULL allowed	type	description
RealTotalCost	no	yes	String	The total expense amount. Example: 47699.20
VoucherPayAmount	no	yes	String	The voucher amount. Example: 10.00
PayableAmount	no	yes	String	The amount payable. Example: 47689.20
TaxAmount	no	yes	String	Tax-deducted amount. Example: 0.00
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 47689.20

Conditions

The conditions for filtering bills.

Referenced by the following interfaces: DescribeBillDownloadByResourceGateway, DescribeBillDownloadRecordListGateway, DescribeBillDownloadResourceDetailGateway, DescribeBillSummaryByResourceGateway, DescribeBillTrendByMonthGateway, DescribeBspDownloadRecordListGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
TimeRange	no	no	Uint64	Valid values: 6 and 12. Example: 6
RegionId	no	no	Int64	The region ID. Example: 50010
PayMode	no	no	String	The billing method. Valid values: prePay and postPay. Example: prePay
ResourceKeyword	no	no	String	The resource keyword. Example: cvm
ProjectId	no	no	String	ID of the project to which resources belong Example: pr-f1d8de1a
OrgIds	no	no	Array of String	Project directory ID list Example: ["org-7414a2f4"]
ProjectSet	no	no	Array of ProjectSet	Project and directory list Example:View
ProductCodes	no	no	Array of String	The product code. Example: ["p_cvm"]
SubProductCodes	no	no	Array of String	The sub-product code. Example: ["sp_cvm_s3"]
RegionIds	no	no	Array of Int64	The region ID. Example: ["50010"]
PayModes	no	no	Array of String	The billing method. Valid values: prePay and postPay. Example: ["prePay"]
ActionTypes	no	no	Array of String	Transaction type. Valid values: postpay_deduct, prepay_deduct. Example: ["postpay_deduct"]
HideFreeCost	no	no	Int64	Indicates whether to hide the records without payments. Example: 1
OrderByCost	no	no	String	The sorting method. Valid values: desc and asc. Example: desc
BillIds	no	no	Array of String	The transaction ID. Example: ["OPENG100001-20241031-K6039MiRoef10"]
BillingItemCodes	no	no	Array of String	The billable item ID. Example: ["v_cvm_cpu"]
FileIds	no	no	Array of String	The file ID. Example: ["6a8ce209-cd15-e30d-6d12-deb37044afd5"]
FileTypes	no	no	Array of String	File type. Valid values: MonthlyBills, CustomizedBillResourceSummary, CustomizedBillDetail. Example: ["MonthlyBills"]
Status	no	no	Array of Uint64	Status. 0: generating; 1: generated. Example: 1
SubBillingItemCodes	no	no	String	The billable sub-item code. Example: ["sv_cvm_cpu_s3"]
ExportFields	no	no	Array of String	The fields exported. Example: ["productCode,"subProductCode""]

name	required	NULL allowed	type	description
ProductCode	no	no	String	The product code. Example: p_cvm
Tags	no	no	Array of Tags	List of tags. ExampleView
ExportTags	no	no	Array of String	The tags exported. Example: ["tag1"]
TagKey	no	no	String	Tag key. Example: tag1
TagValue	no	no	String	Tag value Example: Bank.

GetDownloadListSort

The method for sorting the downloaded records.

Referenced by the following interfaces: DescribeBillDownloadRecordListGateway, DescribeBspDownloadRecordListGateway

name	required	NULL allowed	type	description
DownloadTime	no	no	String	Valid values: desc and asc. Example: 2018-10-24 10:00:00
GenerateTime	no	no	String	Valid values: desc and asc. Example: 2018-10-24 10:00:00

TrendByMonthDetail

TrendByMonthDetail

Referenced by the following interfaces: DescribeBillTrendByMonthGateway

name	required	NULL allowed	type	description
Current	yes	no	Array of MonthCostDetailItem	The statistics of the current month. ExampleView
Previous	yes	no	Array of MonthCostDetailItem	The statistics of the previous months. ExampleView
Next	yes	no	Array of MonthCostDetailItem	The statistics of the future months. ExampleView

SummaryByResourceConditionValue

The conditions for filtering resources.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway

name	required	NULL allowed	type	description
Product	yes	no	Array of ConditionBusiness	The products. ExampleView
SubProduct	yes	no	Array of ConditionProduct	The sub-products. ExampleView
Region	yes	no	Array of ConditionRegion	The regions. ExampleView
PayMode	yes	no	Array of ConditionPayMode	The billing methods. ExampleView
ActionType	yes	no	Array of ConditionActionType	Transaction type. Valid values: postpay_deduct, prepay_deduct. ExampleView
Tags	no	yes	Array of Tag	Tag List ExampleView

ConditionRegion

The conditions for filtering regions.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
RegionId	yes	no	String	The region ID. Example: 50010
RegionName	yes	no	String	The region name. Example: Region A

ConditionFileType

The conditions for filtering file types.

