

Cloud Phone Host

API Reference

Issue 01
Date 2025-01-16



Copyright © Huawei Technologies Co., Ltd. 2025. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <https://www.huawei.com>

Email: support@huawei.com

Security Declaration

Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process*. For details about this process, visit the following web page:

<https://www.huawei.com/en/psirt/vul-response-process>

For vulnerability information, enterprise customers can visit the following web page:

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

Contents

1 Before You Start	1
2 API Overview	3
3 Calling APIs	5
3.1 Making an API Request	5
3.2 Authentication	10
3.3 Response	11
4 Getting Started	13
5 Cloud Phone Server APIs	15
5.1 Cloud Phone Servers	15
5.1.1 Querying cloud phone servers	15
5.1.2 Querying the Details of a Cloud Phone Server	21
5.1.3 Querying Flavors of Cloud Phone Servers	27
5.1.4 Purchasing a Cloud Phone Server	30
5.1.5 Restarting Cloud Phone Servers	39
5.1.6 Changing the Cloud Phone Server for a Cloud Phone	41
5.1.7 Pushing Shared Storage Files	48
5.1.8 Querying Shared Storage Files	51
5.1.9 Deleting Shared Storage Files	53
5.1.10 Pushing Shared Applications	56
5.1.11 Deleting a Shared Application	59
5.1.12 Changing the Flavor of a Cloud Phone Server	61
5.1.13 Modifying the Name of a Cloud Phone Server	64
5.2 Bandwidth	66
5.2.1 Querying Bandwidth Information	66
5.2.2 Modifying a Shared Bandwidth	69
5.3 Cloud Phones	71
5.3.1 Querying Cloud Phones	71
5.3.2 Querying Cloud Phone Details	76
5.3.3 Obtaining the Cloud Phone Access Information	80
5.3.4 Querying Cloud Phone Flavors	84
5.3.5 Querying the Image of a Cloud Phone	87
5.3.6 Resetting Cloud Phones	90

5.3.7 Restarting Cloud Phones.....	93
5.3.8 Stopping Cloud Phones.....	95
5.3.9 Editing the Name of a Cloud Phone.....	97
5.3.10 Updating Properties of Cloud Phones.....	99
5.3.11 Exporting Data from Cloud Phones.....	101
5.3.12 Restoring Data of Cloud Phones.....	105
5.3.13 Diverting Cloud Phone Traffic.....	108
5.3.14 Expanding the Data Disk of a Cloud Phone.....	110
5.4 Tasks.....	112
5.4.1 Querying the Status of a Task.....	112
5.4.2 Querying Task Statuses.....	114
5.5 Keys.....	117
5.5.1 Updating a Key Pair.....	117
5.6 Encoding Services.....	120
5.6.1 Querying Encoding Services.....	120
5.6.2 Batch Restarting Encoding Services.....	124
5.7 ADB Commands.....	126
5.7.1 Pushing Files.....	126
5.7.2 Installing an APK.....	130
5.7.3 Uninstalling an APK.....	133
5.7.4 Running adb Commands Asynchronously.....	136
5.7.5 Running adb Commands Synchronously.....	138
5.8 Tags.....	141
5.8.1 Querying Tags of a Project.....	141
5.8.2 Querying Resource Tags.....	143
5.8.3 Querying Resources.....	145
5.8.4 Adding Tags.....	150
5.8.5 Deleting Tags.....	153
5.9 Images.....	155
5.9.1 Querying Images.....	155
5.9.2 Deleting an Image.....	158
5.9.3 Sharing an Image with an Account in a Specified Project.....	160
5.9.4 Obtaining Projects that the Image Is Shared with.....	161
5.9.5 Deleting a Shared Image.....	163
6 Permissions Policies and Supported Actions.....	166
6.1 Introduction.....	166
7 Common Parameters.....	174
7.1 General Request Return Values.....	174
7.1.1 Abnormal Response.....	174
7.1.2 Returned Values.....	175
7.2 Error Codes.....	176
7.3 Obtaining a Project ID.....	198

A Appendix.....	200
A.1 Cloud Phone Attribute List.....	200
A.2 Cloud Phone Flavor List.....	205
A.3 Server Flavors.....	207

1 Before You Start

Welcome to *Cloud Phone Host API Reference*. Cloud Phone Host (CPH) provides you with cloud phone servers that are virtualized from Huawei Cloud Bare Metal Servers (BMSs). They run native Android and have the functions of virtual phones.

You can use APIs described in this document to manage cloud phone servers and cloud phones, such as purchasing a cloud phone server, querying cloud phones, querying applications deployed on cloud phones, modifying shared bandwidth, and restarting cloud phones. For details about all supported operations, see [2 API Overview](#).

If you plan to access CPH through an API, ensure that you are familiar with CPH concepts. For details, see [Service Overview](#).

Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the endpoints of CPH, see [Regions and Endpoints](#).

Concepts

- Account
An account is created upon successful registration with Huawei Cloud. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used to perform routine management. For security purposes, create Identity and Access Management (IAM) users and grant them permissions for routine management.
- User
An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).
API authentication requires information such as the account name, username, and password.
- Region
Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same

region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

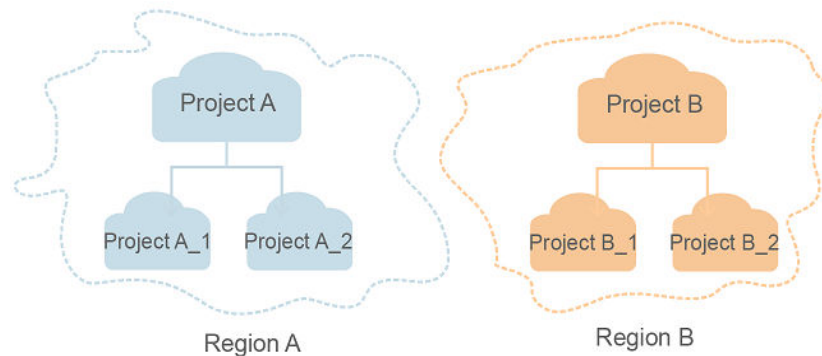
For details, see [Region and AZ](#).

- AZ

An AZ comprises of one or more physical data centers equipped with independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- Project

A project corresponds to a region. Default projects are defined to group and physically isolate resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.

Figure 1-1 Project isolating model



- Enterprise Project

Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.

For details about enterprise projects and about how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).

2 API Overview

By calling CPH APIs, you can use all CPH functions. For example, you can query cloud phones, restart a cloud phone, and push files to a cloud phone.

Table 2-1 CPH APIs

Type	Subtype	Description
Cloud phone server	Cloud Phone Server Management	Query cloud phone servers, query cloud phone server flavors, and purchase cloud phone servers.
	Bandwidth Management	Query bandwidth information and modify the shared bandwidth.
	Cloud Phone Management	Query the cloud phones, query cloud phone images, reset cloud phones, and restart cloud phones.
	Task Management	Query the task execution status and query the task execution status list.
	Key Management	Modify the key pair for connecting to a cloud phone.
	Encoding Server Management	Query and restart the encoding server.
	ADB Commands	Push files, install Android packages (APKs), and uninstall APKs.

Type	Subtype	Description
	Tag Management	Query project tags, resource tags, and resources.

3 Calling APIs

3.1 Making an API Request

3.2 Authentication

3.3 Response

3.1 Making an API Request

This section describes the structure of a REST API request and uses the IAM API for [creating an IAM User](#) as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

Request URI

A request URI is in the following format:

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

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

Table 3-1 URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM in region CN-Hong Kong is iam.ap-southeast-1.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to obtain a user token is /v3/auth/tokens .

Parameter	Description
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of <i>Parameter name=Parameter value</i> . For example, ?limit=10 indicates that a maximum of 10 data records will be displayed.

IAM is a global service. You can create an IAM user using the endpoint of IAM in any region. For example, to create an IAM user in the **CN-Hong Kong** region, obtain the endpoint of IAM (**iam.ap-southeast-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3.0/OS-USER/users**) in the URI of the API for **creating an IAM user**. Then, construct the URI as follows:

`https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users`

Figure 3-1 Example URI



NOTE

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

Request Methods

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

Table 3-2 HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.

Method	Description
PATCH	Requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API for [creating an IAM user](#), the request method is **POST**. An example request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
```

Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

[Table 3-3](#) lists common request header fields.

Table 3-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443

Parameter	Description	Mandatory	Example Value
Content-Type	Specifies the type (or format) of the message body. The default value application/json is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in 7.3 Obtaining a Project ID .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cb aa340f9c0f4
X-Auth-Token	Specifies the user token. It is a response to the API for obtaining a user token (This is the only API that does not require authentication). After the request is processed, the value of X-Subject-Token in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZlhvcNAQc-Co...ggg1BBIINPXsidG9rZ

 NOTE

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

For more details, see **AK/SK Authentication** in [3.2 Authentication](#).

The following shows an example request of the API for [creating an IAM user](#) when AK/SK authentication is used:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****
```

(Optional) Request Body

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

The request body varies depending on APIs. Certain APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

The following shows an example request (a request body included) of the API for [creating an IAM user](#). You can learn about request parameters and their descriptions from this example. Replace *accountid*, *username*, *******, and *email* with actual values.

- **accountid**: account ID of an IAM user
- **username**: name of an IAM user
- **email**: email of an IAM user
- *********: login password of an IAM user

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****

{
  "user": {
    "domain_id": "accountid",
    "name": "username",
    "password": "*****",
    "email": "email",
    "description": "IAM User Description"
  }
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to obtain a user token, **X-Subject-Token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- Token authentication: Requests are authenticated using tokens.
- AK/SK authentication: Requests are encrypted using AK/SK pairs. AK/SK authentication is recommended because it is more secure than token authentication.

Token Authentication

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API. You can obtain a token by calling the API for [obtaining a user token](#).

CPH is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", // IAM user name
          "password": "*****", // IAM user password
          "domain": {
            "name": "domainname" //Name of the account to which the IAM user belongs
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxx" // Project name
      }
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```


AK/SK Authentication

NOTE

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

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

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

In AK/SK authentication, you can use an AK/SK to sign requests based on the signature algorithm or using the signing SDK. For details about how to sign requests and use the signing SDK, see [API Request Signing Guide](#).

NOTE

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

3.3 Response

Status Code

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

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [7.1.2 Returned Values](#).

For example, if status code **201** is returned for calling the API used to [obtain a user token](#), the request is successful.

Response Header

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

[Figure 3-2](#) shows the response header fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-2 Header fields of the response to the request for obtaining a user token

```

connection → keep-alive

content-type → application/json

date → Tue, 12 Feb 2019 06:52:13 GMT

server → Web Server

strict-transport-security → max-age=31536000; includeSubdomains;

transfer-encoding → chunked

via → proxy A

x-content-type-options → nosniff

x-download-options → noopen

x-frame-options → SAMEORIGIN

x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5

x-subject-token
→ MIIYXQYJKoZIhvcNAQcCoIIYTCCEGoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOansiZXhwaXJlc19hdCI6IjwMTktMDItMTNUMC
fj3KJ56YgKnpVNRbW2eZ5eb78SZOkajACgkIqO1wi4JIGzrpd18LGXK5bdfq4lqHCYb8P4NaYONYeJcAgzVefYtLWT1GSO0zxKZmlQHq82HBqHdgIZO9fuEbl5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jggIFkNPQuFSOU8+uSsttVwRtnfsc+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUUVhVpxk8pxiX1wTEboX-
RzT6MUbvpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==

x-xss-protection → 1; mode=block;

```

(Optional) Response Body

The body of a response is often returned in structured format as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following is part of the response body for the API used to [obtain a user token](#).

```

{
  "token": {
    "expires_at": "2019-02-13T06:52:13.855000Z",
    "methods": [
      "password"
    ],
    "catalog": [
      {
        "endpoints": [
          {
            "region_id": "az-01",
            .....

```

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

```

{
  "error_msg": "The format of message is error",
  "error_code": "AS.0001"
}

```

In the response body, **error_code** is an error code, and **error_msg** provides information about the error.

4 Getting Started

This topic describes how to manage cloud phones by calling CPH APIs.

NOTE

The token obtained from Identity and Access Management (IAM) is valid for only 24 hours. If you want to use a token for authentication, you can cache it to avoid frequently calling the IAM API.

Involved APIs

To use token authentication, you need to obtain a token and add **X-Auth-Token** to the request header of API calls.

- API for obtaining tokens from IAM
- API for querying the cloud phone list
- API for restarting a cloud phone
- API for querying the task list

Procedure

1. Perform token authentication by following the steps provided in [3.2 Authentication](#).
2. Query the cloud phone list. Send **GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones?offset=0&limit=100**.
 - a. Add **X-Auth-Token** to the request header.
If the request succeeds, **request_id** and **phones** are returned.
If the request fails, an error code and description are returned. For details, see Error Codes.
3. Restart a cloud phone. Send **POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-restart**.
 - a. Add **X-Auth-Token** to the request header.
 - b. Specify the following parameters in the request body:

```
{  
  "phones": [  
    {  
      "phone_id": "a7f3a1c5258347d6b6f1def79e11f2bc"  
    }  
  ]  
}
```

```
}  
]  
}
```

If the request succeeds, **request_id** and **jobs** are returned.

If the request fails, an error code and description are returned. For details, see Error Codes.

4. Querying the task list. Send **GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/ jobs?request_id={request_id}**.
 - a. Add **X-Auth-Token** to the request header.

If the request succeeds, **request_id** and **jobs** are returned.

```
{  
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",  
  "jobs": [  
    {  
      "phone_id": "1234567b8bab40ffb711234cb80d0234",  
      "server_id": "1e223c8e-3ad0-4bf0-a837-bc90d4f91d01",  
      "node_id": "1e223c8e-3ad0-4bf0-a837-bc90d4f91d01",  
      "job_id": "1564567b8bab40f34711234cb80d0123",  
      "begin_time": "2017-10-25T00:00:00Z",  
      "end_time": "2017-12-26T00:00:00Z",  
      "status": 2,  
      "error_code": "",  
      "error_msg": ""  
    },  
    .....  
  ]  
}
```

If the request fails, an error code and description are returned. For details, see Error Codes.

5 Cloud Phone Server APIs

- [5.1 Cloud Phone Servers](#)
- [5.2 Bandwidth](#)
- [5.3 Cloud Phones](#)
- [5.4 Tasks](#)
- [5.5 Keys](#)
- [5.6 Encoding Services](#)
- [5.7 ADB Commands](#)
- [5.8 Tags](#)
- [5.9 Images](#)

5.1 Cloud Phone Servers

5.1.1 Querying cloud phone servers

Function

This API is used to query cloud phone servers by page and list them by creation time in descending order. You can specify **offset** and **limit**. If no cloud phone server is found, an empty list will be returned.

URI

GET /v1/{project_id}/cloud-phone/servers

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-2 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .
server_name	No	String	Specifies the name of the cloud phone server. Fuzzy query is supported.
server_id	No	String	Specifies the unique identifier of the cloud phone server.
network_version	No	String	Specifies whether the cloud phone server is a user-defined network ID. <ul style="list-style-type: none"> v1: cloud phone server on the system-defined network v2: cloud phone server on a user-defined network
phone_model_name	No	String	Specifies the cloud phone specifications name.
create_since	No	Long	Specifies the start time of the query.
create_until	No	Long	Specifies the end time of the query.
status	No	Integer	Specifies the cloud phone server status. <ul style="list-style-type: none"> 0, 1, 3, and 4: creating 2: abnormal 5: normal 8: frozen 10: stopped 11: being stopped 12: stop failed 13: starting

Request Parameters

Table 5-3 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-4 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
count	Integer	Specifies the total number of cloud phone servers.
servers	Array of Server objects	Specifies the information about the cloud phone servers.

Table 5-5 Server

Parameter	Type	Description
server_name	String	Specifies the name of the cloud phone server. The name can contain a maximum of 65 characters, including only letters, digits, underscores (_), and hyphens (-).
availability_zone	String	Specifies the AZ where the cloud phone server is deployed. For example, the name for AZ 1 in the CN East-Shanghai1 region is cn-east-3a .
server_id	String	Specifies the unique identifier of the cloud phone server. The identifier can contain a maximum of 32 bytes.
server_model_name	String	Specifies the flavor of the cloud phone server. The flavor can contain a maximum of 64 bytes.

Parameter	Type	Description
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes.
keypair_name	String	Specifies the name of the key pair used to connect to the cloud phone. The value can contain a maximum of 64 bytes.
status	Integer	Specifies the Server status. <ul style="list-style-type: none"> ● 0, 1, 3, 4: creating ● 2: abnormal ● 5: normal ● 8: frozen ● 10: powered off ● 11: powering off ● 12: Failed to shut down the VM. ● 13: being started
vpc_id	String	Specifies the ID of the VPC to which the cloud phone server belongs. If network_version is set to v1, this parameter indicates the VPC ID of the resource tenant to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the VPC ID specified by the tenant during server creation.
cidr	String	Specifies the network segment of the VPC to which the cloud phone server belongs. If network_version is set to v1, this parameter indicates the VPC CIDR of the resource tenant to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the VPC CIDR of the VPC specified by the tenant during server creation.
vpc_cidr	String	Specifies the CIDR block of the VPC where the cloud phone server is deployed. When network_version is set to v1 , this parameter indicates the CIDR block of a resource tenant VPC. When network_version is set to v2 , this parameter indicates the CIDR block of a tenant VPC.
subnet_id	String	Specifies the ID of the subnet to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the subnet ID specified when a tenant creates a server. If network_version is set to v1, this parameter indicates the subnet ID of the resource tenant to which the cloud phone server belongs.

Parameter	Type	Description
subnet_cidr	String	Specifies the subnet segment to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the CIDR of the subnet specified when a tenant creates a server. If network_version is set to v1, this parameter indicates the CIDR of the subnet of the resource tenant to which the cloud phone server belongs.
addresses	Array of Address objects	Specifies the IP address of the cloud phone server.
resource_project_id	String	Specifies the project ID of the cloud phone server.
metadata	metadata object	Specifies the order and product information.
network_version	String	Specifies whether the cloud phone server is a user-defined network. v1: cloud phone server on a non-user-defined network. v2: cloud phone server on a user-defined network. Data can be filtered by network version.
enterprise_project_id	String	Specifies the ID of the enterprise project to which the cloud phone server belongs.
create_time	String	Creation Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Update Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 5-6 Address

Parameter	Type	Description
intranet_ip	String	(Expired) Specifies the private IP address of the cloud phone server.
access_ip	String	(Expired) Specifies the public IP address of the cloud phone server.
server_ip	String	(New) Specifies the private IP address of the cloud phone server.
public_ip	String	(New) Specifies the public IP address of the cloud phone server.