Referenced by the following interfaces: DescribeBillDownloadRecordListGateway, DescribeBspDownloadRecordListGateway

name	required	NULL allowed	type	description
FileType	yes	no	String	File type. Valid values: QuotasList, CustomizedBillResourceSummary, CustomizedBillDetail, BillCommonSummary, DealList, VouchersDetail, QuotasChangeList, MonthlyBills. Example: QuotasList
FileTypeName	yes	no	String	File type name. Valid values: Resource Bill Summary, Instance Resource Summary. Example: Quota Management
MonthSelected	no	yes	UInt64	Whether it is required to select month. 0: no; 1: yes. Example: 0

DescribeBillFeeByTagSummaryProduct

DescribeBillFeeByTagSummaryProduct

Referenced by the following interfaces: DescribeBillFeeByPayModeGateway, DescribeBillFeeByProductGateway, DescribeBillFeeByRegionGateway, DescribeBillFeeByTagGateway

name	required	NULL allowed	type	description
ProductCode	no	yes	String	The product code. Example: p_cvm
ProductCodeName	no	yes	String	Product name. Example: p_cvm
RealTotalCost	yes	no	String	The total expense amount. Example: 47699.20
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
TaxAmount	no	yes	String	Paid tax. Example: 0.00
PayAmountIncludedTax	no	yes	String	Paid amount including tax. Example: 0.00
Trend	no	no	DescribeBillFeeByTagSummaryProductTrend	Trend ExampleView

DescribeBillFeeByTagSummaryProductTrend

DescribeBillFeeByTagSummaryProductTrend

Referenced by the following interfaces: DescribeBillFeeByPayModeGateway, DescribeBillFeeByProductGateway, DescribeBillFeeByRegionGateway, DescribeBillFeeByTagGateway

name	required	NULL allowed	type	description
Type	yes	no	String	Valid values: upward, downward, and none. Example: upward
Value	yes	yes	String	The change rate. The value is accurate to two decimal places. Example: 100100
PreMonthRealTotalCost	yes	no	String	The payment amount of the previous month. Example: 100100
ValueIncludedTax	no	yes	String	Trend percentage (tax included). Example: 100100
PreMonthPayAmountIncludedTax	no	yes	String	Last month's expenses (including tax). Example: 0.00

WaterListData

The transaction record information.

Referenced by the following interfaces: DescribeAccountWater

name	required	NULL allowed	type	description
WaterType	yes	no	String	Record type. 1: user transaction record; 2: system transaction record; 3: management transaction record. Example: 1
IoFlag	yes	no	String	1: expenditure. 2: income. Example: 1
ExternTranType	yes	no	String	The transaction types for external users. 2: pay. 10: transfer. 19: repay. 20: write off 21: pre-authorize. 22: cancel pre-authorization (restore quota). 23: confirm pre-authorization (expense). 24: refund. 25: generate bill. 26: modify bill. 27: add temporary credit. 28: cancel repayment. 29: confirm to return pre-authorization. 30: modify pre-authorization. 31: return pre-authorization. Example: 2
BaseTranType	yes	no	String	The transaction types for internal servers. 2: pay. 10: open account. 14: deduct money for transferring. 16: deduct money for topping up. 17: cancel transfer. 42: close account. 52: increase credit for postpaid resources. 53: reduce credit for postpaid resources. 54: modify account information (except adjusting quota) for postpaid resources. 55: repay. 56: write off. 57: prepay. 58: deduct bills. 59: pre-authorize. 60: cancel pre-authorization (restore quota). 61: cancel pre-authorization configuration (restore quota). 62: confirm pre-authorization (expense). 63: pre-authorize for an order. 64: cancel pre-authorization for an order. 65: refund (to top up the balance). 66: restore credit. 67: supplementary deduction. 68: add amount to a bill (billing tool). 69: reduce amount from a bill (billing tool). 70: restore cash amount (billing tool). 71: modify a bill resulting in balance increasing (billing tool). 72: modify a bill resulting in balance reduction (billing tool). 73: add temporary credit. 74: cancel repayment. 75: cancel write-off. 76: cancel prepayment. 82: modify pre-authorization to increase the pre-authorized amount and reduce account count. 83: modify pre-authorization to reduce the pre-authorized amount and increase account count. 84: modify pre-authorization to increase the pre-authorized amount and add more pre-authorization orders. 85: modify pre-authorization to increase the pre-authorized amount and reduce more pre-authorization orders. 86: Return pre-authorization. 87: supplementary deduction for pre-authorization. Example: 2
BillNo	yes	no	String	The child order ID. Example: 20240912110368
TranAmt	yes	no	String	The amount. Example: 800000
Balance	yes	no	String	The balance. The account attribute of a postpay account determines whether the balance of the account is the value of the pbalance or the result of dpbalance + cash. Example: 800000
CreateTime	yes	no	String	The point in time when the transaction was performed. Example: 2018-10-24 10:00:00
Source	yes	no	String	The source. Example: Taobao.
Device	yes	no	String	The device type. 0: PC. 1: mobile phone. Example: 1
UserIp	yes	no	String	The user ID. Example: 127.0.0.1
TranInfo	yes	no	String	The description of the transaction. Example: Purchase CVM.