Table 5-7 metadata

Parameter	Type	Description
product_id	String	Specifies the product ID, which can contain a maximum of 64 bytes.
order_id	String	Specifies the order ID, which can contain a maximum of 64 bytes.

Example Requests

Querying cloud phone servers

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers
```

Example Responses

Status code: 200

OK

```
{
  "servers": [ {
    "server_name": "cph-edgr-1",
    "server_id": "4aff349ab539452a85ac5d7442b39377",
    "server_model_name": "physical.rx1.xlarge",
    "phone_model_name": "rx1.cp.c105.d6.e5v5",
    "keypair_name": "keypair01",
    "status": 2,
    "vpc_id": "9a11e291-967f-4dd6-99bd-9be54f10583c",
    "cidr": "192.168.0.0/16",
    "vpc_cidr": "192.168.0.0/16",
    "subnet_id": "c7f9983d-03ca-4a2e-a0e1-d6bd97174669",
    "subnet_cidr": "192.168.0.0/24",
    "addresses": [ {
      "intranet_ip": "192.168.0.62",
      "server_ip": "192.168.0.62",
      "access_ip": "10.246.175.190",
      "public_ip": "10.246.175.190"
    }, {
      "intranet_ip": "192.168.0.169",
      "server_ip": "192.168.0.169",
      "access_ip": "10.246.171.245",
      "public_ip": "10.246.171.245"
    } ],
    "resource_project_id": "06a5b529fa80d28b2f53c014024bed44",
    "metadata": {
      "product_id": "00301-221014-0--0",
      "order_id": "CS21111116336E8RX",
      "charging_mode": 0
    },
    "availability_zone": "xxxxxx",
    "network_version": "v2",
    "create_time": "2021-11-11T08:33:40Z",
    "update_time": "2021-11-11T09:28:30Z"
  }, {
    "server_name": "cph-igfp-2",
    "server_id": "6d74b672216d40f39377a99e7f95aa95",
    "server_model_name": "physical.kg1m.4xlarge.cg",
    "phone_model_name": "kg1m.cg.c60.d20SSD.e1v1",
    "keypair_name": "KeyPair-2",
    "status": 2,

```

```

"vpc_id" : "12021c68-730f-41fa-9884-11c616f4c9ad",
"cidr" : "172.31.0.0/16",
"vpc_cidr" : "172.31.0.0/16",
"subnet_id" : "92cf2447-163c-4fe8-897b-fd262ab6b134",
"subnet_cidr" : "172.31.0.0/16",
"addresses" : [ {
  "intranet_ip" : "172.31.185.82",
  "access_ip" : "88.88.48.151",
  "server_ip" : "172.31.185.82",
  "public_ip" : "88.88.48.151"
} ],
"resource_project_id" : "06a5b529fa80d28b2f53c014024bed44",
"metadata" : {
  "product_id" : "OFF1635412973496623104",
  "order_id" : "CS21083015171L1CA",
  "charging_mode" : 0
},
"availability_zone" : "xxxxxx",
"network_version" : "v1",
"create_time" : "2021-08-30T07:17:40Z",
"update_time" : "2021-11-05T09:07:57Z"
} ],
"request_id" : "4336f6c61d2048c6b58b4368d9d95ecd",
"count" : 2
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.2 Querying the Details of a Cloud Phone Server

Function

This API is used to query the details of a cloud phone server based on the server ID.

URI

GET /v1/{project_id}/cloud-phone/servers/{server_id}

Table 5-8 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
server_id	Yes	String	Specifies the unique identifier of the cloud phone server.

Request Parameters

Table 5-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-10 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
server_name	String	Cloud Phone Server Name, The value can contain a maximum of 65 characters, including only letters, digits, underscores (_), and hyphens (-).
availability_zone	String	Specifies the AZ where the cloud phone server is deployed. For example, the name for AZ 1 in the CN East-Shanghai1 region is cn-east-3a .
server_id	String	Specifies the unique identifier of the cloud phone server. The identifier can contain a maximum of 32 bytes.
server_model_name	String	Specifies the flavor of the cloud phone server. The flavor can contain a maximum of 64 bytes.
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes.
keypair_name	String	Specifies the name of the key pair used to connect to a cloud phone. The name can contain a maximum of 64 bytes.

Parameter	Type	Description
status	Integer	Specifies the Server status. <ul style="list-style-type: none"> ● 0, 1, 3, 4: creating ● 2: abnormal ● 5: normal ● 8: frozen ● 10: powered off ● 11: powering off ● 12: Failed to shut down the VM. ● 13: being started
vpc_id	String	Specifies the ID of the VPC to which the cloud phone server belongs. If network_version is set to v1, this parameter indicates the VPC ID of the resource tenant to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the VPC ID specified by the tenant during server creation.
cidr	String	Specifies the network segment of the VPC to which the cloud phone server belongs. If network_version is set to v1, this parameter indicates the VPC CIDR of the resource tenant to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the VPC CIDR of the VPC specified by the tenant during server creation.
vpc_cidr	String	Specifies the network segment of the VPC to which the cloud phone server belongs. If network_version is set to v1, this parameter indicates the VPC CIDR of the resource tenant to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the VPC CIDR of the VPC specified by the tenant during server creation.
subnet_id	String	Specifies the ID of the subnet to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the subnet ID specified when a tenant creates a server. If network_version is set to v1, this parameter indicates the subnet ID of the resource tenant to which the cloud phone server belongs.

Parameter	Type	Description
subnet_cidr	String	Specifies the network segment of the subnet to which the cloud phone server belongs. If network_version is set to v2, this parameter indicates the CIDR of the subnet specified when a tenant creates a server. If network_version is set to v1, this parameter indicates the CIDR of the subnet of the resource tenant to which the cloud phone server belongs.
resource_project_id	String	Specifies the project ID of the cloud phone server.
metadata	metadata object	Specifies the order and product information.
addresses	Array of Address objects	Specifies the IP address of the cloud phone server.
band_widths	Array of Bandwidth objects	Specifies the structure array of the cloud phone server bandwidth information.
volumes	Array of Volume objects	Specifies the structure array of the cloud phone server volume information.
share_volume_info	share_volume_info object	Information about the shared storage of the cloud phone server.
network_version	String	Specifies whether the cloud phone server is a user-defined network. v1: cloud phone server on a non-user-defined network. v2: cloud phone server on a user-defined network. Data can be filtered by network version.
enterprise_project_id	String	Specifies the ID of the enterprise project to which the cloud phone server belongs.
security_groups	Array of strings	Specifies the security group bound to the extension NIC of the server. Indicates the server of the system-defined network. An empty list is returned for this field.
create_time	String	Creation Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Update Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 5-11 metadata

Parameter	Type	Description
product_id	String	Specifies the product ID, which can contain a maximum of 64 characters.
order_id	String	Specifies the order ID, which can contain a maximum of 64 characters.

Table 5-12 Address

Parameter	Type	Description
intranet_ip	String	(Expired) Specifies the private IP address of the cloud phone server.
access_ip	String	(Expired) Specifies the public IP address of the cloud phone server.
server_ip	String	(New) Specifies the private IP address of the cloud phone server.
public_ip	String	(New) Specifies the public IP address of the cloud phone server.

Table 5-13 Bandwidth

Parameter	Type	Description
band_width_name	String	Specifies the bandwidth name of the cloud phone server.
band_width_id	String	Specifies the unique identifier of the bandwidth used by the cloud phone server.
band_width_size	Integer	Specifies the bandwidth size of the cloud phone server.
band_width_charge_mode	Integer	Specifies the billing mode of the cloud phone server bandwidth. <ul style="list-style-type: none"> 0: bandwidth (charged by bandwidth) 1: traffic (charged by traffic)
band_width_share_type	Integer	Specifies the bandwidth type of the cloud phone server. <ul style="list-style-type: none"> 0: per, exclusive bandwidth 1: whole, shared bandwidth

Parameter	Type	Description
create_time	String	Time when the bandwidth is created, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Bandwidth Update Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 5-14 Volume

Parameter	Type	Description
volume_name	String	Specifies the disk name of the cloud phone server.
volume_id	String	Specifies the unique identifier of the cloud phone server disk.
volume_size	Integer	Specifies the disk size of the cloud phone server, in GiB.
volume_type	String	Specifies the disk type of the cloud phone server.
create_time	String	Time when the hard disk is created, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Hard Disk Update Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 5-15 share_volume_info

Parameter	Type	Description
volume_type	String	Specifies the type of the shared storage disk.
size	Integer	Size of the shared storage, in GiB.
version	Integer	Shared storage version: <ul style="list-style-type: none"> ● 0: shared storage 1.0 ● 1: shared storage 2.0

Example Requests

Querying the details of a cloud phone server

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/88b8449b896f3a4f0ad57222dd91909

Example Responses

Status code: 200

OK

```
{
  "server_name": "cph-418540-1620-40-old-1",
  "availability_zone": "xxxxxx",
  "addresses": [ {
    "public_ip": "10.246.xxx.xxx",
    "server_ip": "172.31.22.245",
    "intranet_ip": "172.31.22.245",
    "access_ip": "10.246.xxx.xxx"
  } ],
  "metadata": {
    "product_id": "OFFI451249149551403012",
    "order_id": "CS2007271727F9XJE"
  },
  "create_time": "2020-01-01T00:00:00Z",
  "vpc_id": "12021c68-730f-41fa-9884-11c616f4c9ad",
  "phone_model_name": "kg1.cg.c40.d30SSD.e1v1.old",
  "subnet_cidr": "172.31.0.0/16",
  "keypair_name": "KeyPair-1230",
  "resource_project_id": "06a5b529fa80d28b2f53c014024bed44",
  "server_id": "6edb89150bc742aa81fc8ac4ff047297",
  "server_model_name": "physical.kg1.4xlarge.cg",
  "update_time": "2020-01-01T00:00:00Z",
  "cidr": "172.31.0.0/16",
  "vpc_cidr": "172.31.0.0/16",
  "subnet_id": "5784d2fe-fefd-42f0-a7f1-e88454d8bc0f",
  "request_id": "91d5bf46a817466daa25fc5824ab9717",
  "status": 5,
  "network_version": "v1",
  "security_groups": [ ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.3 Querying Flavors of Cloud Phone Servers

Function

This API is used to query flavors of cloud phone servers.

URI

GET /v1/{project_id}/cloud-phone/server-models

Table 5-16 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-17 Query Parameters

Parameter	Mandatory	Type	Description
product_type	No	Integer	Product type. <ul style="list-style-type: none"> 0: cloud phone 1: cloud mobile game

Request Parameters

Table 5-18 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-19 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
server_models	Array of ServerModel objects	Specifies flavors of cloud phone servers.

Table 5-20 ServerModel

Parameter	Type	Description
server_model_name	String	Specifies the flavor of the cloud phone server. The flavor can contain a maximum of 64 bytes.
server_type	String	Specifies the model of the Cloud Phone server, for example, Hi1616. The value can contain a maximum of 32 bytes.
cpu	Integer	Specifies the number of CPU cores of the cloud phone server.
memory	Integer	Specifies the memory size (GB) of the cloud phone server.
extend_spec	extend_spec object	Specifies the attribute description of the Cloud Phone server. The value can contain a maximum of 512 bytes.
product_type	Integer	Product type. <ul style="list-style-type: none"> 0: cloud phone 1: cloud mobile game
free_size	Integer	Free disk quota of the server, in GiB.

Table 5-21 extend_spec

Parameter	Type	Description
cpu	String	Specifies the CPU type of the cloud phone server.
memory	String	Specifies the memory type of the cloud phone server.
disk	String	Specifies the disk type of the cloud phone server.
network_interface	String	Specifies the network type of the cloud phone server.
gpu	String	Specifies the GPU type of the cloud phone server.
bms_flavor	String	Specifies the Bare Metal Server (BMS) flavor of the cloud phone server.
gpu_count	Integer	Specifies the GPU quantity of the cloud phone server.
numa_count	Integer	Specifies the non-uniform memory access (NUMA) quantity of the cloud phone server.

Example Requests

Querying flavors of cloud phone servers

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/server-models

Example Responses

Status code: 200

OK

```
{
  "request_id" : "4d4aefaa7b1d4a2bb5637e9d5631342f",
  "server_models" : [ {
    "server_model_name" : "physical.rx1.xlarge",
    "server_type" : "Hi1616",
    "cpu" : 64,
    "memory" : 256,
    "extend_spec" : {
      "cpu" : "Hi1616(2*32Core*2.4GHz)",
      "memory" : "DDR4 RAM",
      "disk" : "2*1.2T SAS + 800G SSD",
      "network_interface" : "2 x 2*10GE",
      "gpu" : "3*WX5100",
      "bms_flavor" : "physical.rg1.xlarge.cph.ondemand",
      "gpu_count" : 3,
      "numa_count" : 4
    },
    "product_type" : 0,
    "free_size" : 0
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.4 Purchasing a Cloud Phone Server

Function

When purchasing a cloud phone server, you can reuse existing VPCs, shared bandwidth, and other resources that you have purchased.

- Ensure that VPCs are available. You need to specify an existing VPC when creating a cloud phone server, or the server cannot be created. In addition, ensure that your account has at least the **VPC ReadOnlyAccess** permissions so that VPC resources can be selected.

- Ensure that your account has successfully created key pairs and has the **ecs:serverKeypairs:list** fine-grained permissions for querying the key pairs. Creating a key pair requires the **ecs:serverKeypairs:create** permissions.
- Ensure that an agency with **Agency Name** set to **cph_admin_trust**, **Agency Type** to **Cloud service**, and cloud service set to **Cloud Phone Host (CPH)** is available. The agency has the **VPC FullAccess** permissions and allows CPH to call cloud services. If the agency creation or permission verification fails, the cloud phone server will fail to be created.
- Ensure that your account has the **Security Administrator** permissions.
- Ensure that your quotas for cloud phone servers and networking resources have not been reached. If the quota verification fails, the cloud phone server will fail to be created.

URI

POST /v2/{project_id}/cloud-phone/servers

Table 5-22 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-23 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-24 Request body parameters

Parameter	Mandatory	Type	Description
server_name	Yes	String	Specifies the name of the cloud phone server. The name can contain a maximum of 60 characters, including only letters, digits, underscores (_), and hyphens (-). If you purchase multiple cloud phone servers at a time, the system automatically adds a sequence number suffix to the end of each server name. For example, if you set server_name to server-1 , the name of the first cloud phone server will be server-1-0001 , and the name of the second cloud phone server will be server-1-0002 .
server_model_name	Yes	String	Specifies the flavor of the cloud phone server. The flavor can contain a maximum of 64 bytes.
phone_model_name	Yes	String	Specifies the cloud phone flavor, which contains a maximum of 64 bytes.
image_id	Yes	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes.
count	Yes	Integer	Specifies the number of cloud phone servers that can be purchased. A maximum of 10 cloud phone servers can be purchased.
keypair_name	No	String	Specifies the key pair name. The name can contain a maximum of 64 bytes and is used for logging in to the cloud phone through ADB.
ports	No	Array of Port objects	Specifies the application port enabled on the cloud phone. The CPH service forwards requests to and from the port.
extend_param	Yes	extend_param object	Specifies parameters related to the billing mode.

Parameter	Mandatory	Type	Description
tenant_vpc_id	Yes	String	Specifies the ID of the VPC you select for the cloud phone server to be created. The VPC ID is in UUID format.
nics	Yes	Array of Nic objects	Specifies the structure of the NIC you customized, which defines the NIC information of the cloud phone server to be created.
public_ip	Yes	public_ip object	Indicates the EIP structure customized by the tenant. Specifies the method of configuring the EIP of the ECS, Automatically assigned. You need to specify the information about the new EIP. If you use an existing EIP, you need to specify the EIP ID that has been [created] (tag:fcs) [purchased] (tag:hws,hws_hk,cmcc).
phone_count_per_ip	No	Integer	Number of mobile phones that share a VIP. The default value is the number of mobile phones, indicating that all mobile phones share one VIP. The value ranges from 1 to the number of mobile phone specifications.
phone_data_volume	No	phone_data_volume object	Mobile phone disk structure. This parameter is mandatory for 2.0 specifications.
server_share_data_volume	No	server_share_data_volume object	Shared storage disk structure. This parameter is optional for 2.0 specifications.
band_width	Yes	band_width object	Specifies the bandwidth used by the cloud phone.
availability_zone	No	String	Specifies the AZ where the cloud phone server to be created is located. You need to specify the AZ name. For example, the name for AZ 1 in the CN East-Shanghai1 region is cn-east-3a .

Table 5-25 Port

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the application port name, which can contain a maximum of 16 bytes. The key service name cannot be adb or vnc .
listen_port	Yes	Integer	Specifies the port number, which ranges from 10000 to 50000.
internet_accessible	Yes	String	Specifies whether internet_accessible is enabled. When internet_accessible is set to true (case insensitive), you can access cloud phones over this port from the Internet. Otherwise, you cannot access cloud phones over this port from the Internet.

Table 5-26 extend_param

Parameter	Mandatory	Type	Description
charging_mode	Yes	Integer	Billing mode, -0: duration-based [- 1: pay-per-use](tags: fcs)
period_type	Yes	Integer	Specifies the subscription period. <ul style="list-style-type: none"> • 2: month • 3: year
period_num	Yes	Integer	Number of subscription periods. If the subscription period is a month, the value ranges from 1 to 9. If the subscription period is a year, the value ranges from 1 to 10.
is_auto_pay	No	Integer	Specifies whether to automatically pay fees. By default, automatic payment is disabled. <ul style="list-style-type: none"> • 1: automatic payment • 0: no

Parameter	Mandatory	Type	Description
is_auto_renew	No	Integer	Specifies whether auto renew is enabled. By default, auto renewal is disabled. <ul style="list-style-type: none"> • 1: automatic renewal • 0: no
enterprise_project_id	No	String	Specifies the enterprise project ID. If this parameter is not specified or is set to 0 , resources will be bound to the default enterprise project.

Table 5-27 Nic

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	Specifies the ID of the subnet you specified, which is the subnet where you will deploy your cloud phone server. The value must be the ID of the subnet created in the VPC (tenant_vpc_id) and in UUID format.
ipv6_enable	No	Boolean	Specifies whether the NIC supports IPv6 addresses. If this parameter is set to true , the NIC supports IPv6 addresses.
ipv6_bandwidth	No	ipv6_bandwidth object	Specifies the shared bandwidth bound to the NIC IPv6 addresses. For details, see the ipv6_bandwidth data structure.

Table 5-28 ipv6_bandwidth

Parameter	Mandatory	Type	Description
bandwidth_id	Yes	String	Specifies the ID of the shared bandwidth bound to the NIC IPv6 addresses.