name	required	NULL allowed	type	description
Remark	yes	no	String	The remarks of the transaction. Example: Purchase CVM.
Reserve1	yes	no	String	Reserved field 1 Example: null
Reserve2	yes	no	String	Reserved field 2 Example: null
Extreserve1	yes	no	String	Extended reserved field 1 from external sources. Example: null
Extreserve2	yes	no	String	Extended reserved field 2 from external sources. Example: null
RelationId	yes	no	String	The associated ID, such as the write-off transaction ID. Example: 10010
Dplimit	yes	no	String	The total credit amount. Example: 9000000
Dpbalance	yes	no	String	The remaining credit amount for postpaid resources. The account attribute determines whether the cash amount is included in the credit amount. Example: 9000000
Cash	yes	no	String	The cash balance. Example: 100100
MerchantType	yes	no	String	The merchant type. 1: agent. 2: sub-customer 3: direct customer Example: 1
RelatedMerchant	yes	no	String	The related merchant. If the value of the MerchantType parameter is 1 or 3, the value of this parameter is empty. If the value of the MerchantType parameter is 2, the value of this parameter is the information about the agent. Example: John Doe
Reserve3	yes	no	String	Reserved field 3 (storing the timestamp when the transaction record was inserted to the database) Example: 2018-10-24 10:00:00
Reserve4	yes	no	String	Reserved field 4 (1. The flag for account modification. 2. The write-off transaction ID in repayment records. 3. The AllOffSet flag for writing off all amount of a bill.) Example: 1
Reserve5	yes	no	String	Reserved field 5 (The transaction time. Unit: us.) Example: 1730702488000
Reserve6	yes	no	String	Reserved field 6 (write-off records: TotalRefund,1000;CurDebt,1110;DebtBillDate,201706; PayChannel,bank:) Example: CurDebt
Reserve7	yes	no	String	Reserved field 7 (The credit amount restored after write-off. Type: repayment type. Recover: restored credit amount. ChgTimeUs: the transaction pending period. Unit: us. TranSeq: The transaction sequence number. Example: Recover
Reserve8	yes	no	String	Reserved field 8. Example: null

BigDealListData

The information about parent orders.

Referenced by the following interfaces: DescribeDealListGateway

name	required	NULL allowed	type	description
BigDealId	yes	no	Uint64	The parent order ID. Example: 20240912110368
Uin	yes	no	String	The unique identifier of the user. Example: 100004603015
ProductCode	yes	no	String	The product code. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
ProductCodeName	yes	no	String	Product name. Example: p_cvm
SubProductCodeName	yes	no	String	The name of the sub-product. Example: sp_cvm_s3
DealAction	yes	no	String	Order type. tc_open: purchase; tc_change: configuration adjustment; tc_destroy: termination. Example: tc_destroy
ActionName	yes	no	String	Action name. Example: Isolation
CreateTime	yes	no	String	Creation time. Example: 2018-10-24 10:00:00
UpdateTime	yes	no	String	Update time. Example: 2018-10-24 10:00:00
OverdueTime	yes	no	Datetime	The point in time when the order expires. Example: 2018-10-24 10:00:00
PayEndTime	yes	no	Datetime	The payment time. Example: 2018-10-24 10:00:00
Payer	yes	yes	String	The creator. Example: 100004603015
Status	yes	no	Uint64	The status. 1: pending payment. 2: paid. 3: shipping. 4: shipped. 5: shipping failed. 6: refunded. 7: canceled. 100: deleted. Example: 1
TotalCost	yes	no	Uint64	The amount payable. Example: 4000000
VoucherDecline	yes	no	Uint64	The voucher amount. Example: 20000
RealTotalCost	yes	no	Uint64	The amount actually paid. Example: 4000000
ProviderOwnerUin	yes	yes	String	The payer. Example: 100004603015
StatusName	yes	no	String	Status name. Valid values: to be paid, paid, in shipment, shipment successful, shipment failed, refunded, canceled, deleted. Example: Paid
DealList	yes	no	Array of DealListData	The child order list. Example:View
DiscountCost	yes	no	Uint64	The amount deducted from the total price. Example: 5000
Creater	yes	no	String	The creator. Example: 100004603015

TagData

Tag list.