Table 5-29 public_ip

Parameter	Mandatory	Type	Description
ids	No	Array of strings	Specifies the ID of the existing EIP selected for creating the cloud phone server. Only one existing EIP ID can be specified.
eip	No	eip object	Specifies the parameter for an EIP that will be automatically assigned. For details, see the EIP structure.
count	No	Integer	Number of EIPs. The default value is 1. If no EIP is required, set this parameter to 0. The value ranges from 0 to the number of mobile phone IP addresses.

Table 5-30 eip

Parameter	Mandatory	Type	Description
type	Yes	String	EIP type. <ul style="list-style-type: none"> 5_telcom: China Telecom 5_union: China Unicom 5_bgp: dynamic BGP 5_sbgp: static BGP

Table 5-31 phone_data_volume

Parameter	Mandatory	Type	Description
volume_type	Yes	String	Specifies the disk type. Only the following types are supported: <ul style="list-style-type: none"> SSD GPSSD
size	Yes	Integer	Specifies the cloud phone disk size, in GiB. The value ranges from 10 GiB to 32,768 GiB.

Table 5-32 server_share_data_volume

Parameter	Mandatory	Type	Description
volume_type	Yes	String	Specifies the disk type. Only the following types are supported: <ul style="list-style-type: none"> SSD GPSSD
size	Yes	Integer	Specifies the shared storage size on the cloud phone server, in GiB. The value ranges from 10 GiB to 32,768 GiB.

Table 5-33 band_width

Parameter	Mandatory	Type	Description
band_width_id	No	String	Specifies the unique identifier of the bandwidth used by the cloud phone server.
band_width_size	No	Integer	Specifies the bandwidth size of the cloud phone server.
band_width_charge_mode	Yes	Integer	Specifies the billing mode of the cloud phone server bandwidth. <ul style="list-style-type: none"> 0: bandwidth (charged by bandwidth) 1: traffic (charged by traffic)
band_width_share_type	Yes	Integer	Specifies the bandwidth type of the cloud phone server. <ul style="list-style-type: none"> 0: per, exclusive bandwidth 1: whole, shared bandwidth

Response Parameters

Status code: 200

Table 5-34 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.

Parameter	Type	Description
order_id	String	Specifies the order ID, which can contain a maximum of 64 bytes.
product_id	String	Specifies the product ID, which can contain a maximum of 64 bytes.
server_ids	Array of strings	Specifies the server ID list.

Example Requests

Purchasing a cloud phone server

POST https://{CPH Endpoint}/v2/{project_id}/cloud-phone/servers

```
{
  "server_name": "cph-kertus-1110",
  "server_model_name": "physical.kg1.4xlarge.cp",
  "phone_model_name": "kg1.cp.c20.d64SSD.e1v1",
  "image_id": "20060220200717f201120a2300000e91",
  "count": 1,
  "keypair_name": "keypair",
  "ports": [ {
    "name": "myServer1",
    "listen_port": 20000,
    "internet_accessible": "false"
  }, {
    "name": "myServer2",
    "listen_port": 20001,
    "internet_accessible": "true"
  } ],
  "extend_param": {
    "charging_mode": 0,
    "period_type": 2,
    "period_num": 1,
    "is_auto_pay": 0
  },
  "tenant_vpc_id": "fca063f6-b942-42a8-9004-e5545f58d6a2",
  "nics": [ {
    "subnet_id": "f1cbfc37-eb42-4357-a0ec-9e4f11950908"
  } ],
  "public_ip": {
    "eip": {
      "type": "5_bgp"
    }
  },
  "band_width": {
    "band_width_share_type": 0,
    "band_width_size": 300,
    "band_width_charge_mode": 1
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "1564567b8bab40f34711234cb80d8574",
}
```

```
"order_id" : "CS1710111105S8IPB",
"product_id" : "00301-25217-0--0",
"server_ids" : [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.5 Restarting Cloud Phone Servers

Function

This API is used to restart cloud phone servers.

URI

POST /v1/{project_id}/cloud-phone/servers/batch-restart

Table 5-35 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-36 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-37 Request body parameters

Parameter	Mandatory	Type	Description
server_ids	Yes	Array of strings	Specifies the ID list of cloud phone servers.

Response Parameters

Status code: 200

Table 5-38 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Specifies the task list.

Table 5-39 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Restarting cloud phone servers listed in **server_ids**

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/batch-restart
{
  "server_ids" : [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf",
}
```

```
"jobs" : [ {
  "server_id" : "1234567b8bab40ffb711234cb80d0234",
  "job_id" : "1564567b8bab40f34711234cb80d0123"
}, {
  "server_id" : "1678567b8bab40f93711234cb80d0764",
  "job_id" : "1564567b8bab40f34711234cb80d5678"
} ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.6 Changing the Cloud Phone Server for a Cloud Phone

Function

This API is used to change the cloud phone server for a cloud phone. After the change, the cloud phone server name, ID, AZ, and billing mode are the same as those of the original cloud phone server. During the change, a new cloud phone is created on the new cloud phone server, and the user data on the original cloud phone is not retained. The cloud phone server change requires additional resources and resource quotas.

URI

POST /v2/{project_id}/cloud-phone/servers/{server_id}/change

Table 5-40 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
server_id	Yes	String	Specifies the unique identifier of the cloud phone server.

Request Parameters

Table 5-41 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-42 Request body parameters

Parameter	Mandatory	Type	Description
phone_model_name	Yes	String	Specifies the cloud phone flavor, which contains a maximum of 64 bytes.
image_id	Yes	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes.
keypair_name	No	String	Specifies the key pair name. The name can contain a maximum of 64 bytes and is used for logging in to the cloud phone through ADB.
ports	No	Array of Port objects	Specifies the application port enabled on the cloud phone. The CPH service forwards requests to and from the port.
extend_param	No	extend_param object	Extended field
tenant_vpc_id	Yes	String	Specifies the ID of the VPC you select for the cloud phone server to be created. The VPC ID is in UUID format.
nics	Yes	Array of Nic objects	Specifies the structure of the NIC you customized, which defines the NIC information of the cloud phone server to be created.

Parameter	Mandatory	Type	Description
public_ip	Yes	public_ip object	Specifies the structure of the EIP you specified. To bind an EIP to a cloud phone server, you can: Let the system automatically assign an EIP. You need to specify the EIP type. Use an existing EIP by specifying its ID.
phone_count_per_ip	No	Integer	Number of mobile phones that share a VIP. The default value is the number of mobile phones, indicating that all mobile phones share one VIP. The value ranges from 1 to the number of mobile phone specifications.
phone_data_volume	No	phone_data_volume object	Mobile phone disk structure. This parameter is mandatory for 2.0 specifications.
server_share_data_volume	No	server_share_data_volume object	Shared storage disk structure. This parameter is optional for 2.0 specifications.
band_width	Yes	band_width object	Specifies the bandwidth used by the cloud phone.

Table 5-43 Port

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the application port name, which can contain a maximum of 16 bytes. The key service name cannot be adb or vnc .
listen_port	Yes	Integer	Specifies the port number, which ranges from 10000 to 50000.

Parameter	Mandatory	Type	Description
internet_accessible	Yes	String	Specifies whether internet_accessible is enabled. When internet_accessible is set to true (case insensitive), you can access cloud phones over this port from the Internet. Otherwise, you cannot access cloud phones over this port from the Internet.

Table 5-44 extend_param

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Enterprise project ID. If this parameter is not specified or is set to 0, resources will be bound to the default enterprise project.

Table 5-45 Nic

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	Specifies the ID of the subnet you specified, which is the subnet where you will deploy your cloud phone server. The value must be the ID of the subnet created in the VPC (tenant_vpc_id) and in UUID format.
ipv6_enable	No	Boolean	Specifies whether the NIC supports IPv6 addresses. If this parameter is set to true , the NIC supports IPv6 addresses.
ipv6_bandwidth	No	ipv6_bandwidth object	Specifies the shared bandwidth bound to the NIC IPv6 addresses. For details, see the ipv6_bandwidth data structure.

Table 5-46 ipv6_bandwidth

Parameter	Mandatory	Type	Description
band_width_id	Yes	String	Specifies the ID of the shared bandwidth bound to the NIC IPv6 addresses.

Table 5-47 public_ip

Parameter	Mandatory	Type	Description
ids	No	Array of strings	Specifies the ID of the existing EIP selected for creating the cloud phone server. Only one existing EIP ID can be specified.
eip	No	eip object	Specifies the parameter for an EIP that will be automatically assigned. For details, see the EIP structure.
count	No	Integer	Number of EIPs. The default value is 1. If no EIP is required, set this parameter to 0. The value ranges from 0 to the number of mobile phone IP addresses.

Table 5-48 eip

Parameter	Mandatory	Type	Description
type	Yes	String	EIP type. <ul style="list-style-type: none">• 5_telcom: China Telecom• 5_union: China Unicom• 5_bgp: dynamic BGP• 5_sbgp: static BGP

Table 5-49 phone_data_volume

Parameter	Mandatory	Type	Description
volume_type	Yes	String	Specifies the disk type. Only the following types are supported: <ul style="list-style-type: none"> • SSD • GPSSD
size	Yes	Integer	Specifies the cloud phone disk size, in GiB. The value ranges from 10 GiB to 32,768 GiB.

Table 5-50 server_share_data_volume

Parameter	Mandatory	Type	Description
volume_type	Yes	String	Specifies the disk type. Only the following types are supported: <ul style="list-style-type: none"> • SSD • GPSSD
size	Yes	Integer	Specifies the shared storage size on the cloud phone server, in GiB. The value ranges from 10 GiB to 32,768 GiB.

Table 5-51 band_width

Parameter	Mandatory	Type	Description
band_width_id	No	String	Specifies the unique identifier of the bandwidth used by the cloud phone server.
band_width_size	No	Integer	Specifies the bandwidth size of the cloud phone server.
band_width_charge_mode	Yes	Integer	Specifies the billing mode of the cloud phone server bandwidth. <ul style="list-style-type: none"> • 0: bandwidth (charged by bandwidth) • **1: traffic (charged by traffic)

Parameter	Mandatory	Type	Description
band_width_share_type	Yes	Integer	Specifies the bandwidth type of the cloud phone server. <ul style="list-style-type: none"> 0: per, exclusive bandwidth 1: whole, shared bandwidth

Response Parameters

Status code: 200

Table 5-52 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
server_id	String	Specifies the server ID.
job_id	String	Task ID

Example Requests

Changing the cloud phone server for a cloud phone

POST https://{CPH Endpoint}/v2/{project_id}/cloud-phone/servers/{server_id}/change

```
{
  "phone_model_name": "kg1.cp.c20.d64SSD.e1v1",
  "image_id": "20060220200717f201120a2300000e91",
  "keypair_name": "keypair",
  "ports": [ {
    "name": "myServer1",
    "listen_port": 20000,
    "internet_accessible": "false"
  }, {
    "name": "myServer2",
    "listen_port": 20001,
    "internet_accessible": "true"
  } ],
  "extend_param": {
    "enterprise_project_id": "0"
  },
  "tenant_vpc_id": "fca063f6-b942-42a8-9004-e5545f58d6a2",
  "nics": [ {
    "subnet_id": "f1cbfc37-eb42-4357-a0ec-9e4f11950908"
  } ],
  "public_ip": {
    "eip": {
      "type": "5_bgp"
    }
  },
  "band_width": {
    "band_width_share_type": 0,
    "band_width_size": 300,
    "band_width_charge_mode": 1
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "1564567b8bab40f34711234cb80d8574",
  "server_id" : "1234567b8bab40ffb711234cb80d0234",
  "job_id" : "3648acdc113a44d39a95f95bf3b8b01e"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.7 Pushing Shared Storage Files

Function

This API is used to push files to the shared storage space. This function is available only on cloud phones that support storage sharing. Before calling this API, ensure that the CPH service has been authorized to operate OBS buckets. For details, see [Delegating CPH to Operate OBS Buckets](#).

URI

POST /v1/{project_id}/cloud-phone/phones/share-files

Table 5-53 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-54 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-55 Request body parameters

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	Specifies the valid name of an OBS bucket, which can contain 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.). This parameter is only used by the API for pushing shared storage.
object_path	Yes	String	Valid OBS object path. The maximum length is 1024 characters. The value can contain only uppercase letters, lowercase letters, digits, dots (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), and equal signs (=). Only .tar files can be pushed. The file is pushed to the cloud phone based on the directory structure of the decompressed .tar file. Currently, only the /data and /cache directories can be pushed. This parameter is used only by the interface for pushing shared storage.
server_ids	Yes	Array of strings	Specifies the ID list of cloud phone servers.

Response Parameters

Status code: 200

Table 5-56 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Specifies the task list.

Table 5-57 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Pushing shared storage files from the same OBS bucket to cloud servers listed in **server_ids**

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/share-files
```

```
{
  "bucket_name": "bucketA",
  "object_path": "my_apps/test.tar",
  "server_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "server_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "server_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```


Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.8 Querying Shared Storage Files

Function

This API is used to query files in a specified path of shared storage. This function is supported only by cloud phones that support shared storage.

URI

GET /v1/{project_id}/cloud-phone/servers/share-files

Table 5-58 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-59 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .
server_ids	Yes	String	Specifies the ID list of cloud phone servers. Use commas (,) to separate IDs.

Parameter	Mandatory	Type	Description
path	Yes	String	Name of the directory to be queried, The value can contain uppercase letters, lowercase letters, digits, periods (.), plus signs (+), hyphens (-), underscores (_), slashes (/), and equal signs (=). The value must start with a slash (/) and cannot contain only slashes (/). The value cannot contain ../ or //. Example: / data/data

Request Parameters

Table 5-60 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-61 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Specifies the task list.

Table 5-62 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Querying the content in the **/data/data** directory of servers

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/share-files?path=/data/data&server_ids=xxxxxxx,xxxxxxx&limit=100&offset=0
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "server_id": "203a7243181646b190047ade6bfd882d",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.9 Deleting Shared Storage Files

Function

This API is used to delete shared storage files from the shared storage directory. This function is available only on cloud phones that support shared storage.

URI

POST /v1/{project_id}/cloud-phone/phones/share-files

Table 5-63 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-64 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-65 Request body parameters

Parameter	Mandatory	Type	Description
server_ids	Yes	Array of strings	Specifies the ID list of cloud phone servers.
file_paths	Yes	Array of strings	Absolute path of the shared storage file to be deleted. The value starts with a slash (/) and contains a maximum of 4096 bytes. Currently, only uppercase letters, lowercase letters, digits, periods (.), slashes (/), hyphens (-), spaces, underscores (_), and equal signs (=) are supported. Chinese characters are not supported. The path cannot contain..upper-level directory path to prevent cross-directory attacks.

Response Parameters

Status code: 200

Table 5-66 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Specifies the task list.

Table 5-67 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Deleting a shared storage file from the shared storage directory (This function is available only on cloud phones that support shared storage.)

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/share-files
```

```
{
  "file_paths": [ "/data/app", "/data/data/test.apk" ],
  "server_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "server_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "server_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.10 Pushing Shared Applications

Function

This API is used to push .tar files of applications to the shared storage space. This function is available only on cloud phone servers that support application sharing. Before calling this API, ensure that the CPH service has been authorized to operate OBS buckets. For details, see [Delegating CPH to Operate OBS Buckets](#).

Note: Do not push application packages exported from a cloud phone of a later version to the cloud phone server of an earlier version. Or, there may be compatibility issues. If you use a cloud phone server of the physical.kg1.4xlarge.a.cp specifications, ensure that the available shared storage space is greater than twice the size of the TAR package.

URI

POST /v1/{project_id}/cloud-phone/phones/share-apps

Table 5-68 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-69 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-70 Request body parameters

Parameter	Mandatory	Type	Description
package_name	Yes	String	Specifies the valid name of an application package.
pre_install_app	No	Integer	Indicates whether an application is pre-installed. <ul style="list-style-type: none"> • 1: pre-installed • 0: no (default)
bucket_name	Yes	String	Specifies the valid name of an OBS bucket, which can contain 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	Yes	String	A valid OBS object key can contain a maximum of 1024 characters. The value can contain only uppercase letters, lowercase letters, digits, dots (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), and equal signs (=). Only .tar files can be pushed. The file is pushed to the cloud phone based on the directory structure of the decompressed .tar file.
server_ids	Yes	Array of strings	Specifies the ID list of cloud phone servers.

Response Parameters

Status code: 200

Table 5-71 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Specifies the task list.

Table 5-72 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Pushing applications from the same OBS bucket to all servers in the server list

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/share-apps

```
{
  "package_name": "com.miniteck.miniworld",
  "bucket_name": "bucket",
  "object_path": "my_apps/test.tar",
  "server_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "server_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "server_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.11 Deleting a Shared Application

Function

This API is used to delete a shared application from the storage directory of shared applications. This function is available only on cloud phones that support shared applications.

URI

DELETE /v1/{project_id}/cloud-phone/phones/share-apps

Table 5-73 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-74 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-75 Request body parameters

Parameter	Mandatory	Type	Description
package_name	Yes	String	Valid package name of the shared application to be deleted. The value contains a maximum of 128 bytes. The package name can contain only uppercase letters, lowercase letters, digits, underscores (<code>_</code>), and periods (<code>.</code>). <i>The package name cannot start with a digit or underscore (<code>_</code>) or end with a period (<code>.</code>).</i> The package name must contain at least one period (<code>.</code>).
server_ids	Yes	Array of strings	Specifies the ID list of cloud phone servers.

Response Parameters

Status code: 200

Table 5-76 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Specifies the task list.

Table 5-77 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Deleting the Mini World from cloud phone servers

```
DELETE https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/share-apps

{
  "package_name": "com.miniteck.miniworld",
  "server_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "server_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "server_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.12 Changing the Flavor of a Cloud Phone Server

Function

This API is used to change the flavor of a cloud phone server. The target flavor must be a special one. After the API is successfully invoked, the flavor change will be completed in about 2 minutes. On the **My Orders** page of the management console, you can view that the order status is **Successful**. Also, if you query the server details on the **My Orders** page, you can see that the new flavor has been applied.

URI

POST /v1/{project_id}/cloud-phone/servers/change-server-model

Table 5-78 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-79 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-80 Request body parameters

Parameter	Mandatory	Type	Description
server_id	Yes	String	Specifies the unique identifier of the cloud phone server. You can modify the specifications of only specified servers.
server_model_name	Yes	String	Specifies the specifications of the target cloud phone server. The value contains a maximum of 64 bytes. Specifications can be switched only between servers of the same generation.
phone_model_name	Yes	String	Specifies the target flavor of the cloud phone. The cloud phone quantity must be the same as that before the change. The cloud phone flavor must match the flavor of the target cloud phone server.
extend_param	No	extend_param object	Specifies the purchase mode parameter.

Table 5-81 extend_param

Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	Indicates whether to enable automatic payment. By default, automatic payment is disabled. If the specifications are upgraded, you need to pay extra fees. If the specifications are degraded, you will be automatically refunded. <ul style="list-style-type: none"> 1: automatic payment 0: no

Response Parameters

Status code: 200

Table 5-82 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
order_id	String	Specifies the order ID. The value can contain a maximum of 64 characters.
product_id	String	Specifies the product ID, which can contain a maximum of 64 characters.

Example Requests

Changing flavors of cloud phone servers

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/change-server-model
{
  "server_id" : "a176d8625981453bbafbc0a321d8d6a1",
  "server_model_name" : "physical.rx1.xlarge.special",
  "phone_model_name" : "rx1.cp.sp.c105.d8.e5v5",
  "extend_param" : {
    "is_auto_pay" : 1
  }
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "1564567b8bab40f34711234cb80d8574",
```

```
"order_id" : "CS1710111105S8IPB",
"product_id" : "00301-25217-0--0"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.1.13 Modifying the Name of a Cloud Phone Server

Function

This API is to modify the name of a cloud phone server based on its ID.

URI

PUT /v1/{project_id}/cloud-phone/servers/{server_id}

Table 5-83 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
server_id	Yes	String	Specifies the unique identifier of the cloud phone server.

Request Parameters

Table 5-84 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-85 Request body parameters

Parameter	Mandatory	Type	Description
server_name	Yes	String	Specifies the cloud phone server name, which can contain a maximum of 60 characters, including letters, digits, hyphens (-), and underscores (_).

Response Parameters

Status code: 200

Table 5-86 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

Example Requests

Modifying the name of a cloud phone server

```
PUT https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/1564567b8bab40f34711234cb80d8574
{
  "server_name" : "newName"
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "135d898e69344a13925a0899e1a4ac53"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.2 Bandwidth

5.2.1 Querying Bandwidth Information

Function

This API is used to query the bandwidth used by a cloud phone. This API applies only to cloud phone servers that use system-defined networks.

URI

GET /v1/{project_id}/cloud-phone/bandwidths

Table 5-87 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-88 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .

Request Parameters

Table 5-89 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-90 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
band_widths	Array of Bandwidth objects	Indicates the bandwidth information.

Table 5-91 Bandwidth

Parameter	Type	Description
band_width_name	String	Specifies the bandwidth name of the cloud phone server.
band_width_id	String	Specifies the unique identifier of the bandwidth used by the cloud phone server.
band_width_size	Integer	Specifies the bandwidth size of the cloud phone server.
band_width_charge_mode	Integer	Specifies the billing mode of the cloud phone server bandwidth. <ul style="list-style-type: none"> 0: bandwidth (charged by bandwidth) 1: traffic (charged by traffic)

Parameter	Type	Description
band_width_share_type	Integer	Specifies the bandwidth type of the cloud phone server. <ul style="list-style-type: none"> 0: per, exclusive bandwidth 1: whole, shared bandwidth
create_time	String	Time when the bandwidth is created, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Bandwidth Update Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Example Requests

Querying the bandwidth in use

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/bandwidths

Example Responses

Status code: 200

OK

```
{
  "request_id" : "70bb40bef50e4a14b116a5a527fd7432",
  "band_widths" : [ {
    "band_width_id" : "70bb40-bef5-0e4a-14b116-a5a527fd7432",
    "band_width_name" : "BANDWIDTH_70bb40bef50e4a14b116a5a527fd7432",
    "band_width_size" : 300,
    "band_width_share_type" : 1,
    "create_time" : "2017-10-10T00:00:00Z",
    "update_time" : "2018-11-12T00:00:00Z"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.2.2 Modifying a Shared Bandwidth

Function

This API is used to modify the bandwidth used by a cloud phone. This API applies only to cloud phone servers that use system-defined networks.

URI

PUT /v1/{project_id}/cloud-phone/bandwidths/{band_width_id}

Table 5-92 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
band_width_id	Yes	String	Specifies the bandwidth ID.

Request Parameters

Table 5-93 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-94 Request body parameters

Parameter	Mandatory	Type	Description
band_width_size	Yes	Integer	<p>Specifies the increment step of a bandwidth.</p> <ul style="list-style-type: none"> • ≤ 300 Mbit/s: The default minimum increment step is 1 Mbit/s. • 300 Mbit/s to 1,000 Mbit/s: The default minimum increment step is 50 Mbit/s. • NOTE 1,000 Mbit/s: The default minimum increment step is 500 Mbit/s.

Response Parameters

Status code: 200

Table 5-95 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

Example Requests

Changing the bandwidth size to 350 Mbit/s

```
PUT https://{CPH Endpoint}/v1/{project_id}/cloud-phone/bandwidths/{band_width_id}
{
  "band_width_size": 350
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "70bb40bef50e4a14b116a5a527fd7432"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3 Cloud Phones

5.3.1 Querying Cloud Phones

Function

This API is used to query cloud phones by page. The cloud phones are sorted by creation time in descending order. You can specify **offset** and **limit**. If no cloud phone is found, an empty list will be returned.

URI

GET /v1/{project_id}/cloud-phone/phones

Table 5-96 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-97 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. Value range: 1 to 200 (default value). Generally, this parameter is set to 10 , 20 , or 50 .

Parameter	Mandatory	Type	Description
phone_name	No	String	Specifies the cloud phone name. Fuzzy query is supported.
server_id	No	String	Specifies the unique identifier of the cloud phone server.
status	No	Integer	Specifies the cloud phone status. <ul style="list-style-type: none"> • 1: creating • 2: running • 3: resetting • 4: restarting • 6: frozen • 7: stopping • 8: stopped • -5: reset failed • -6: restart failed • -7: abnormal • -8: creation failed • -9: stop failed
type	No	Integer	Cloud phone type. <ul style="list-style-type: none"> • 0: common cloud phone

Request Parameters

Table 5-98 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-99 Response body parameters

Parameter	Type	Description
phones	Array of Phone objects	Specifies the information about cloud phones.
request_id	String	Specifies the unique request ID.
count	Integer	Specifies the total number of cloud phones.

Table 5-100 Phone

Parameter	Type	Description
phone_name	String	Specifies the cloud phone name, which can contain a maximum of 65 bytes.
server_id	String	Specifies the cloud phone server ID, which can contain a maximum of 32 bytes.
phone_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes.
image_id	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes.
image_version	String	Specifies the image version.
vnc_enable	String	Specifies whether to enable the VNC service on the cloud phone. - true : enable <ul style="list-style-type: none"> • false: disable

Parameter	Type	Description
status	Integer	Specifies the cloud phone status. <ul style="list-style-type: none"> ● 0: being created ● 1: Creating ● 2: running ● 3: resetting ● 4: restarting ● 6: frozen ● 7: being shut down ● 8: powered off ● -5: The resetting fails. ● -6: The restart fails. ● -7: The mobile phone is abnormal. ● -8: Creation failed. ● -9: The VM fails to be shut down.
type	Integer	Cloud phone type. <ul style="list-style-type: none"> ● 0: common cloud phone ● 1: trial cloud phone
imei	String	Specifies the International Mobile Equipment Identity (IMEI) of the cloud phone.
traffic_type	String	Specifies the cloud phone route type. <ul style="list-style-type: none"> ● direct: default route ● routing: Traffic is routed to the encoding container.
volume_mode	Integer	Specifies whether the cloud phone disk is independent. <ul style="list-style-type: none"> ● 0: not independent ● 1: independent
availability_zone	String	Specifies the AZ where the cloud phone server is deployed. For example, the name for AZ 1 in the CN East-Shanghai1 region is cn-east-3a .
metadata	metadata object	Specifies the order and product information.
has_encrypt	Boolean	Specifies whether file-level encryption is enabled on the cloud phone.
create_time	String	Creation Time, The time format is UTC.
update_time	String	Update Time, The time format is UTC.

Table 5-101 metadata

Parameter	Type	Description
order_id	String	Specifies the order ID. The value can contain a maximum of 64 bytes.
product_id	String	Specifies the product ID, which can contain a maximum of 64 bytes.

Example Requests

Querying cloud phones

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "count": 1,
  "phones": [ {
    "phone_name": "mobile-0001",
    "server_id": "88b8449b896f3a4f0ad57222dd91909",
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "phone_model_name": "AOSP-1U4G15G-001",
    "image_version": "AOSP 7.0",
    "image_id": "88b8449b896f3a4f0ad57222dd91909",
    "vnc_enable": "true",
    "status": 2,
    "type": 0,
    "imei": "869287243397729",
    "availability_zone": "xxxxxx",
    "traffic_type": "direct",
    "volume_mode": 0,
    "metadata": {
      "order_id": "CS1710111105S8IPB",
      "product_id": "00301-25217-0--0"
    }
  },
  "create_time": "2017-10-10T00:00:00Z",
  "update_time": "2018-10-10T00:00:00Z"
} ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.2 Querying Cloud Phone Details

Function

This API is used to query cloud phone details.

URI

GET /v1/{project_id}/cloud-phone/phones/{phone_id}

Table 5-102 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
phone_id	Yes	String	Specifies the cloud phone ID.

Request Parameters

Table 5-103 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-104 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
phone_name	String	Specifies the cloud phone name. The value can contain a maximum of 65 bytes.
server_id	String	Specifies the cloud phone server ID, which can contain a maximum of 32 bytes.

Parameter	Type	Description
phone_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
image_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
image_version	String	Specifies the image version.
vnc_enable	String	Whether to enable the VNC service on the cloud phone (expired) <ul style="list-style-type: none"> ● true: enable ● false: disable
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes.
status	Integer	Specifies the cloud phone status. <ul style="list-style-type: none"> ● 1: creating ● 2: running ● 3: resetting ● 4: restarting ● 6: frozen ● 7: stopping ● 8: stopped ● -5: reset failed ● -6: restart failed ● -7: abnormal ● -8: creation failed ● -9: stop failed
access_infos	Array of PhoneAccessInfo objects	Specifies the cloud phone access information.
property	String	Specifies the cloud phone attribute character string. The value can contain a maximum of 2048 bytes.
metadata	metadata object	Specifies the order and product information.
phone_data_volume	PhoneDataVolume object	Specifies the data disk information of the cloud phone.
imei	String	Specifies the cloud phone IMEI.

Parameter	Type	Description
traffic_type	String	Specifies the cloud phone route type. <ul style="list-style-type: none"> ● direct: default route ● routing: Traffic is routed to the encoding container.
volume_mode	Integer	Specifies whether the physical disk of the cloud phone is independent. <ul style="list-style-type: none"> ● 0: not independent ● 1: independent
availability_zone	String	Specifies the AZ where the cloud phone server is deployed. For example, the name for AZ 1 in the CN East-Shanghai1 region is cn-east-3a .
has_encrypt	Boolean	Specifies whether file-level encryption is enabled on the cloud phone.
create_time	String	Creation Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Update Time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 5-105 PhoneAccessInfo

Parameter	Type	Description
type	String	Specifies the user-defined port type. The value can contain a maximum of 16 bytes.
device_ip	String	(Expired) Specifies the cloud phone IP address.
phone_ip	String	Specifies the cloud phone IP address.
listen_port	Integer	Specifies the listening port of a program that is enabled in a cloud phone to provide services.
access_ip	String	(Expired) Specifies the IP address for accessing the cloud phone server.
public_ip	String	Specifies the public IP address of the cloud phone server. If non-public access is configured for the access port, an empty string is returned.
intranet_ip	String	(Expired) Specifies the private IP address of the cloud phone server.
server_ip	String	Specifies the private IP address of the cloud phone server.

Parameter	Type	Description
access_port	Integer	Specifies the access port of a program that is mapped to a port on the public network. The program is enabled in a cloud phone to provide services.
phone_ipv6	String	(New) Specifies the cloud phone IPv6 address.
server_ipv6	String	(New) Specifies the IPv6 address of the cloud phone server.

Table 5-106 metadata

Parameter	Type	Description
order_id	String	Specifies the order ID. The value can contain a maximum of 64 bytes.
product_id	String	Specifies the product ID, which can contain a maximum of 64 bytes.

Table 5-107 PhoneDataVolume

Parameter	Type	Description
volume_type	String	Specifies the data disk type of the cloud phone.
volume_size	Integer	Specifies the data disk size of the cloud phone.

Example Requests

Querying Cloud Phone Details

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/1564567b8bab40f34711234cb80d8574
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "70bb40bef50e4a14b116a5a527fd7432",
  "phone_name" : "mobile-0049",
  "server_id" : "88b8449b896f3a4f0ad57222dd91909",
  "phone_id" : "1564567b8bab40f34711234cb80d8574",
  "image_id" : "88b8449b896f3a4f0ad57222dd91909",
  "phone_model_name" : "aphs1.large.2.aosp",
  "image_version" : "AOSP 7.0",
  "status" : 2,
  "imei" : 869287243397729,
  "availability_zone" : "xxxxxx",
```

```

"traffic_type" : "direct",
"volume_mode" : 0,
"phone_data_volume" : {
  "volume_type" : "GPSSD",
  "volume_size" : 10
},
"access_infos" : [ {
  "type" : "server1",
  "device_ip" : "10.237.0.61",
  "phone_ip" : "10.237.0.61",
  "listen_port" : 38080,
  "access_ip" : "213.32.43.210",
  "public_ip" : "213.32.43.210",
  "intranet_ip" : "172.31.0.123",
  "server_ip" : "172.31.0.123",
  "access_port" : 14308,
  "phone_ipv6" : "fd00::aed:3d",
  "server_ipv6" : "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d"
}, {
  "type" : "server2",
  "device_ip" : "10.237.0.61",
  "phone_ip" : "10.237.0.61",
  "listen_port" : 38081,
  "access_ip" : "213.32.43.210",
  "public_ip" : "213.32.43.210",
  "intranet_ip" : "172.31.0.123",
  "server_ip" : "172.31.0.123",
  "access_port" : 14328,
  "phone_ipv6" : "fd00::aed:3d",
  "server_ipv6" : "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d"
} ],
"property" : "{\"sys.prop.writephonenum\" : \"13666666666\", \"sys.prop.writeimsi\" : \"460021624617113\", \"sys.prop.writewifissid\" : \"test_wifi\"}",
"metadata" : {
  "order_id" : "CS1710111105S8IPB",
  "product_id" : "00301-25217-0--0"
},
"create_time" : "2017-10-10T00:00:00Z",
"update_time" : "2018-11-12T00:00:00Z"
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.3 Obtaining the Cloud Phone Access Information

Function

This API is used to obtain the cloud phone access information.

URI

POST /v1/{project_id}/cloud-phone/phones/batch-connection

Table 5-108 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-109 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-110 Request body parameters

Parameter	Mandatory	Type	Description
phone_ids	Yes	Array of strings	Specifies the phone_id array. A maximum of 10 cloud phone IDs can be requested at a time.
client_type	Yes	String	Specifies the type of the client that needs to access the cloud phone. <ul style="list-style-type: none"> ● ANDROID: Android SDK ● WINDOWS: Microsoft Windows SDK ● H5_MOBILE: H5 SDK for mobile terminals ● H5_PC: H5 SDK for PCs ● iOS: iOS SDK

Response Parameters

Status code: 200

Table 5-111 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
connect_infos	Array of ConnectInfo objects	Specifies information about the cloud phones that have been accessed.
errors	Array of ConnectErrorInfo objects	Specifies the error message list.

Table 5-112 ConnectInfo

Parameter	Type	Description
phone_id	String	Specifies the unique ID of the cloud phone.
access_info	access_info object	Specifies information about the cloud phone that has been accessed.

Table 5-113 access_info

Parameter	Type	Description
access_ip	String	Specifies the EIP for accessing the cloud phone.
intranet_ip	String	Specifies the virtual IP address for accessing the cloud phone.
access_ipv6	String	Specifies the IPv6 address of the cloud phone server.
access_port	Integer	Specifies the port for accessing the cloud phone.
session_id	String	Specifies the ID of the session accessed this time.
timestamp	String	Specifies the timestamp.
ticket	String	Specifies the signature token.

Table 5-114 ConnectErrorInfo

Parameter	Type	Description
phone_id	String	Specifies the cloud phone ID.

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Obtaining the cloud phone access information

POST https://{CPHEndpoint}/v1/{project_id}/cloud-phone/phones/batch-connection

```
{
  "client_type" : "ANDROID",
  "phone_ids" : [ "1564567b8bab40f34711234cb80d8574", "1234567b8bab40ffb711234cb80d0234",
"1234567b8bab40ffb711234cb8654321" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "70bb40bef50e4a14b116a5a527fd7432",
  "connect_infos" : [ {
    "phone_id" : "1564567b8bab40f34711234cb80d8574",
    "access_info" : {
      "access_ip" : "213.32.43.22",
      "intranet_ip" : "192.168.0.25",
      "access_ipv6" : "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d",
      "access_port" : 14308,
      "session_id" : "9864567a7bab40f34711234cb8087474",
      "timestamp" : "122478329742",
      "ticket" : "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
    }
  } ],
  "errors" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "error_code" : "CPS.0018",
    "error_msg" : "Access info not found."
  }, {
    "phone_id" : "1234567b8bab40ffb711234cb8654321",
    "error_code" : "CPS.0005",
    "error_msg" : "Phone not found."
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.4 Querying Cloud Phone Flavors

Function

This API is used to query cloud phone flavors.

URI

GET /v1/{project_id}/cloud-phone/phone-models

Table 5-115 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-116 Query Parameters

Parameter	Mandatory	Type	Description
status	No	Integer	Specifies the status of a flavor. <ul style="list-style-type: none">• 0: offline• 1: available If this parameter is not specified, flavors in all states will be queried.
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .

Request Parameters

Table 5-117 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-118 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
phone_models	Array of PhoneModel objects	Specifies flavors of cloud phones.

Table 5-119 PhoneModel

Parameter	Type	Description
server_model_name	String	Specifies the flavor of the cloud phone server. The flavor can contain a maximum of 64 bytes.
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes.
status	Integer	Flavor status. Options: <ul style="list-style-type: none"> 1: normal 0: offline A flavor that has been taken offline cannot be used to purchase a cloud phone server.
cpu	Integer	Number of vCPUs
memory	Integer	Specifies the memory size in MB.
disk	Integer	Specifies the storage size in GiB.