Referenced by the following interfaces: GetTagListGateway

name	required	NULL allowed	type	description
TagList	yes	yes	Array of TagList	Tag list. Example:View
RecordNum	yes	no	Uint64	Number of tags. Example: 100

Tags

List of tags.

Referenced by the following interfaces: DescribeBillDownloadByResourceGateway, DescribeBillDownloadRecordListGateway, DescribeBillDownloadResourceDetailGateway, DescribeBillSummaryByResourceGateway, DescribeBillTrendByMonthGateway, DescribeBspDownloadRecordListGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
TagKey	yes	no	String	Tag key. Example: tag1
TagValue	yes	no	Array of String	Tag value Example: Cloud Virtual Machine

DetailConditionValue

The filter conditions.

Referenced by the following interfaces: DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
Product	yes	no	Array of ConditionBusiness	The products. Example:View
SubProduct	yes	no	Array of ConditionProduct	The sub-products. Example:View
BillingItem	yes	no	Array of ConditionComponent	The billable items. Example:View
Region	yes	no	Array of ConditionRegion	The regions. Example:View
PayMode	yes	no	Array of ConditionPayMode	The billing methods. Example:View
ActionType	yes	no	Array of ConditionActionType	Transaction type. Valid values: postpay_deduct, prepay_deduct. Example:View
Tags	no	yes	Array of DescribeResourceBillDetailGatewayTags	Tag List Example:View

DealListData

The information about the orders.

Referenced by the following interfaces: DescribeDealListGateway

name	required	NULL allowed	type	description
DealName	yes	no	String	The child order ID. Example: 20240912110368
ProductCode	yes	no	String	The product code. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
ProductCodeName	yes	no	String	The product name. Example: p_cvm
SubProductCodeName	yes	no	String	The sub-product name. Example: sp_cvm_s3
DealAction	yes	no	String	Order type. tc_open: purchase; tc_change: configuration adjustment; tc_destroy: termination. Example: tc_destroy
CreateTime	yes	no	Datetime	Creation time. Example: 2018-10-24 10:00:00

name	required	NULL allowed	type	description
UpdateTime	yes	no	Datetime	Update time. Example: 2018-10-24 10:00:00
Payer	yes	yes	String	The user who submitted the order. Example: 100004603015
Status	yes	no	Uint64	The status. 1: pending payment. 2: paid. 3: shipping. 4: shipped. 5: shipping failed. 6: refunded. 7: canceled. 100: deleted. Example: 1
BigDealId	yes	no	Uint64	The parent order ID. Example: 20240912110368
GoodsDetail	yes	yes	String	The order details. The value is a JSON string. Example: {"cpu":"48","deviceClass":"VSELF_UDRHZ2","fpga":0,"goodsSubType":"cvm_hour","gpu":0,"isUnderwrite":0,"isWinOs":0,"ladder":2,"mem":"174","pid":260506065,"platform":1,"productCode":"p_cvm","storageBlock":6,"subProductCode":"sp_cvm_udrhz2","sv_cvm_cpu_udrhz2":48,"sv_cvm_dsb_hdd11176g_udrhz2":6,"sv_cvm_mem_udrhz2":174,"timeSpan":"3600","timeUnit":"s"}
PayMode	yes	no	Uint64	Payment mode. 0: pay-as-you-go; 1: prepaid. Example: 0
GoodsNum	yes	no	String	The number of orders. Example: 100
TaskDetail	yes	yes	String	Details of the resource ID returned by the business, which is a JSON string. Example: {"sub_roc_oid":0,"flow_id":0,"pay_amt":0,"auto_renew_flag":0,"resource_id":["disk-m81l6moa"],"resource_detail":[{"resource_id":"disk-m81l6moa","start_time":"","end_time":"","isolate_time":""}]}
ActionName	yes	no	String	Name Example: Isolation
StatusName	yes	no	String	The status name. Example: Pending payment
Uin	yes	no	String	The UIN of the user. Example: 100004603015
Formula	yes	no	String	The formula for calculating values for upgrade. Example: null
RegionId	yes	no	String	The region ID. Example: 50010
ZoneId	yes	yes	String	The availability zone ID. Example: 40010
Discount	yes	no	Float	The discount range. Value range: 0 - 1. Example: 0.9
DiscountCost	yes	no	Uint64	The amount deducted from the price. Example: 100
GoodsPrice	yes	yes	String	The pricing details of the order, including discount information. The value is a JSON string. { "policyDetail":{ "total":60, //total discounts. If the value is 100 , it means no discount. "user":60, //user's personal discount. "common":100 //basic discount of the official website. }, "voucherList":[{ "id":"xxxx", "voucherAmount":600 }] } Example: {"totalCost":0,"realTotalCost":0,"price":0,"discount":1,"voucherAmount":0,"policyDetail":null}
VoucherId	yes	yes	String	The voucher ID. Example: 1341057229_20241103011000000001090945271 0bat6723663792 74a_001
Price	yes	no	Uint64	The unit price. Example: 0.001
TotalCost	yes	no	Uint64	The amount payable. Example: 4000000
ProviderOwnerUin	yes	yes	String	The payer. Example: 100004603015
Creater	yes	no	String	The creator. Example: 100004603015
VoucherDecline	yes	yes	Uint64	The voucher amount. Example: 10000
VoucherTradeId	yes	no	String	The voucher usage transaction ID. Example: 1341057229_20241103011000000001090945271 0bat6723663792 74a_001
RealTotalCost	yes	no	Uint64	The total expense amount. Example: 4000000

ProductDefineList

API for querying product definitions.

Referenced by the following interfaces: DescribeProductRelationsGateway

name	required	NULL allowed	type	description
ProductCode	yes	no	String	The product code. Example: p_cvm
ProductChnName	yes	no	String	Product name. Example: Cloud Virtual Machine
ProductEngName	yes	no	String	English name of the product. Example: CVM
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
SubProductChnName	yes	no	String	Name of the sub-product. Example: CVM (S1 model).
SubProductEngName	yes	no	String	The sub-product name. Example: CVM-S1
BillingItemCode	yes	no	String	The code of the billable item. Example: v_cvm_cpu
BillingItemChnName	yes	no	String	Name of the billable item. Example: CPU
BillingItemEngName	yes	no	String	The billable item name. Example: CPU
SubBillingItemCode	yes	no	String	The code of the billable sub-item. Example: sv_cvm_cpu_s3
SubBillingItemChnName	yes	no	String	Name of the billable sub-item. Example: CPU-S1
SubBillingItemEngName	yes	no	String	The billable sub-item name. Example: CPU-S1
SubBillingItemsGoodNumUnit	yes	no	String	The unit of the billable sub-item. Example: Cores
SubBillingItemsGoodNumUnitEn	yes	no	String	The unit of the billable sub-item (English). Example: Core
Status	yes	no	Int64	Status of four-level definitions. 0: invalid; 1: valid. Example: 0
Alias	yes	no	String	Alias Example: sv_cvm_cpu_s3
Operator	no	yes	String	The last operator. Example: 100004603015
SourceType	no	yes	String	Source type. local; third. Example: local
Source	no	yes	String	Source type, bsp or billing. Example: billing
ProductGoodNumUnit	no	yes	String	Product unit Example: Pieces
ProductGoodNumUnitEng	no	yes	String	Product English unit Example: instances
SubProductGoodNumUnit	no	yes	String	Subproduct unit. Example: Pieces
SubProductGoodNumUnitEng	no	yes	String	Subproduct unit in English. Example: inctances
BillingItemsGoodNumUnit	no	yes	String	Product item unit. Example: GB
BillingItemsGoodNumUnitEn	no	yes	String	Product item unit in English. Example: GB

ConditionPayMode

The conditions for filtering billing methods.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway, DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
PayMode	yes	no	String	The billing method. Example: 0
PayModeName	yes	no	String	Payment mode name. Valid values: prePay, postPay. Example: prePay

BusinessSummaryTotal

The expenses sorted by product.

Referenced by the following interfaces: DescribeBillSummaryByTagGateway

name	required	NULL allowed	type	description
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
PayAmountIncludedTax	no	yes	String	Paid amount including tax. Example: 4000000

PageTenantQuotaResponse

Paging query quota data.