Parameter	Type	Description
resolution	String	Specifies the cloud phone resolution, which can contain a maximum of 16 bytes.
extend_spec	String	Specifies the cloud phone extended configuration, which can contain a maximum of 512 bytes.
spec_code	String	Specifies the flavor name. The value can contain a maximum of 64 bytes.
phone_capacity	Integer	Specifies the number of cloud phones of the current flavor.
image_label	String	Specifies the image type. Only the following types are supported: <ul style="list-style-type: none">• qemu_phone• cloud_phone• cloud_phone_1620• cloud_game• cloud_game_1620
product_type	Integer	Product type. <ul style="list-style-type: none">• 0: cloud phone• 1: cloud mobile game
phone_model_version	Integer	Specification version: <ul style="list-style-type: none">• 0: specification 1.0• 1: Specification 2.0
dpi	Integer	Number of points per inch.
fps	String	Rendering frame rate.
volume_mode	Integer	Specifies whether the physical disk of the cloud phone is independent. <ul style="list-style-type: none">• 0: not independent• 1: independent

Example Requests

Querying cloud phone flavors

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phone-models
```

Example Responses

Status code: 200

OK

```
{
  "phone_models": [ {
    "server_model_name": "physical.rx1.xlarge",
    "phone_model_name": "rx1.cp.c60.d32.e1v1.qemu",
    "status": 1,
    "cpu": 2,
    "memory": 3072,
    "disk": 32,
    "resolution": "540x960",
    "render_fps": 60,
    "stream_fps": 60,
    "extend_spec": "{\"eip_count\": 1, \"vip_count\":1, \"emulator_type\":0, \"bms_image_id
    \": \"72460777-7fcb-4cae-8bb5-62d93be86bd7\", \"core_bind_strategy\": \"lxc_qemu_common_hosted_c60\",
    \"sd_disk\": 1}",
    "spec_code": "rx1.cp.c60.d32.e1v1.qemu",
    "phone_capacity": 60,
    "image_label": "qemu_phone",
    "product_type": 0
  }, {
    "server_model_name": "physical.rx1.xlarge",
    "phone_model_name": "rx1.cp.c60.d10.e1v1",
    "status": 1,
    "cpu": 2,
    "memory": 3584,
    "disk": 10,
    "resolution": "720x1280",
    "render_fps": 60,
    "stream_fps": 60,
    "extend_spec": "{\"eip_count\": 1, \"vip_count\":1, \"emulator_type\":1, \"thinpool_size_g\":70,
    \"sharepool_size_g\":650, \"max_share_disk_size_g\":50, \"encode_server_spec\": {\"cpu\": 2, \"memory\":
    14448, \"disk\": 10, \"image_id\": \"coderserver_v2.5\", \"port_num\":0}, \"core_bind_strategy
    \": \"common_hosted_c60\"}",
    "spec_code": "rx1.cp.c60.d10.e1v1",
    "phone_capacity": 60,
    "image_label": "cloud_phone",
    "product_type": 0
  } ],
  "request_id": "e0dd77cb688743468599487ca2a1c738"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.5 Querying the Image of a Cloud Phone

Function

This API is used to query available cloud phone images by project ID.

URI

GET /v1/{project_id}/cloud-phone/phone-images

Table 5-120 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-121 Query Parameters

Parameter	Mandatory	Type	Description
image_type	No	String	Specifies the image type. The value can be public (public images), private (private images), share (shared images), or all (all images).

Request Parameters

Table 5-122 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-123 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
phone_images	Array of PhoneImage objects	Specifies images of cloud phones.

Table 5-124 PhonelImage

Parameter	Type	Description
image_name	String	Specifies the cloud phone image name. The value can contain a maximum of 128 bytes.
os_type	String	Specifies the image OS type, which can contain a maximum of 16 bytes.
is_public	Integer	Image type <ul style="list-style-type: none"> • 1: public image • 2: private image
os_name	String	Specifies the cloud phone OS, which can contain a maximum of 36 bytes.
image_label	String	Specifies the cloud phone specifications to which the image applies. <ul style="list-style-type: none"> • cloud_phone: applicable to physical.rx1.xlarge cloud phone servers • cloud_phone_1620: applicable to cloud phone servers of the physical.kg1.4xlarge.cp type • cloud_game: cloud mobile game servers of the physical.rx1.xlarge.cg type • cloud_game_1620: applicable to cloud mobile game servers of the physical.kg1.4xlarge.cg type • qemu_phone: applicable to qemu cloud phones on physical.rx1.xlarge cloud phones
image_id	String	Specifies the unique identifier of the cloud phone image. The value can contain a maximum of 32 bytes.
is_support_encrypt	Boolean	Specifies whether the current image supports file-level encryption.

Example Requests

Querying the image of a cloud phone

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phone-images
```

Example Responses

Status code: 200

OK

```
{
  "phone_images" : [ {
```

```

"image_name" : "AOSP",
"os_type" : "aosp",
"is_public" : 1,
"os_name" : "AOSP7.1.1",
"image_label" : "cloud_game",
"image_id" : "20032420200401a60b0003a99684b8ea"
}, {
"image_name" : "AOSP",
"os_type" : "aosp",
"is_public" : 1,
"os_name" : "AOSP7.1.1",
"image_label" : "cloud_phone",
"image_id" : "20032120200330a20b000eae5b8c01e6"
}, {
"image_name" : "AOSP",
"os_type" : "aosp",
"is_public" : 1,
"os_name" : "AOSP7.0.0",
"image_label" : "qemu_phone",
"image_id" : "be4d231e44d2a4ccf612660a473fe1e3"
} ],
"request_id" : "5aac6ab146ba76e5b12a3d00a03a9869"
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.6 Resetting Cloud Phones

Function

Reset cloud phones in batches to restore them to factory settings. This API is an asynchronous API.

URI

POST /v1/{project_id}/cloud-phone/phones/batch-reset

Table 5-125 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-127 Request body parameters

Parameter	Mandatory	Type	Description
image_id	No	String	Specifies the cloud phone image.
phones	Yes	Array of PhoneProperty objects	Specifies the cloud phone list.

Table 5-128 PhoneProperty

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
property	No	String	Specifies the cloud phone property list, which is a JSON string.

Response Parameters

Status code: 200

Table 5-129 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Task information

Table 5-130 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Changing images and properties when resetting cloud phones

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-reset

```
{
  "phones" : [ {
    "phone_id" : "a7f3a1c5258347d6b6f1def79e11f2bc",
    "property" : "{\"sys.prop.writephonenum\":\"13666666666\",\"sys.prop.writeimsi\": \"460021624617113\",\"sys.prop.writewifissid\":\"test_wifi\"}"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "property" : "{\"sys.prop.writephonenum\":\"13666666666\",\"sys.prop.writeimsi\": \"460021624617113\",\"sys.prop.writewifissid\":\"test_wifi\"}"
  } ],
  "image_id" : "1564567b8bab40f34711234cb80d8574"
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "jobs" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "job_id" : "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "error_code" : "CPS.0004",
    "error_msg" : "Parameter: phone_id is invalid."
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.7 Restarting Cloud Phones

Function

Restart cloud phones in batches or start cloud phones. This API is an asynchronous API.

URI

POST /v1/{project_id}/cloud-phone/phones/batch-restart

Table 5-131 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-132 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-133 Request body parameters

Parameter	Mandatory	Type	Description
image_id	No	String	Specifies the cloud phone image.
phones	Yes	Array of PhoneProper ty objects	Specifies the cloud phone list.

Table 5-134 PhoneProperty

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
property	No	String	Specifies the cloud phone property list, which is a JSON string.

Response Parameters

Status code: 200

Table 5-135 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Task information

Table 5-136 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Changing images and properties when restarting cloud phones

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-restart

```
{
  "phones" : [ {
    "phone_id" : "a7f3a1c5258347d6b6f1def79e11f2bc",
    "property" : "{\"sys.prop.writephonenum\":\"13666666666\",\"sys.prop.writeimsi\": \"460021624617113\", \"sys.prop.writewifissid\": \"test_wifi\"}"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "property" : "{\"sys.prop.writephonenum\":\"13666666666\",\"sys.prop.writeimsi\": \"460021624617113\", \"sys.prop.writewifissid\": \"test_wifi\"}"
  }
]
```

```

    }],
    "image_id" : "1564567b8bab40f34711234cb80d8574"
}

```

Example Responses

Status code: 200

OK

```

{
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "jobs" : [{
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "job_id" : "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "error_code" : "CPS.0004",
    "error_msg" : "Parameter: phone_id is invalid."
  }
]
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.8 Stopping Cloud Phones

Function

Stopping cloud phones

URI

POST /v1/{project_id}/cloud-phone/phones/batch-stop

Table 5-137 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-138 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-139 Request body parameters

Parameter	Mandatory	Type	Description
phone_ids	Yes	Array of strings	Specifies the cloud phone ID list.

Response Parameters

Status code: 200

Table 5-140 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Indicates the task information.

Table 5-141 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Stopping cloud phones

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-stop
{
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.9 Editing the Name of a Cloud Phone

Function

This API is used to modify the cloud phone name based on the cloud phone ID.

URI

PUT /v1/{project_id}/cloud-phone/phones/{phone_id}

Table 5-142 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
phone_id	Yes	String	Specifies the cloud phone ID.

Request Parameters

Table 5-143 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-144 Request body parameters

Parameter	Mandatory	Type	Description
phone_name	Yes	String	Specifies the cloud phone name. The name can contain a maximum of 60 characters, including letters, digits, hyphens (-), and underscores (_).

Response Parameters

Status code: 200

Table 5-145 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.

Example Requests

Editing the name of a cloud phone

```
PUT https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/1564567b8bab40f34711234cb80d8574
{
  "phone_name": "newName"
}
```

Example Responses

Status code: 200

OK


```
{  
  "request_id" : "135d898e69344a13925a0899e1a4ac53"  
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.10 Updating Properties of Cloud Phones

Function

Some cloud phone attributes can be updated. Some attributes cannot be updated, and some attributes take effect only after the phone is restarted. For details about attribute restrictions, see the cloud phone attribute list. If the cloud phone is in the abnormal state, the updated attributes take effect only after the cloud phone is restored to the running state. This API is an asynchronous API.

URI

POST /v1/{project_id}/cloud-phone/phones/batch-update-property

Table 5-146 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-147 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-148 Request body parameters

Parameter	Mandatory	Type	Description
phones	Yes	Array of Property objects	Specifies the cloud phone list.

Table 5-149 Property

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID, which can contain a maximum of 32 bytes.
property	Yes	String	Specifies the cloud phone property list, which is a JSON string.

Response Parameters

Status code: 200

Table 5-150 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Task information

Table 5-151 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Updating properties of cloud phones

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-update-property

```
{
  "phones" : [ {
    "phone_id" : "a7f3a1c5258347d6b6f1def79e11f2bc",
    "property" : "{\\"sys.prop.writephonenum\\":\\"13666666666\\"}\\"sys.prop.writeimsi
    \":\\"460021624617113\\"}\\"sys.prop.writewifissid\\":\\"test_wifi\\"}"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "property" : "{\\"sys.prop.writephonenum\\":\\"13666666666\\"}\\"sys.prop.writeimsi
    \":\\"460021624617113\\"}\\"sys.prop.writewifissid\\":\\"test_wifi\\"}"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "jobs" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "job_id" : "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "error_code" : "CPS.0005",
    "error_msg" : "Parameter: Phone not found."
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.11 Exporting Data from Cloud Phones

Function

This asynchronous API is used to export data from cloud phones in batches. Before calling this API, ensure that the CPH service has been authorized to operate OBS buckets. For details, see [Delegating CPH to Operate OBS Buckets](#).

URI

POST /v1/{project_id}/cloud-phone/phones/batch-storage

Table 5-152 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-153 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-154 Request body parameters

Parameter	Mandatory	Type	Description
storage_infos	Yes	Array of StorageInfo objects	Specifies the information about the cloud phone whose data will be exported.

Table 5-155 StorageInfo

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
include_files	Yes	Array of strings	Path for storing the data to be exported. The value is an absolute path and contains a maximum of 4096 bytes. Only data in the /data and cache directories can be exported. Currently, only uppercase letters, lowercase letters, digits, dots (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), asterisks (*), and equal signs (=) are supported.

Parameter	Mandatory	Type	Description
exclude_files	No	Array of strings	Specifies the path from which data cannot be exported. exclude_files has a higher priority than include_files . If the two parameters conflict with each other, exclude_files takes effect. The path requirements are the same as those for include_files .
bucket_name	Yes	String	Specifies the name of the OBS bucket for storing the exported data. A valid OBS bucket name contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	Yes	String	Specifies the OBS path for storing the exported data. The value must comply with the OBS path naming specifications and can contain a maximum of 1024 characters. Currently, only uppercase letters, lowercase letters, digits, dots (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), and equal signs (=) are supported.

Response Parameters

Status code: 200

Table 5-156 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Task information

Table 5-157 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Exporting data of cloud phones to an OBS bucket

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-storage

```
{
  "storage_infos": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "include_files": [ "/data/app", "/data/local", "/data/media" ],
    "exclude_files": [ "/data/app/com.xx.xx-*" ],
    "bucket_name": "mybucket",
    "object_path": "myimage/v1/xxxxx.tar"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.12 Restoring Data of Cloud Phones

Function

This asynchronous API is used to restore data to cloud phones in batches. Before calling this API, ensure that the CPH service has been authorized to operate OBS buckets. For details, see [Delegating CPH to Operate OBS Buckets](#).

Data exported from a cloud phone running a later Android version cannot be restored on a cloud phone running an earlier Android version. Data exported from a cloud phone of an earlier Android version can be restored on a cloud phone of a later Android version. However, there may be compatibility issues in a few scenarios. It is recommended that you export and restore data between cloud phones of the same Android version.

When a cloud phone is in use, it stores data in its cache. If you try to run restored files without restarting the cloud phone, you may experience access issues or application crashes. To avoid this and ensure stable performance, restart the cloud phone after successful restoration.

URI

POST /v1/{project_id}/cloud-phone/phones/batch-restore

Table 5-158 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-159 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-160 Request body parameters

Parameter	Mandatory	Type	Description
restore_infos	Yes	Array of RestoreInfo objects	Specifies the information about the cloud phone to which data will be imported.

Table 5-161 RestoreInfo

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
bucket_name	Yes	String	Specifies the name of the OBS bucket for storing the exported data. A valid OBS bucket name contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	Yes	String	Specifies the OBS path for storing the exported data. The value must comply with the OBS path naming specifications and can contain a maximum of 1024 characters.

Response Parameters

Status code: 200

Table 5-162 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Task information

Table 5-163 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Restoring data from an OBS bucket to a cloud phone

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/batch-restore

```
{
  "restore_infos" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "bucket_name" : "mybucket",
    "object_path" : "myimage/v1/xxxx.tar"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "jobs" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "job_id" : "1564567b8bab40f34711234cb80d0123"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.13 Diverting Cloud Phone Traffic

Function

This API is used to modify the route of a cloud phone.

URI

POST /v1/{project_id}/cloud-phone/phones-traffic

Table 5-164 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-165 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-166 Request body parameters

Parameter	Mandatory	Type	Description
traffic_type	Yes	String	Mobile phone route type. <ul style="list-style-type: none"> • direct: default route • routing: routing to the encoding container
phone_ids	Yes	Array of strings	Specifies the cloud phone ID list. A maximum of 100 IDs can be invoked at a time.

Response Parameters

Status code: 200

Table 5-167 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Task list.

Table 5-168 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Changing the routes of all cloud phones listed in **phone_ids** to the same route

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones-traffic

```
{
  "traffic_type": "routing",
  "phone_ids": [ "631056bfb66b4f4ea02ba25f04830cb4" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "631056bfb66b4f4ea02ba25f04830cb4",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.3.14 Expanding the Data Disk of a Cloud Phone

Function

This API is used to expand the data disk of a cloud phone.

URI

POST /v1/{project_id}/cloud-phone/phones/expand-volume

Table 5-169 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-170 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-171 Request body parameters

Parameter	Mandatory	Type	Description
phones	Yes	Array of PhoneDataVolumeSize objects	Specifies the cloud phone list.

Table 5-172 PhoneDataVolumeSize

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
new_size	Yes	Integer	Specifies the new capacity of the cloud phone data disk after expansion, in GiB. The new capacity must be greater than or equal to the original capacity and less than the maximum allowed capacity, 32,768 GiB.

Response Parameters

Status code: 200

Table 5-173 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Specifies the task information.

Table 5-174 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Expanding the data disk of a cloud phone

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/expand-volume
```

```
{
  "phones" : [ {
    "phone_id" : "ca6ae3158406452696deade1a1091250",
```

```
"new_size" : 100
} ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "jobs" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "job_id" : "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id" : "1678567b8bab40f93711234cb80d0764",
    "error_code" : "CPS.0004",
    "error_msg" : "Parameter: phone_id is invalid."
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.4 Tasks

5.4.1 Querying the Status of a Task

Function

This API is used to query the status of a task.

URI

GET /v1/{project_id}/cloud-phone/jobs/{job_id}

Table 5-175 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
job_id	Yes	String	Specifies the task ID.

Request Parameters

Table 5-176 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-177 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
job_id	String	Specifies the unique ID of a task.
begin_time	String	Specifies when the task processing started. The UTC time is in <i>YYYY-MM-DDTHH:MM:SSZ</i> format.
end_time	String	Specifies when the task processing ended. The UTC time is in <i>YYYY-MM-DDTHH:MM:SSZ</i> format.
status	Integer	Task status. <ul style="list-style-type: none"> • 1: running • 2: success • -1: failure
error_msg	String	Specifies the error message returned for the task.
error_code	String	Task error code.
execute_msg	String	Specifies the content returned after a task is executed. The value can contain a maximum of 1,024 bytes.

Example Requests

Querying the status of a task

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/jobs/6837531fd3f54550927b930180a706bf

Example Responses

Status code: 200

OK

```
{
  "error_msg" : null,
  "execute_msg" : null,
  "job_id" : "6837531fd3f54550927b930180a706bf",
  "end_time" : "2019-04-26T07:00:06Z",
  "begin_time" : "2019-04-26T07:00:00Z",
  "error_code" : null,
  "request_id" : "2676a3b4f7df49c297c6775989806d32",
  "status" : 2
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.4.2 Querying Task Statuses

Function

This API is used to query tasks with the same request ID.

URI

GET /v1/{project_id}/cloud-phone/jobs

Table 5-178 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-179 Query Parameters

Parameter	Mandatory	Type	Description
request_id	No	String	Specifies the request ID in the response after the task request is issued. Either request_id or request_ids must be specified. If both request_id and request_ids are specified, the value of request_ids is used.
request_ids	No	String	Specifies the request IDs in the response after the task request is issued. A maximum of 20 request IDs that are separated by commas (,) are allowed. Either request_id or request_ids must be specified. If both request_id and request_ids are specified, the value of request_ids is used.
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .

Request Parameters

Table 5-180 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-181 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of Job objects	Task information

Table 5-182 Job

Parameter	Type	Description
phone_id	String	Unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
server_id	String	Unique ID of the cloud phone server. This parameter is contained in tasks related to the cloud phone server.
node_id	String	(Discarded) Unique ID of the cloud phone server. This field is included in the cloud phone service.
job_id	String	Specifies the unique ID of a task.
begin_time	String	Task processing start time, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
end_time	String	End time of task processing, The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
status	Integer	Task status. <ul style="list-style-type: none"> • 1: running • 2: success • -1: failure
error_code	String	Task error code.
error_msg	String	Specifies the error message returned for the task.
execute_msg	String	Specifies the content returned after a task is executed. The value can contain a maximum of 1,024 bytes.