Referenced by the following interfaces: PageTenantQuotaGateway

name	required	NULL allowed	type	description
Uin	no	yes	String	User UIN Example: 110000000674
ProductCode	no	yes	String	Product code. Example: p_cfs
QuotaKey	no	yes	String	Quota key. Example: p_cfs###

name	required	NULL allowed	type	description
QuotaValue	no	yes	String	Quota Example: 100
UpdateTime	no	yes	String	Update time. Example: 2025-06-18 10:42:17
Source	no	yes	String	Source. bsp: metering; billing: billing. Example: bsp
WarningThreshold	no	yes	Uint64	Threshold warning Example: 10
SubProductCode	no	yes	String	Sub-product code. Example: sp_cbs_sid
BillingItemCode	no	yes	String	Product item Code. Example: v_cvm_cpu
SubBillingItemCode	no	yes	String	Product details code. Example: sv_cvm_cpu_u
ProductName	no	yes	String	Product name. Example: CVM
ProductEngName	no	yes	String	English name of the product. Example: CVM
ProductGroupName	no	yes	String	Product grouping name Example: Compute
ProductGroupEngName	no	yes	String	Product grouping name in English. Example: Compute
UnitName	no	yes	String	The unit. Example: Cores
SubProductName	no	yes	String	The name of the sub-product. Example: Cloud File Storage-Extreme
SubProductEngName	no	yes	String	The sub-product name. Example: Cloud File Storage-Extreme
BillingItemName	no	yes	String	The billable item name. Example: CPU
BillingItemEngName	no	yes	String	The billable item name. Example: CPU
SubBillingItemName	no	yes	String	Product item name Example: CPU-Big Data
SubBillingItemEngName	no	yes	String	The billable sub-item name. Example: CPU_Big Data
UsedQuota	no	yes	Uint64	Used quota. Example: 0
Quota	no	yes	Uint64	Tenant used quota. Example: 0
AllQuota	no	yes	Uint64	Quota used by the root account Example: 0

DetailTotal

The payment summary details.

Referenced by the following interfaces: DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
TaxAmount	yes	no	String	Tax amount. Example: 0.00000000
PayAmountIncludedTax	no	yes	String	Paid amount including tax. Example: 0.00

GetDownloadListRecordItem

The download details.

Referenced by the following interfaces: DescribeBillDownloadRecordListGateway, DescribeBspDownloadRecordListGateway

name	required	NULL allowed	type	description
FileId	yes	no	String	The file ID. Example: 9ecdb930-06e8-9f92-558b-ff548d359626
FileType	yes	no	String	File type. Valid values: QuotasList, CustomizedBillResourceSummary, CustomizedBillDetail, BillCommonSummary, DealList, VouchersDetail, QuotasChangeList, MonthlyBills. Example: QuotasList
FileTypeName	yes	no	String	The file type name. Example: Quota Management
FileName	yes	no	String	The file name. Example: 100004603270-2024-11-06-Quotas-Lists-1730875608.zip_billing6a24e5f4-746d-d0d7-ff15-e2ba07ce11be
Status	yes	no	Uint64	Status. 0: generating; 1: generated. Example: 0
TaskId	no	yes	String	The task ID. Example: 14133
GenerateTime	no	yes	String	The point in time when the file generated. Example: 2018-10-24 10:00:00
DownloadTime	no	yes	String	The download time. Example: 2018-10-24 10:00:00
DownloadUrl	no	yes	String	The download URL. Example: http://example.com

PayModeSummaryDetailItem

The payment summary details sorted by billing method.

Referenced by the following interfaces: DescribeBillFeeByPayModeGateway

name	required	NULL allowed	type	description
PayMode	yes	no	String	Billing mode. 0: postPay; 1: prePay. Example: prePay
PayModeName	yes	no	String	The billing method name. Example: prePay
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
Trend	yes	no	SummaryTrend	The comparison to the previous month. Example:View
Product	yes	no	Array of BusinessSummaryDetailItem	The product code (layer-1). Example:View
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 0.00
TaxAmount	no	yes	String	Tax-deducted amount. Example: 0.00

ListResourceSummaryGatewayList

ListResourceSummaryGatewayList

Referenced by the following interfaces: ListResourceSummaryGateway

name	required	NULL allowed	type	description
BizStatus	no	yes	Uint64	Status. 0: terminated; 1: normal. Example: 1
BizIsolatedTime	no	yes	String	The point in time when the resource was released. This is a new parameter. This parameter is not available for the version earlier than V342. Example: 2018-10-24 10:00:00
Uin	no	yes	String	uin Example: 100004603015
AppId	no	yes	Uint64	app ID Example: 1255000011
ResourceId	no	yes	String	Resource ID. Example: ins-08cxpupy
AddTime	no	yes	String	Creation time. Example: 2018-10-24 10:00:00
ProductCode	yes	no	String	The product code. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
ModifyTime	no	yes	String	The point in time when the resource was last modified, including the point in time when the resource was released. Example: 2018-10-24 10:00:00
RegionId	no	yes	Uint64	The region ID. Example: 50010
ZoneId	no	yes	Uint64	The region ID. Example: 40010
ProjectId	no	yes	String	ID of the project to which the resources belong. Example: pr-f1d8de1a
ProductName	yes	no	String	Product name. Example: Virtual Host
ProductGroupName	no	yes	String	Product category name. Example: Compute
SubProductName	yes	no	String	The name of the sub-product. Example: Virtual host (S1 model).
RegionName	no	yes	String	The region name. Example: Region A
ZoneName	no	yes	String	The availability zone name. Example: Region-1

name	required	NULL allowed	type	description
ProductDisplayCode	no	yes	String	Product display code. Example: p_cvm
ProductDisplayName	no	yes	String	The display name of the product. Example: CVM
SubProductDisplayCode	no	yes	String	Product display code. Example: sp_cvm_sh1
SubProductDisplayName	no	yes	String	Sub-product display name. Example: sh1 model

ProductPropertyFields

The information about sales attribute fields.