Example Requests

Querying the status of the task corresponding to the request ID

https://{CPH Endpoint}/v1/{project_id}/cloud-phone/jobs?request_id=6837531fd3f54550927b930180a706bf

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6a63a18b8bab40ffb71ebd9cb80d0085",
  "jobs" : [ {
    "phone_id" : "1234567b8bab40ffb711234cb80d0234",
    "server_id" : "1e223c8e-3ad0-4bf0-a837-bc90d4f91d01",
    "node_id" : "1e223c8e-3ad0-4bf0-a837-bc90d4f91d01",
    "job_id" : "1564567b8bab40f34711234cb80d0123",
    "begin_time" : "2017-10-25T00:00:00Z",
    "end_time" : "2017-10-25T00:00:30Z",
    "status" : -1,
    "error_code" : "CPS0005",
    "error_msg" : "Phone not found."
  }, {
    "phone_id" : "abc4567b8bab40ffb711234cb80d0abc",
    "server_id" : "1e223c8e-3ad0-4bf0-a837-bc90d4f91d01",
    "node_id" : "1e223c8e-3ad0-4bf0-a837-bc90d4f91d01",
    "job_id" : "1564567b8bab40f34711234cb80d0456",
    "begin_time" : "2017-10-25T00:00:00Z",
    "end_time" : "2017-10-25T00:00:32Z",
    "status" : 2,
    "error_code" : "",
    "error_msg" : ""
  }
  ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.5 Keys

5.5.1 Updating a Key Pair

Function

This API is used to update the key pair for connecting to the cloud phone.

URI

PUT /v1/{project_id}/cloud-phone/servers/open-access

Table 5-183 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-184 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-185 Request body parameters

Parameter	Mandatory	Type	Description
servers	Yes	Array of ServerKeypair objects	Specifies the information about the cloud phone server whose key pair is to be changed.

Table 5-186 ServerKeypair

Parameter	Mandatory	Type	Description
server_id	Yes	String	Specifies the cloud phone server ID, which can contain a maximum of 32 bytes.
keypair_name	Yes	String	Specifies the key pair name.

Response Parameters

Status code: 200

Table 5-187 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of ServerJob objects	Task information

Table 5-188 ServerJob

Parameter	Type	Description
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Modifying the Key Pair of the Corresponding Server in the Server List

PUT https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/open-access

```
{
  "servers" : [ {
    "keypair_name" : "mykeypair",
    "server_id" : "ae4d231e44d2a4ccf612660a473fe1e3"
  }, {
    "keypair_name" : "mykeypair",
    "server_id" : "2347275010d3440d963d3fcb8931ff55"
  } ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "6837531fd3f54550927b930180a706bf",
  "jobs" : [ {
    "server_id" : "ae4d231e44d2a4ccf612660a473fe1e3",
    "job_id" : "1564567b8bab40f34711234cb80d0123"
  }, {
    "server_id" : "2347275010d3440d963d3fcb8931ff55",
    "job_id" : "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.6 Encoding Services

5.6.1 Querying Encoding Services

Function

This API is used to query encoding services.

URI

GET /v1/{project_id}/cloud-phone/encode-servers

Table 5-189 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-190 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .

Parameter	Mandatory	Type	Description
type	No	Integer	Encoding service type. <ul style="list-style-type: none"> 0: server 1: container
status	No	Integer	Status list. <ul style="list-style-type: none"> 1: running 2: abnormal 3: restarting 4: frozen 5: powered off 100, 1014, 0: being created
server_id	No	String	Specifies the unique identifier of the cloud phone server.

Request Parameters

Table 5-191 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-192 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
encode_servers	Array of EncodeServer objects	Specifies the information about the encoding service.

Table 5-193 EncodeServer

Parameter	Type	Description
encode_server_name	String	Specifies the name of the encoding service. The name can contain a maximum of 64 bytes.
encode_server_id	String	Specifies the unique ID of the encoding service. The ID can contain a maximum of 32 bytes.
encode_server_ip	String	Specifies the IP address of the encoding service.
server_id	String	Specifies the cloud phone server ID, which can contain a maximum of 32 bytes.
keypair_name	String	Specifies the key pair for logging in to the encoding service.
type	Integer	Encoding service type. <ul style="list-style-type: none"> 0: server 1: container
status	Integer	Encoding service status. <ul style="list-style-type: none"> 1: running 2: abnormal 3: restarting 0, 4, 5: being created
access_infos	Array of EncodeServerAccessInfo objects	Specifies the access information about the encoding service.
encode_server_ipv6	String	Specifies the IPv6 address of the encoding service.

Table 5-194 EncodeServerAccessInfo

Parameter	Type	Description
listen_port	Integer	Specifies the listening port of the encoding service.
access_ip	String	(Expired) Specifies the public IP address of the encoding service.
intranet_ip	String	(Expired) Specifies the private IP address of the encoding service.
public_ip	String	(New) Specifies the public IP address for accessing the encoding service.

Parameter	Type	Description
server_ip	String	(New) Specifies the private IP address for accessing the encoding service.
access_port	Integer	Specifies the port of the encoding service accessed by the public network.
type	String	Specifies the port type of the encoding service. The value can be one of the following: <ul style="list-style-type: none"> • adb: ADB ports of the cloud phone • vnc: VNC ports of the cloud phone • cph_app_server: access ports of the cloud gaming client • cph_h5_server: H5 web page access ports of cloud gaming • Others: user-defined ports
server_ipv6	String	(New) Specifies the private IPv6 address for accessing the encoding service.

Example Requests

Querying the encoding container by server ID

```
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/encode-servers?
server_id=9a8870d670584f929978b15c80009e99
```

Example Responses

Status code: 200

OK

```
{
  "encode_servers": [ {
    "encode_server_name": "ENCODE_SERVER_2",
    "encode_server_id": "00b00d1b35094f13b360cdfe15a9bfee",
    "encode_server_ip": "10.237.0.233",
    "encode_server_ipv6": "fd00::aed:e9",
    "server_id": "26fef5ef8f484e5fbd3d3974134b8091",
    "keypair_name": "keyPair2",
    "type": 0,
    "status": 1,
    "access_infos": [ {
      "listen_port": 6902,
      "intranet_ip": "172.31.240.115",
      "access_port": 6902,
      "access_ip": "10.154.119.231",
      "server_ip": "172.31.240.115",
      "server_ipv6": "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d",
      "public_ip": "10.154.119.231",
      "type": "port1"
    }, {
      "listen_port": 6903,
      "intranet_ip": "172.31.240.115",
      "access_port": 6903,
      "access_ip": "172.31.240.115",
    }
  ]
}
```

```

"server_ip" : "172.31.240.115",
"server_ipv6" : "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d",
"public_ip" : "",
"type" : "port2"
}, {
"listen_port" : 6900,
"intranet_ip" : "172.31.240.115",
"access_port" : 6900,
"access_ip" : "172.31.240.115",
"server_ip" : "172.31.240.115",
"server_ipv6" : "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d",
"public_ip" : "",
"type" : "port3"
}, {
"listen_port" : 6901,
"intranet_ip" : "172.31.240.115",
"server_ipv6" : "2001:db8:a583:b62:e5ea:4a6b:de7b:f97d",
"access_port" : 6901,
"access_ip" : "100.68.0.235",
"server_ip" : "172.31.240.115",
"public_ip" : "100.68.0.235",
"type" : "port4"
}
}],
"request_id" : "4faba0b7f7cb4e829b18773718289b99"
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.6.2 Batch Restarting Encoding Services

Function

This API is used to restart encoding services.

URI

POST /v1/{project_id}/cloud-phone/encode-servers/batch-restart

Table 5-195 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-196 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-197 Request body parameters

Parameter	Mandatory	Type	Description
encode_server_ids	Yes	Array of strings	Specifies the ID of the encoding service to be restarted.

Response Parameters

Status code: 200

Table 5-198 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of EncodeServerJob objects	Task information

Table 5-199 EncodeServerJob

Parameter	Type	Description
encode_server_id	String	Specifies the unique ID of the encoding service. This parameter is contained in tasks related to the encoding service.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Restarting encoding containers on cloud phone servers in the `encode_server_ids` list

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/encode-servers/batch-restart
```

```
{
  "encode_server_ids": [ "d5cfa92995da40168c39b38d2aa478b3", "00b00d1b35094f13b360cdf15a9bfee" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "jobs": [ {
    "job_id": "e9d7b1a2572c4f2c9bf056a3d1b35e39",
    "encode_server_id": "d5cfa92995da40168c39b38d2aa478b3"
  }, {
    "job_id": "4d0a42447cac4c9697b97f07934b74bd",
    "encode_server_id": "00b00d1b35094f13b360cdf15a9bfee"
  } ],
  "request_id": "c775bdf09bc0400a9138199b346cab62"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.7 ADB Commands

5.7.1 Pushing Files

Function

This asynchronous API is used to push a file to the cloud phone file system. The file is downloaded and decompressed by the system, and then the decompressed content is pushed to the root directory of the cloud phone. Only .tar files can be pushed. You need to upload the .tar files to your OBS bucket in advance. Before calling this API, ensure that the CPH service has been authorized to operate OBS buckets. For details, see [Delegating CPH to Operate OBS Buckets](#).

- The management plane performance is limited. Executing ADB commands in batches on the same cloud phone server blocks the execution of other tasks on the cloud phone.

- You can only push files up to 6 GB in an OBS bucket to cloud phones. If you push a file that exceeds 6 GB, an error message will be returned.
- Due to restrictions of the cloud phone OS, pushing files to the system disk of a cloud phone may fail. You are advised to push files to the cloud phone data disk. When packaging a .tar file, place the file to be pushed in the **data/** directory created on the local host and compress the file (for example, **tar -cvf data.tar data**) to ensure that the file is pushed to the data disk of the cloud phone.

URI

POST /v1/{project_id}/cloud-phone/phones/commands

Table 5-200 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-201 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-202 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	This parameter is fixed at push .

Parameter	Mandatory	Type	Description
content	Yes	String	(Only .tar files can be pushed.) Specify the .tar files in the Object Storage Service (OBS) bucket. The file name can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), dots (.), slashes (/), colons (:), and hyphens (-). File format: obs://obs-bucket-name/obs-file-path/file.tar. The file path corresponds to the object path in the OBS bucket.
phone_ids	No	Array of strings	Specifies the ID list of cloud phones. This parameter is mandatory when there is no parameter server_ids . If there is parameter server_ids , set phone_ids only.
server_ids	No	Array of strings	Specifies the ID list of cloud phone servers. This parameter is mandatory when there is no parameter phone_ids . If there is parameter phone_ids , set phone_ids only.

Response Parameters

Status code: 200

Table 5-203 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Specifies the task list.

Table 5-204 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Pushing a file to the cloud phone file system

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands

```
{
  "command": "push",
  "content": "obs://push-bucket/my_apps/test.tar",
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.7.2 Installing an APK

Function

This asynchronous API is used to install APKs on cloud phones. The system downloads specified APKs and installs them on the cloud phones. To install a single-APK application, run the **install** command. Only one APK can be installed at a time. If multiple APKs are specified at a time, only the first APK will be successfully installed. To install a multiple-APK application, run the **install-multiple** command to install multiple APKs (a single APK is split into multiple APKs). Only multiple APKs of the same application can be installed at a time. Before calling this API, ensure that the CPH service has been authorized to operate OBS buckets. For details, see [Delegating CPH to Operate OBS Buckets](#).

- The management plane performance is limited. Executing ADB commands in batches on the same cloud phone server blocks the execution of other tasks on the cloud phone.
- You are advised to install APKs by developing an app store. You can only install an APK up to 2 GB in an OBS bucket on a cloud phone. If an APK exceeds 2 GB, an error message will be returned.

URI

POST /v1/{project_id}/cloud-phone/phones/commands

Table 5-205 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-206 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-207 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	To install a single APK, set this parameter to install. To install multiple APKs, set this parameter to install-multiple.
content	Yes	String	Specifies the APK file in the specified OBS bucket. (The APK file must be uploaded to the specified bucket in advance.) Only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-) are allowed. Only .apk files can be pushed. In single-APK scenarios, only one APK file can be installed, and the maximum length is 1,024 bytes. In multi-APK scenarios, a maximum of 50 APK files separated by spaces can be installed, and the maximum length is 8,100 bytes. example: obs://obs-bucket-name/obs-file-path/file.apk
phone_ids	No	Array of strings	Specifies the ID list of cloud phones. This parameter is mandatory when there is no parameter server_ids . If there is parameter server_ids , set phone_ids only.
server_ids	No	Array of strings	Specifies the ID list of cloud phone servers. This parameter is mandatory when there is no parameter phone_ids . If there is parameter phone_ids , set phone_ids only.

Response Parameters

Status code: 200

Table 5-208 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Specifies the task list.

Table 5-209 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

- Installing an APK file on cloud phones listed in **phone_ids**

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands

```
{
  "command": "install",
  "content": "-t -r obs://push-bucket/my_apps/test.apk",
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

- Installing APK files on cloud phones in **phone_ids**

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands

```
{
  "command": "install-multiple",
  "content": "-t -r obs://push-bucket/my_apps/test_part1.apk obs://push-bucket/my_apps/test_part_2.apk obs://push-bucket/my_apps/test_part3.apk",
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id": "1678567b8bab40f93711234cb80d0764",
```

```

    "job_id" : "1564567b8bab40f34711234cb80d5678"
  } ]
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.7.3 Uninstalling an APK

Function

Uninstalling the APK file from a cloud phone This API is an asynchronous API.

- The performance of the management plane is limited. Executing ADB commands in batches on the same server will block the execution of other tasks on the cloud phone.

URI

POST /v1/{project_id}/cloud-phone/phones/commands

Table 5-210 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-211 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-212 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	This parameter is fixed at uninstall in scenarios for uninstalling applications.
content	Yes	String	Specifies the name of the application to be uninstalled. The application name can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
phone_ids	No	Array of strings	Specifies the ID list of cloud phones. This parameter is mandatory when there is no parameter server_ids . If there is parameter server_ids , set phone_ids only.
server_ids	No	Array of strings	Specifies the ID list of cloud phone servers. This parameter is mandatory when there is no parameter phone_ids . If there is parameter phone_ids , set phone_ids only.

Response Parameters

Status code: 200

Table 5-213 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Specifies the task list.

Table 5-214 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Uninstalling the APK file from a cloud phone

POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands

```
{
  "command": "uninstall",
  "content": "com.myapp.test",
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.7.4 Running adb Commands Asynchronously

Function

Run the shell command on a cloud phone. This API is an asynchronous API.

- The performance of the management plane is limited. Executing ADB commands in batches on the same server will block the execution of other tasks on the cloud phone.

URI

POST /v1/{project_id}/cloud-phone/phones/commands

Table 5-215 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-216 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-217 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Specifies the ADB command. The value is fixed at shell .
content	Yes	String	Specifies the command to be executed. The command can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).

Parameter	Mandatory	Type	Description
phone_ids	No	Array of strings	Specifies the ID list of cloud phones. This parameter is mandatory when there is no parameter server_ids . If there is parameter server_ids , set phone_ids only.
server_ids	No	Array of strings	Specifies the ID list of cloud phone servers. This parameter is mandatory when there is no parameter phone_ids . If there is parameter phone_ids , set phone_ids only.

Response Parameters

Status code: 200

Table 5-218 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of PhoneJob objects	Specifies the task list.

Table 5-219 PhoneJob

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

Example Requests

Running the **ls -l /system** command asynchronously on cloud phones listed in **phone_ids**

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands
```

```
{
  "command": "shell",
  "content": "ls -l /system",
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [ {
    "phone_id": "1234567b8bab40ffb711234cb80d0234",
    "job_id": "1564567b8bab40f34711234cb80d0123"
  }, {
    "phone_id": "1678567b8bab40f93711234cb80d0764",
    "job_id": "1564567b8bab40f34711234cb80d5678"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.7.5 Running adb Commands Synchronously

Function

This API is only used to synchronously run ADB shell commands and return the command output on a cloud phone. Within one minute, you can call this API for up to 6 times. The timeout interval for a cloud phone to run a command is 2 seconds, and the API calling time does not exceed 30 seconds (excluding the 2-second timeout interval). A larger number of cloud phones indicates a longer API calling time in total.

URI

POST /v1/{project_id}/cloud-phone/phones/sync-commands

Table 5-220 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-221 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-222 Request body parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Specifies the ADB command. The value is fixed at shell .
content	Yes	String	Specifies the command to be executed. The command can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
phone_ids	No	Array of strings	Specifies the ID list of cloud phones. This parameter is mandatory when there is no parameter server_ids . If there is parameter server_ids , set phone_ids only.
server_ids	No	Array of strings	Specifies the ID list of cloud phone servers. This parameter is mandatory when there is no parameter phone_ids . If there is parameter phone_ids , set phone_ids only.

Response Parameters

Status code: 200

Table 5-223 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of RunSyncCommandJob objects	Specifies the task list.

Table 5-224 RunSyncCommandJob

Parameter	Type	Description
phone_id	String	Unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
job_id	String	Specifies the unique ID of a task.
status	Integer	Specifies the task status. <ul style="list-style-type: none"> • 2: successful • 1: running • -1: failed
error_code	String	Task error code.
error_msg	String	Specifies the error message returned for the task.
execute_msg	String	Specifies the content returned after a task is executed. The value can contain a maximum of 1,024 bytes.

Example Requests

Running the **ls -l /system** command synchronously on cloud phones listed in **phone_ids**

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/sync-commands
```

```
{
  "command": "shell",
  "content": "ls -l /system",
  "phone_ids": [ "1234567b8bab40ffb711234cb80d0234", "1678567b8bab40f93711234cb80d0764" ]
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
}
```

```

"jobs" : [ {
  "phone_id" : "1234567b8bab40ffb711234cb80d0234",
  "job_id" : "3fc17538866a4ff3a014d8bc6aaa4b69",
  "status" : -1,
  "error_code" : "CPS.0191",
  "error_msg" : "Run command failed.",
  "execute_msg" : "ls: cannot access '/system': No such file or directory"
}, {
  "phone_id" : "1678567b8bab40f93711234cb80d0764",
  "job_id" : "1564567b8bab40f34711234cb80d5678",
  "status" : 2,
  "error_code" : "",
  "error_msg" : "",
  "execute_msg" : "xxxxx"
} ]
}

```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.8 Tags

5.8.1 Querying Tags of a Project

Function

Querying all tags of a resource type in a region.

URI

GET /v1/{project_id}/{resource_type}/tags

Table 5-225 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
resource_type	Yes	String	Specifies the resource type. cph-server : cloud phone server

Request Parameters

Table 5-226 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-227 Response body parameters

Parameter	Type	Description
tags	Array of Tags objects	Specifies resource tag list.

Table 5-228 Tags

Parameter	Type	Description
key	String	Specifies the tag key. <ul style="list-style-type: none"> A key can contain a maximum of 127 Unicode characters. key must be specified.
values	Array of strings	Specifies the tag value list. <ul style="list-style-type: none"> A maximum of 10 values are supported. Values of the same tag must be unique. Each tag value can contain a maximum of 255 Unicode characters. If this parameter is left blank, any value can be used.

Example Requests

Querying all tags of a resource type in a region

```
GET https://{CPH Endpoint}/v1/{project_id}/{resource_type}/tags
```

Example Responses

Status code: 200

OK

```
{
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value1", "value2" ]
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.8.2 Querying Resource Tags

Function

This API is used to query all resource tags.

URI

GET /v1/{project_id}/{resource_type}/{resource_id}/tags

Table 5-229 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
resource_type	Yes	String	Specifies the resource type. cph-server : cloud phone server
resource_id	Yes	String	Specifies the resource ID.

Request Parameters

Table 5-230 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-231 Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Resource tag list

Table 5-232 Tag

Parameter	Type	Description
key	String	Specifies the tag key. <ul style="list-style-type: none"> A key can contain a maximum of 127 Unicode characters. A key cannot be left blank, start or end with a space, nor start with sys. A key can contain letters, digits, spaces, and special characters <code>_:=+@</code> of any language.
value	String	Specifies the list of tag values. <ul style="list-style-type: none"> Each tag value can contain a maximum of 255 Unicode characters. A tag value cannot be left blank nor start or end with a space. It can contain letters, digits, spaces, and special characters <code>_:=+@</code>.

Example Requests

Querying tags of a resource based on the resource ID

```
GET https://{CPH Endpoint}/v1/{project_id}/{resource_type}/{resource_id}/tags
```

Example Responses

Status code: 200

OK

```
{
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.8.3 Querying Resources

Function

This API is used to query resources.

URI

POST /v1/{project_id}/{resource_type}/resource_instances/action

Table 5-233 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
resource_type	Yes	String	Specifies the resource type. cph-server : cloud phone server

Request Parameters

Table 5-234 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-235 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Specifies the operation to be performed. The operation can be filter or count . filter indicates pagination query. count indicates that the total number of query results meeting the search criteria will be returned.
offset	No	String	Specifies where the query starts. The query starts from the next data record indexed by this parameter. You do not need to specify this parameter when querying resources on the first page. When you query resources on subsequent pages, set this parameter to the location returned in the response body for the previous query. If you set action to count , this parameter is not required. If you set action to filter , offset is 0 by default. The offset value must be a positive number.

Parameter	Mandatory	Type	Description
limit	No	String	Specifies the maximum number of records to be queried. If you set action to count , this parameter is not required. If you set action to filter , this parameter takes effect. The value ranges from 1 to 1000 (default).
without_any_tag	No	Boolean	Specifies any tag that is not contained. If this parameter is set to true , all resources without tags are queried.
tags	No	Array of Tags objects	A maximum of 10 tag keys are allowed in each query operation. Each tag key can have up to 10 tag values. The structure body is mandatory. The tag key cannot be left blank or be an empty string. Each tag key and values of each key must be unique. Resources identified by different keys are in AND relationship.
matches	No	Array of Match objects	Specifies the key-value pair to be matched. The key can only be resource_name . The value will be exactly matched.

Table 5-236 Tags

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. <ul style="list-style-type: none"> A key can contain a maximum of 127 Unicode characters. key must be specified.

Parameter	Mandatory	Type	Description
values	Yes	Array of strings	Specifies the tag value list. <ul style="list-style-type: none"> • A maximum of 10 values are supported. • Values of the same tag must be unique. • Each tag value can contain a maximum of 255 Unicode characters. • If this parameter is left blank, any value can be used.

Table 5-237 Match

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the key. key can only be resource_name . In such a case, value is the resource name.
value	Yes	String	Specifies the value. key can only be resource_name . In such a case, value is the resource name.

Response Parameters

Status code: 200

Table 5-238 Response body parameters

Parameter	Type	Description
resources	Array of Resource objects	Lists the resources.
total_count	Integer	Total number of resources

Table 5-239 Resource

Parameter	Type	Description
resource_id	String	Specifies the resource ID.
resource_detail	String	Specifies resource details.
resource_name	String	Specifies the resource name.
tags	Array of Tag objects	Specifies the resource name.

Table 5-240 Tag

Parameter	Type	Description
key	String	Specifies the tag key. <ul style="list-style-type: none"> A key can contain a maximum of 127 Unicode characters. A key cannot be left blank, start or end with a space, nor start with <i>sys</i>. A key can contain letters, digits, spaces, and special characters <code>_:=+@</code> of any language.
value	String	Specifies the list of tag values. <ul style="list-style-type: none"> Each tag value can contain a maximum of 255 Unicode characters. A tag value cannot be left blank nor start or end with a space. It can contain letters, digits, spaces, and special characters <code>_:=+@</code>.

Example Requests

- Querying the number of resources

Post `https://{CPH Endpoint}/v1/{project_id}/{resource_type}/resource_instances/action`

```
{
  "action": "count",
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value1", "value2" ]
  } ],
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ]
}
```

- Querying resources

Post `https://{CPH Endpoint}/v1/{project_id}/{resource_type}/resource_instances/action`

```
{
  "offset": "100",
  "limit": "100",
  "action": "filter",
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value1", "value2" ]
  } ],
  "matches": [ {
    "key": "resource_name",
    "value": "resource1"
  } ]
}
```

Example Responses

Status code: 200

ok

```
{
  "resources": [ {
    "resource_detail": null,
    "resource_id": "cdfs_cefs_wesas_12_dsad",
    "resource_name": "resoucee1",
    "tags": [ {
      "key": "key1",
      "value": "value1"
    }, {
      "key": "key2",
      "value": "value1"
    } ]
  } ],
  "total_count": 1000
}
```

Status Codes

Status Code	Description
200	ok

Error Codes

See [Error Codes](#).

5.8.4 Adding Tags

Function

This API is used to add tags.

URI

POST /v1/{project_id}/{resource_type}/{resource_id}/tags/action

Table 5-241 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
resource_type	Yes	String	Specifies the resource type. cph-server : cloud phone server
resource_id	Yes	String	Specifies the resource ID.

Request Parameters

Table 5-242 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-243 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Indicates an operation. <ul style="list-style-type: none"> • create
tags	Yes	Array of Tag objects	Specifies the tag list.

Table 5-244 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	<p>Specifies the tag key.</p> <ul style="list-style-type: none"> • A key can contain a maximum of 127 Unicode characters. • A key cannot be left blank, start or end with a space, nor start with <i>sys</i>. A key can contain letters, digits, spaces, and special characters <code>._:=-@</code> of any language.
value	Yes	String	<p>Specifies the list of tag values.</p> <ul style="list-style-type: none"> • Each tag value can contain a maximum of 255 Unicode characters. • A tag value cannot be left blank nor start or end with a space. It can contain letters, digits, spaces, and special characters <code>._:=-@</code>.

Response Parameters

None

Example Requests

Adding tags

Post `https://{CPH Endpoint}/v1/{project_id}/{resource_type}/{resource_id}/tags/action`

```
{
  "action": "create",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content

Error Codes

See [Error Codes](#).

5.8.5 Deleting Tags

Function

This API is used to delete tags.

URI

POST /v1/{project_id}/{resource_type}/{resource_id}/tags/action

Table 5-245 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
resource_type	Yes	String	Specifies the resource type. cph-server : cloud phone server
resource_id	Yes	String	Specifies the resource ID.

Request Parameters

Table 5-246 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-247 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Indicates an operation. <ul style="list-style-type: none"> delete: delete
tags	Yes	Array of Tag objects	Specifies the tag list.

Table 5-248 Tag

Parameter	Mandatory	Type	Description
key	Yes	String	Specifies the tag key. <ul style="list-style-type: none"> A key can contain a maximum of 127 Unicode characters. A key cannot be left blank, start or end with a space, nor start with sys. A key can contain letters, digits, spaces, and special characters <code>._:=-+@</code> of any language.
value	Yes	String	Specifies the list of tag values. <ul style="list-style-type: none"> Each tag value can contain a maximum of 255 Unicode characters. A tag value cannot be left blank nor start or end with a space. It can contain letters, digits, spaces, and special characters <code>._:=-+@</code>.

Response Parameters

None

Example Requests

Deleting tags

Post `https://{CPH Endpoint}/v1/{project_id}/{resource_type}/{resource_id}/tags`

```
{
  "action": "delete",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
```



```
"key" : "key2",
"value" : "value2"
}]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	No Content

Error Codes

See [Error Codes](#).

5.9 Images

5.9.1 Querying Images

Function

This API is used to query the images.

URI

GET /v1/{project_id}/cloud-phone/images

Table 5-249 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Table 5-250 Query Parameters

Parameter	Mandatory	Type	Description
image_type	No	String	Specifies the image type. <ul style="list-style-type: none"> • public: public images • private: private images • share: shared images

Parameter	Mandatory	Type	Description
status	No	Integer	Specifies the image status. <ul style="list-style-type: none"> • 0: The image is being created. • 1: The image can be used. • 2: The image failed to be created.
offset	No	Integer	If the offset is 0 (default value) or an integer greater than 0, all resources after the offset will be queried.
limit	No	Integer	Specifies the number of resources returned on each page. The value ranges from 1 to 100 (default). Generally, this parameter is set to 10 , 20 , or 50 .
image_id	No	String	Specifies the image ID.
image_name	No	String	Specifies the image name.
create_since	No	Long	Specifies the start time.
create_until	No	Long	Specifies the end time.
src_project_id	No	String	Specifies the project ID of the account that provides the image to share.

Request Parameters

Table 5-251 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-252 Response body parameters

Parameter	Type	Description
image_infos	Array of ListImagesView objects	Specifies details of the images.
total	Integer	Specifies the total number of records returned.
request_id	String	Specifies the unique request ID.

Table 5-253 ListImagesView

Parameter	Type	Description
domain_id	String	Specifies the ID of the tenant to which the image belongs.
image_name	String	Specifies the image name.
update_time	String	Specifies when the image was updated.
create_time	String	Specifies the time when the image was created.
image_size	Long	Specifies the image size, in bytes.
project_id	String	Specifies the project ID. (This parameter is returned only when image_type is set to private .)
image_id	String	Specifies the image ID.
image_version	String	Specifies the AOSP version of the image.
image_type	String	Specifies the image type. The value can be public (public images), private (private images), or share (shared images).
status	Integer	Specifies the image status. <ul style="list-style-type: none"> ● 0: The image is being created. ● 1: The image can be used. ● 2: The image failed to be created.
src_project_id	String	Specifies the project ID of the account that provides the image to share. (This parameter is returned only when image_type is set to share .)

Example Requests

Querying images

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/images

Example Responses

Status code: 200

OK

```
{
  "image_infos" : [ {
    "domain_id" : "4a2a9967e4514c388a4c945efcbab9d6",
    "image_name" : "cph-private-image",
    "update_time" : "2024-04-11T06:38:21Z",
    "create_time" : "2024-04-11T06:38:21Z",
    "image_size" : 1306150912,
    "project_id" : "3a63a229aa6e47bab2153b44a7f3f50d",
    "image_id" : "23030320230421e300221a2000004433",
    "image_version" : "AOSP 9.0",
    "image_type" : "private",
    "status" : 1
  } ],
  "total" : 1,
  "request_id" : "bff458ad55f24751b0b226119ab4f9fd"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.9.2 Deleting an Image

Function

This API is used to delete an image.

URI

DELETE /v1/{project_id}/cloud-phone/images/{image_id}

Table 5-254 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
image_id	Yes	String	Specifies the image ID.

Request Parameters

Table 5-255 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-256 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Deleting an image

```
DELETE https://{CPH Endpoint}/v1/{project_id}/cloud-phone/images/{image_id}
```

Example Responses

Status code: 200

No Content

```
{
  "request_id" : "2b49a942417c48528ed89e4b22ae5cdf"
}
```

Status Codes

Status Code	Description
200	No Content

Error Codes

See [Error Codes](#).

5.9.3 Sharing an Image with an Account in a Specified Project

Function

This API is used to share an image with an account in a specified project.

- An image can be shared only with another Huawei Cloud account in the same region.

URI

POST /v1/{project_id}/cloud-phone/images/{image_id}/members

Table 5-257 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.
image_id	Yes	String	Specifies the image ID.

Request Parameters

Table 5-258 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Table 5-259 Request body parameters

Parameter	Mandatory	Type	Description
member	No	String	Specifies the ID of the project that the image is shared with.

Response Parameters

Status code: 200

Table 5-260 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Sharing an image with an account in a specified project

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/images/{image_id}/members
{
  "member" : "87dc6af96095488d9205b6f31f314b16"
}
```

Example Responses

Status code: 200

OK

```
{
  "request_id" : "95f25ae6120643ac9e0effd633b37b98"
}
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.9.4 Obtaining Projects that the Image Is Shared with

Function

This API is used to obtain projects that the image is shared with.

URI

GET /v1/{project_id}/cloud-phone/images/{image_id}/members

Table 5-261 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID.

Parameter	Mandatory	Type	Description
image_id	Yes	String	Specifies the image ID.

Request Parameters

Table 5-262 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-263 Response body parameters

Parameter	Type	Description
members	Array of ListImageMembersView objects	Specifies details of projects that the image is shared with.

Table 5-264 ListImageMembersView

Parameter	Type	Description
create_time	Long	Specifies the time when the image was shared.
update_time	Long	Specifies the update time.
image_id	String	Specifies the image ID.
member_id	String	Specifies the IDs of the projects that the image is shared with.

Example Requests

Obtaining projects that the image is shared with.

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/images/{image_id}/members

Example Responses

Status code: 200

OK

```
{
  "members": [ {
    "image_id": "23030320230421e300221a2000004167",
    "member_id": "87dc6af96095488d9205b6f31f314b16",
    "create_time": 1713320018058,
    "update_time": 1713320018058
  }, {
    "image_id": "23030320230421e300221a2000004167",
    "member_id": "6733a7ad58694af18c7ee4820052d63f",
    "create_time": 1713083265307,
    "update_time": 1713083265307
  }
]
```

Status Codes

Status Code	Description
200	OK

Error Codes

See [Error Codes](#).

5.9.5 Deleting a Shared Image.

Function

This API is used to delete a shared image.

URI

DELETE /v1/{project_id}/cloud-phone/images/{image_id}/members/{member_id}

Table 5-265 Path Parameters

Parameter	Mandatory	Type	Description
image_id	Yes	String	Specifies the image ID.
member_id	Yes	String	Specifies the IDs of the projects that the image is shared with.
project_id	Yes	String	Specifies the project ID.

Request Parameters

Table 5-266 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Specifies the user token. It can be obtained by calling an Identity and Access Management (IAM) API. The value of X-Subject-Token in the response header is the user token.

Response Parameters

Status code: 200

Table 5-267 Response body parameters

Parameter	Type	Description
request_id	String	Specifies the request ID.

Example Requests

Deleting a Shared Image

```
DELETE https://{CPH Endpoint}/v1/{project_id}/cloud-phone/images/{image_id}/members/{member_id}
```

Example Responses

Status code: 200

ok

```
{
  "request_id" : "95f25ae6120643ac9e0effd633b37b98"
}
```

Status Codes

Status Code	Description
200	ok

Error Codes

See [Error Codes](#).

6 Permissions Policies and Supported Actions

6.1 Introduction

6.1 Introduction

You can use Identity and Access Management (IAM) for fine-grained permissions management of your CPH resources. If your Huawei Cloud account does not need individual IAM users, you can skip this section.

New IAM users do not have any permissions assigned by default. You need to first add them to one or more groups and attach policies or roles to these groups. The users then inherit permissions from the groups and can perform specified operations on cloud services based on the permissions they have been assigned.

You can grant users permissions using **roles** and **policies**. Roles are provided by IAM to define service-based permissions that match users' job responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

If you want to allow or deny the access to an API, use policy-based authorization.

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user wants to query ECSs using an API, the user must have been granted permissions that allow the **cph:servers:list** action.

Supported Actions

CPH provides system-defined policies that can be used in IAM. You can also create custom policies to supplement system-defined policies for more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- Permissions: statements in a policy that allow or deny certain operations
- APIs: REST APIs that can be called by a user who has been granted specific permissions
- Actions: specific operations that are allowed or denied
- Dependencies: actions which a specific action depends on. When allowing an action for a user, you also need to allow any existing action dependencies for that user.
- IAM projects/Enterprise projects: the authorization scope of a custom policy. A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions for both IAM and enterprise projects can be used and applied for both IAM and Enterprise Management. CPH does not support Enterprise Project. For details about the differences between IAM and enterprise management, see [Differences Between IAM and Enterprise Management](#).

 NOTE

√: supported; x: not supported

Table 6-1 describes the actions supported by CPH custom policies.