Referenced by the following interfaces: DescribeProperties

name	required	NULL allowed	type	description
FieldName	yes	no	String	Field name. Example: Region ID
FieldCode	yes	no	String	The field code. Example: RegionId
FieldFlag	yes	no	String	The field flag. Valid values: 0: general field. 1: master field. Example: 0

TrendByMonthStatItem

TrendByMonthStatItem

Referenced by the following interfaces: DescribeBillTrendByMonthGateway

name	required	NULL allowed	type	description
BeginMonth	yes	no	String	The start month. Example: 2018-05. Example: 2018-05
EndMonth	yes	no	String	The end month. Example: 2018-11. Example: 2018-05
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The voucher amount. Example: 4000000
RealTotalCost	yes	no	String	The total expense amount. Example: 4000000
TaxAmount	no	yes	String	Paid tax. Example: 0.00
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 0.00

DescribeResourceBillDetailGatewayTags

Tag

Referenced by the following interfaces: DescribeResourceBillDetailGateway

name	required	NULL allowed	type	description
TagKey	no	yes	String	Tag key Example: QtaCostTagA
TagValue	no	yes	Array of String	Tag value Example: ["*]

DescribeDownloadQuotasListGatewayData

DescribeDownloadQuotasListGatewayData

Referenced by the following interfaces: DescribeDownloadQuotasListGateway

name	required	NULL allowed	type	description
TaskId	no	yes	Uint64	The task ID. Example: 35176

ProjectSet

Project and directory list

Referenced by the following interfaces: DescribeBillDownloadByResourceGateway, DescribeBillDownloadRecordListGateway, DescribeBillDownloadResourceDetailGateway, DescribeBillSummaryByResourceGateway, DescribeBillTrendByMonthGateway, DescribeBspDownloadRecordListGateway, DescribeResourceBillDetailGateway, DescribeResourceBillDownloadGateway, ListResourceSummaryDownloadGateway, ListResourceSummaryGateway

name	required	NULL allowed	type	description
OrgId	no	no	String	Project directory ID Example: org-7414a2f4
OrgName	no	no	String	Project directory name Example: Bank.
ProjectId	no	no	String	Project ID. Example: pr-f1d8de1a
ProjectName	no	no	String	Project Name Example: Branch construction.
CreatorUin	no	no	String	Creator UIN Example: 10000460301S
Creator	no	no	String	Creator Example: 10000460301S
CreateTime	no	no	String	Creation time. Example: 2018-10-24 10:00:00

SummaryByResourceDataItem

The payment summary details sorted by resource.

Referenced by the following interfaces: DescribeBillSummaryByResourceGateway

name	required	NULL allowed	type	description
Id	yes	no	String	The record ID. Example: 100
PayerUin	yes	no	String	The UIN of the payer. Example: 10000460301S
ProductCode	yes	no	String	The product code. Example: p_cvm
ProductCodeName	yes	no	String	Product name. Example: p_cvm
SubProductCode	yes	no	String	The sub-product code. Example: sp_cvm_s1
SubProductCodeName	yes	no	String	The name of the sub-product. Example: sp_cvm_s3
ResourceId	yes	no	String	Resource ID. Example: ins-08cxpupy
ProjectId	no	no	String	Project ID. Example: pr-f1d8de1a
ResourceName	yes	no	String	Resource name. Example: CVM for personal use.
RealTotalCost	yes	no	String	The total price. Example: 4000000
PayableAmount	yes	no	String	The amount payable. Example: 4000000
VoucherPayAmount	yes	no	String	The amount deducted by using vouchers. Example: 4000000
RegionName	yes	no	String	The region name. Example: Region A
PayModeName	yes	no	String	Payment mode name. Valid values: prepaid, pay-as-you-go. Example: prePay
PayMode	yes	no	String	Payment mode. 0: pay-as-you-go; 1: prepaid. Example: 0
RegionId	yes	no	String	The region ID. Example: 50010
BillId	yes	no	String	The bill ID. Example: OPENG100001-20241101-2AX39MR4fkf1
OwnerUin	yes	no	String	The UIN of the resource holder. Example: 10000460301S
OperateUin	yes	no	String	The UIN of the operator. Example: 10000460301S
ActionTypeName	yes	no	String	The transaction type name. Example: Pay-as-you-go deduction.
ZoneName	yes	no	String	AZ name. Example: AZ-1
PayTime	yes	no	String	The point in time when the order was paid. Example: 2018-10-24 10:00:00
FeeBeginTime	yes	no	String	The beginning of the validity period. Example: 2018-10-24 10:00:00
FeeEndTime	yes	no	String	The end of the validity period. Example: 2018-10-24 10:00:00
ComponentConfig	yes	no	String	The billable item configuration. Example: SSD cloud disk (storage space: 1400 GB)
AccountName	yes	yes	String	The account name. Example: John Doe
TotalCost	yes	no	String	The original price. Example: 4000000
OrderId	yes	yes	String	The order ID. Example: 20240912110368
TotalDiscount	yes	no	String	The discount rate. Example: 100
TaxAmount	no	yes	String	Tax-deducted amount. Example: 0.00

name	required	NULL allowed	type	description
PayAmountIncludedTax	no	yes	String	Payment amount including tax. Example: 447.48

ErrorCode

Feature Description

If there is an Error field in the response, it means that the API call failed. For example:

```
{
    "Response": {
        "Error": {
            "Code": "AuthFailure.SignatureFailure",
            "Message": "The provided credentials could not be validated. Please check your signature is cor
rect."
        },
        "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
    }
}
```

Code in Error indicates the error code, and Message indicates the specific information of the error.

Error Code List

Common Error Codes

Error codes	Description
AuthFailure.InvalidSecretId	Invalid key (not a Cloud API key type).
AuthFailure.MFAFailure	MFA failed.
AuthFailure.SecretIdNotFound	Key does not exist. Check if the key has been deleted or disabled in the console, and if not, check if the key is correctly entered. Note that whitespaces should not exist before or after the key.
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes. Please ensure your current local time matches the standard time.
AuthFailure.SignatureFailure	Invalid signature. Signature calculation error. Please ensure you've followed the signature calculation process described in the Signature API documentation.
AuthFailure.TokenFailure	Token error.

Error codes	Description
AuthFailure.UnauthorizedOperation	The request does not have CAM authorization.
DryRunOperation	DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidAction	The API does not exist.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	Quota limit exceeded.
MissingParameter	A parameter is missing.
NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTPS request method error. Only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

Service Error Codes

Error codes	Description
FailedOperation	Operation failed.

Error codes	Description
UnauthorizedOperation.NotCertification	The account has not completed identity verification. Payment failed.
FailedOperation.ResourceHandling	The resources are being processed. Place an order later.
InvalidParameterValue	Parameter value error.
FailedOperation.ConfirmBillCheckFail	Download the bill before you confirm.
FailedOperation.Providing	Payment succeeded. Shipping.
FailedOperation.AccountError	An error occurred when calling the account system.
FailedOperation.CallBillingRouteFail	Failed to call the service.
FailedOperation.AgentPayDealCannotDown	The specification of the agent payment device cannot be downgraded.
FailedOperation.DebtBillNotExist	The bill does not exist.
FailedOperation.BalanceInsufficient	Insufficient account balance.
FailedOperation.ProductManageError	An error occurred while calling the item management system.
FailedOperation.PaySuccDeliverFailed	Paid successfully, but shipment failed. Contact the cloud platform staff for handling.
FailedOperation.NeedPayTogeter	You must pay for the items in the same order at the same time.
FailedOperation.InvalidVoucher	The voucher is not supported.
FailedOperation.InvalidDeal	The order in the current state does not support this operation. Only unpaid orders can be paid.
UnauthorizedOperation.NotFinanceAuth	The account does not have the permission for payment. Payment failed.
FailedOperation.PayPriceError	Payment failed. Contact the cloud platform staff for handling.
FailedOperation.ProvideFailed	Payment succeeded. Shipping failed.
FailedOperation.DeviceHasExpired	The device is expired.
FailedOperation.CallJipingFail	Failed to call the billing platform API.

Error codes	Description
FailedOperation.SummaryDataNotReady	Summarizing data. Please wait.
FailedOperation.QuotaNotEnough	Quota insufficient.
FailedOperation.AcctNotExist	The account does not exist.
FailedOperation.NotAllowToRefund	The order is non-refundable.
InvalidParameter	Parameter error.
FailedOperation.CouponsNotExist	No voucher available.
FailedOperation.BalanceNotEnough	Insufficient balance.