Table 6-1 Actions supported by CPH custom policies

Permission	API	Action	IAM Project	Enterprise Project
Creating a cloud phone server	POST /v2/{project_id}/cloud-phone/servers	cph:servers:create	√	√
Migrating workloads from a cloud phone server to another server	POST /v2/{project_id}/cloud-phone/servers/{server_id}/change	cph:servers:change	√	√
Querying cloud phone servers	GET /v1/{project_id}/cloud-phone/servers	cph:servers:list	√	√
Querying details of a cloud phone server	GET /v1/{project_id}/cloud-phone/servers/{server_id}	cph:servers:get	√	√

Permission	API	Action	IAM Project	Enterprise Project
Querying cloud phone server flavors	GET /v1/{project_id}/cloud-phone/server-models	cph:system:listServerTypes	√	×
Renaming a cloud phone server	PUT /v1/{project_id}/cloud-phone/servers/{server_id}	cph:servers:updateName	√	√
Changing the flavor of a cloud phone server	POST /v1/{project_id}/cloud-phone/servers/change-server-model	cph:servers:changeType	√	√
Batch restarting cloud phone servers	POST /v1/{project_id}/cloud-phone/servers/batch-restart	cph:servers:restart	√	√
Pushing a shared storage file	POST /v1/{project_id}/cloud-phone/phones/share-files	cph:servers:pushShareFiles	√	√
Querying shared storage files	GET /v1/{project_id}/cloud-phone/servers/share-files	cph:servers:getShareFiles	√	√
Deleting shared storage files	POST /v1/{project_id}/cloud-phone/phones/share-files	cph:servers:deleteShareFiles	√	√
Pushing a shared application	POST /v1/{project_id}/cloud-phone/phones/share-apps	cph:servers:pushShareApps	√	√
Deleting a shared application	DELETE /v1/{project_id}/cloud-phone/phones/share-apps	cph:servers:deleteShareApps	√	√
Changing a key pair	PUT /v1/{project_id}/cloud-phone/servers/open-access	cph:servers:updateKeypair	√	√

Permission	API	Action	IAM Project	Enterprise Project
Querying encoding servers	GET /v1/{project_id}/cloud-phone/encode-servers	cph:servers:listEncodeServers	√	√
Batch restarting the encoding servers	POST /v1/{project_id}/cloud-phone/encode-servers/batch-restart	cph:servers:restartEncodeServers	√	√
Querying the bandwidth used by a cloud phone	GET /v1/{project_id}/cloud-phone/bandwidths	cph:bandwidths:list	√	×
Modifying a shared bandwidth	PUT /v1/{project_id}/cloud-phone/bandwidths/{band_width_id}	cph:bandwidths:put	√	×
Querying cloud phones	GET /v1/{project_id}/cloud-phone/phones	cph:phones:list	√	√
Querying details of a cloud phone	GET /v1/{project_id}/cloud-phone/phones/{phone_id}	cph:phones:get	√	√
Querying cloud phone flavors	GET /v1/{project_id}/cloud-phone/phone-models	cph:system:listPhoneSpecifications	√	×
Resetting cloud phones	POST /v1/{project_id}/cloud-phone/phones/batch-reset	cph:phones:reset	√	√
Restarting cloud phones	POST /v1/{project_id}/cloud-phone/phones/batch-restart	cph:phones:restart	√	√
Stopping cloud phones	POST /v1/{project_id}/cloud-phone/phones/batch-stop	cph:phones:stop	√	√
Renaming a cloud phone	PUT /v1/{project_id}/cloud-phone/phones/{phone_id}	cph:phones:updateName	√	√

Permission	API	Action	IAM Project	Enterprise Project
Updating cloud phone attributes	POST /v1/{project_id}/cloud-phone/phones/batch-update-property	cph:phones:updateProperty	√	√
Exporting data on cloud phones	POST /v1/{project_id}/cloud-phone/phones/batch-storage	cph:phones:storage	√	√
Restoring data of cloud phones	POST /v1/{project_id}/cloud-phone/phones/batch-restore	cph:phones:restore	√	√
Diverting cloud phone traffic	POST /v1/{project_id}/cloud-phone/phones-traffic	cph:phones:createTrafficRoute	√	√
Expanding the disk capacity of cloud phones	POST /v1/{project_id}/cloud-phone/phones/expand-volume	cph:phones:expandVolume	√	√
Obtaining information about the cloud phones to be accessed	POST /v1/{project_id}/cloud-phone/phones/batch-connection	cph:phones:getConnections	√	√
Asynchronously running the ADB shell commands	POST /v1/{project_id}/cloud-phone/phones/commands	cph:phones:execCommands	√	√
Synchronously running the ADB shell commands	POST /v1/{project_id}/cloud-phone/phones/sync-commands	cph:phones:execSyncCommands	√	√

Permission	API	Action	IAM Project	Enterprise Project
Querying the execution status of a task	GET /v1/{project_id}/cloud-phone/jobs/{job_id}	cph:jobs:get	√	×
Querying the execution statuses of all tasks	GET /v1/{project_id}/cloud-phone/jobs	cph:jobs:list	√	×
Batch adding tags	POST /v1/{project_id}/{resource_type}/{resource_id}/tags/action	cph:resource:tagResource	√	√
Batch deleting tags	POST /v1/{project_id}/{resource_type}/{resource_id}/tags/action	cph:resource:unTagResource	√	√
Querying cloud phone servers by tag	POST /v1/{project_id}/{resource_type}/resource_instances/action	cph:resource:listResourcesByTag	√	√
Querying tags of a cloud phone server	GET /v1/{project_id}/{resource_type}/{resource_id}/tags	cph:resource:listTagsForResource	√	√
Querying cloud phone server tags in a specified project	GET /v1/{project_id}/{resource_type}/tags	cph:resource:listTags	√	√
Querying cloud phone images	GET /v1/{project_id}/cloud-phone/images	cph:images:list	√	×
Deleting a cloud phone image	DELETE /v1/{project_id}/cloud-phone/images/{image_id}	cph:images:delete	√	×

Permission	API	Action	IAM Project	Enterprise Project
Sharing a cloud phone image	POST /v1/{project_id}/cloud-phone/images/{image_id}/members	cph:images:addMembers	√	×
Querying users with whom you shared a cloud phone image	GET /v1/{project_id}/cloud-phone/images/{image_id}/members	cph:images:listMembers	√	×
Stopping sharing of a cloud phone image	DELETE /v1/{project_id}/cloud-phone/images/{image_id}/members/{member_id}	cph:images:deleteMembers	√	×
Querying AZs	GET /v1/{project_id}/cloud-phone/availability-zones	cph:system:listServerTypesSoldOutStatus	√	×
Querying subnets	GET /v1/{project_id}/cloud-phone/subnets	cph:system:listSubnets	√	×
Querying VPC peering connections	GET /v1/{project_id}/cloud-phone/peering-routes	cph:system:listPeerings	√	×
Deleting a VPC peering connection	DELETE /v1/{project_id}/cloud-phone/peering-routes	cph:system:deletePeerings	√	×
Adding a VPC peering connection	POST /v1/{project_id}/cloud-phone/peering-routes	cph:system:createPeerings	√	×
Exporting details of cloud phones	GET /v1/{project_id}/cloud-phone/phones/phone-export	cph:phones:exportDetails	√	√
Creating agencies	POST /v1/{project_id}/agencies	cph:system:createAgencies	√	×

Permission	API	Action	IAM Project	Enterprise Project
Checking an agency	GET /v1/{project_id}/agencies	cph:system:checkAgencies	√	×

7 Common Parameters

[7.1 General Request Return Values](#)

[7.2 Error Codes](#)

[7.3 Obtaining a Project ID](#)

7.1 General Request Return Values

7.1.1 Abnormal Response

Cloud Phone APIs

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
error_code	String	Specifies the error code. For details, see Error Codes.
error_msg	String	Specifies the error message.

- Example response

```
{  
  "request_id": "aad0860d089c482b943971f802a6718e",  
  "error_code": "CPS.0001",  
  "error_msg": "No permission to request resources."  
}
```

Cloud Mobile Gaming APIs

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.

Parameter	Type	Description
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.
failures	Array of objects	For details about operation object exceptions, see Table 7-1 .

Table 7-1 Data structure description of **failures**

Parameter	Type	Description
server_id	String	Specifies the cloud phone server ID.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error message.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "error_code": "CPS.1040",
  "error_msg": "App pool cannot be scaled down.",
  "failures": [
    {
      "server_id": "1564567b8bab40f34711234cb80d0124",
      "error_code": "CPS.1027",
      "error_msg": "Server is being scaled up."
    },
    {
      "server_id": "1564567b8bab40f34711234cb80d0188",
      "error_code": "CPS.1028",
      "error_msg": "No permission to request resources. Server is frozen."
    }
  ]
}
```

7.1.2 Returned Values

- Normal

Returned Value	Description
200 OK	The request has succeeded.
201 Created	The request has succeeded and has led to the creation of a resource.
204	A request has succeeded, but that the client does not need to navigate away from its current page.

- Abnormal

Returned Value	Description
400 Bad Request	The request parameter is invalid.
403 Forbidden	You do not have the permissions to access the requested resource.
404 Not Found	The requested resource does not exist.
500 Internal Server Error	Failed to complete the request because of an internal service error.
501 Not Implemented	Failed to complete the request because the server does not support the requested function.
502 Bad Gateway	Failed to complete the request because the server has received an invalid response.
503 Service Unavailable	Failed to complete the request because an internal service error occurred.
504 Gateway Timeout	The gateway timed out.

7.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0002	Parameter: offset or limit is invalid.	Parameter: offset or limit is invalid.	Specify a valid offset or limit.
400	CPS.0004	Invalid phone id.	Invalid phone id.	Enter a valid cloud phone ID.
400	CPS.0009	Parameter: phone_id list is empty.	Parameter: phone_id list is empty.	Ensure that the cloud phone ID list is not left blank.
400	CPS.0010	Parameter: status is invalid.	Parameter: status is invalid.	Specify a valid status and try again.
400	CPS.0014	Parameter: sd_path list is empty.	Parameter: sd_path list is empty.	Specify sd_path list and try again.
400	CPS.0016	server_id is invalid.	server_id is invalid.	Specify a valid server_id and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0020	VNC is not enable.	VNC is not enable.	Contact customer service.
400	CPS.0021	Invalid ticket.	Invalid ticket.	Contact customer service.
400	CPS.0022	Not available phone.	Not available phone.	Contact customer service.
400	CPS.0023	Duplicate apply the phone.	Duplicate apply the phone.	Contact customer service.
400	CPS.0024	Parameter: count is invalid.	Parameter: count is invalid.	Specify a valid count and try again.
400	CPS.0025	Parameter: phone_name is invalid.	Parameter: phone_name is invalid.	Specify a valid phone_name and try again.
400	CPS.0026	Parameter: phone_name is conflicted.	Parameter: phone_name is conflicted.	Specify a valid phone_name and try again.
400	CPS.0027	Parameter: phone_model_name is empty.	Parameter: phone_model_name is empty.	Specify phone_model_name and try again.
400	CPS.0028	Parameter: phone_model_name is invalid.	Parameter: phone_model_name is invalid.	Specify a valid phone_model_name and try again.
400	CPS.0029	Parameter: image_id is empty.	Parameter: image_id is empty.	Specify image_id and try again.
400	CPS.0030	Parameter: image_id is invalid.	Parameter: image_id is invalid.	Specify a valid image_id and try again.
400	CPS.0031	Parameter: band_width is invalid.	Parameter: band_width is invalid.	Specify a valid band_width and try again.
400	CPS.0032	Parameter: band_width_id is empty.	Parameter: band_width_id is empty.	Specify band_width_id and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0033	Parameter: band_width_id is invalid.	Parameter: band_width_id is invalid.	Specify a valid band_width_id and try again.
400	CPS.0034	Parameter: band_width_share_type is invalid.	Parameter: band_width_share_type is invalid.	Specify a valid band_width_share_type and try again.
400	CPS.0035	Parameter: band_width_charge_mode is invalid.	Parameter: band_width_charge_mode is invalid.	Specify a valid band_width_charge_mode and try again.
400	CPS.0036	Parameter: band_width_size is invalid.	Parameter: band_width_size is invalid.	Specify a valid band_width_size and try again.
400	CPS.0037	Parameter: ports is invalid.	Parameter: ports is invalid.	Specify a valid ports and try again.
400	CPS.0038	Parameter: port name is invalid.	Parameter: port name is invalid.	Specify a valid port name and try again.
400	CPS.0039	Parameter: port name is conflicted.	Parameter: port name is conflicted.	Specify a different port name and try again.
400	CPS.0040	Parameter: listen_port is invalid.	Parameter: listen_port is invalid.	Specify a valid listen_port and try again.
400	CPS.0041	Parameter: listen_port is conflicted.	Parameter: listen_port is conflicted.	Specify another port number and try again.
400	CPS.0042	System busy.	System busy.	Try again later.
400	CPS.0043	Parameter: bms_name is invalid.	Parameter: bms_name is invalid.	Specify a valid bms_name and try again.
400	CPS.0045	Parameter: device_id is invalid.	Parameter: device_id is invalid.	Specify a valid device_id and try again.
400	CPS.0046	Parameter: project_id is invalid.	Parameter: project_id is invalid.	Specify a valid project_id and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0047	Parameter: action is invalid.	Parameter: action is invalid.	Specify a valid action and try again.
400	CPS.0048	Parameter: job_id is empty.	Parameter: job_id is empty.	Specify job_id and try again.
400	CPS.0049	Parameter: request_id is empty.	Parameter: request_id is empty.	Specify request_id and try again.
400	CPS.0051	The bandwidth share type of WHOLE is exist.	The bandwidth share type of WHOLE is exist.	Contact customer service.
400	CPS.0052	Parameter: error_code is invalid.	Parameter: error_code is invalid.	Specify a valid error_code and try again.
400	CPS.0053	No permission to request resources. Phone is freezed.	No permission to request resources. Phone is freezed.	Apply to unfreeze your cloud phone and try again.
400	CPS.0054	Handle job timeout.	Handle job timeout.	Try again later.
400	CPS.0055	Parameter: extend_param is invalid.	Parameter: extend_param is invalid.	Specify a valid extend_param and try again.
400	CPS.0056	Parameter: charging_mode is invalid.	Parameter: charging_mode is invalid.	Specify a valid charging_mode and try again.
400	CPS.0057	Parameter: period_type is invalid.	Parameter: period_type is invalid.	Specify a valid period_type and try again.
400	CPS.0058	Parameter: period_num is invalid.	Parameter: period_num is invalid.	Parameter: period_num is invalid.
400	CPS.0059	Parameter: isAutoRenew is invalid.	Parameter: isAutoRenew is invalid.	Specify a valid isAutoRenew and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0060	Parameter: isAutoPay is invalid.	Parameter: isAutoPay is invalid.	Specify a valid isAutoPay and try again.
400	CPS.0061	Inquiry order info failed.	Inquiry order info failed.	Try again later.
400	CPS.0062	Create order failed.	Create order failed.	Contact customer service or try again later.
400	CPS.0063	productInfos is empty.	productInfos is empty.	Specify productInfos and try again.
400	CPS.0064	productId is empty.	productId is empty.	Specify productId and try again.
400	CPS.0065	Quota exceeded for server.	Quota exceeded for server.	Apply for a higher quota and try again.
400	CPS.0066	Capacity exceeded for server.	Capacity exceeded for server.	Contact customer service.
400	CPS.0067	Keypair could not found.	Keypair could not found.	Contact customer service.
400	CPS.0068	Parameter: keypair_name is empty.	Parameter: keypair_name is empty.	Specify keypair_name and try again.
400	CPS.0069	Parameter: topic_urn is invalid.	Parameter: topic_urn is invalid.	Specify a valid topic_urn and try again.
400	CPS.0070	Parameter: Property [phone_brand] is invalid.	Parameter: Property [phone_brand] is invalid.	Specify a valid phone_brand and try again.
400	CPS.0071	Parameter: Property [phone_type] is invalid.	Parameter: Property [phone_type] is invalid.	Specify a valid phone_type and try again.
400	CPS.0072	Parameter: Property [serial_num] is invalid.	Parameter: Property [serial_num] is invalid.	Specify a valid serial_num and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0073	Parameter: Property [os_version] is invalid.	Parameter: Property [os_version] is invalid.	Specify a valid os_version and try again.
400	CPS.0074	Parameter: Property [phone_num] is invalid.	Parameter: Property [phone_num] is invalid.	Specify a valid phone_num and try again.
400	CPS.0075	Parameter: Property [imsi] is invalid.	Parameter: Property [imsi] is invalid.	Specify a valid imsi and try again.
400	CPS.0076	Parameter: Property [iccid] is invalid.	Parameter: Property [iccid] is invalid.	Specify a valid iccid and try again.
400	CPS.0077	Parameter: phones list is invalid.	Parameter: phones list is invalid.	Specify a valid phones list and try again.
400	CPS.0078	Parameter: Property is invalid.	Parameter: Property is invalid.	Specify a valid Property and try again.
400	CPS.0079	Parameter: mac_address is invalid.	Parameter: mac_address is invalid.	Specify a valid mac_address and try again.
400	CPS.0080	Parameter: phone_ids is invalid.	Parameter: phone_ids is invalid.	Specify a valid phone_ids and try again.
400	CPS.0081	Parameter: phone_ids and phones are both empty.	Parameter: phone_ids and phones are both empty.	Specify either phone_ids or phones and try again.
400	CPS.0082	Parameter: Property [wifi_name] is invalid.	Parameter: Property [wifi_name] is invalid.	Specify a valid wifi_name and try again.
400	CPS.0083	Parameter: Property [mac_address] is invalid.	Parameter: Property [mac_address] is invalid.	Specify a valid mac_address and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0084	Parameter: Property [imei] is invalid.	Parameter: Property [imei] is invalid.	Specify a valid imei and try again.
400	CPS.0085	Parameter: order_id is invalid.	Parameter: order_id is invalid.	Specify a valid order_id and try again.
400	CPS.0086	Parameter: resourceid is invalid.	Parameter: resourceid is invalid.	Specify a valid resourceid and try again.
400	CPS.0087	Parameter: server_name is invalid.	Parameter: server_name is invalid.	Specify a valid server_name and try again.
400	CPS.0088	Parameter: server_model_name is empty.	Parameter: server_model_name is empty.	Specify server_model_name and try again.
400	CPS.0089	Parameter: server_model_name is invalid.	Parameter: server_model_name is invalid.	Specify a valid server_model_name and try again.
400	CPS.0090	Init server create data failed.	Init server create data failed.	Contact customer service.
400	CPS.0091	Retry time exceeded for creating server.	Retry time exceeded for creating server.	Contact customer service.
400	CPS.0092	Create server failed.	Create server failed.	Contact customer service.
400	CPS.0093	Parameter: internet_accessible is empty.	Parameter: internet_accessible is empty.	Specify internet_accessible and try again.
400	CPS.0094	Parameter: server_ids is invalid.	Parameter: server_ids is invalid.	Specify a valid server_ids and try again.
400	CPS.0095	Parameter: server_ids is empty.	Parameter: server_ids is empty.	Specify server_ids and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0096	The number of servers exceeds the limit.	The number of servers exceeds the limit.	Contact customer service.
400	CPS.0097	Parameter: server_id is invalid.	Parameter: server_id is invalid.	Specify a valid server_id and try again.
400	CPS.0098	Parameter: no available keypair_name or server not ready.	Parameter: no available keypair_name or server not ready.	Specify a valid key pair name.
400	CPS.0099	Parameter: server is not ready.	Parameter: server is not ready.	Contact customer service.
400	CPS.0100	Probation phones not found.	Probation phones not found.	Contact customer service.
400	CPS.0101	No available device access found.	No available device access found.	Contact customer service.
400	CPS.0102	Failed to create OBS bucket.	Failed to create OBS bucket.	Contact customer service.
400	CPS.0103	Failed to upload objects to OBS.	Failed to upload objects to OBS.	Contact customer service.
400	CPS.0105	BMS status is invalid.	BMS status is invalid.	Contact customer service.
400	CPS.0106	version doesn't match with agent package.	version doesn't match with agent package.	Contact customer service.
400	CPS.0107	Parameters for upload files to obs is invalid.	Parameters for upload files to obs is invalid.	Contact customer service.
400	CPS.0108	Upload files to obs failed.	Upload files to obs failed.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0109	Failed to create alarm topic.	Failed to create alarm topic.	Contact customer service.
400	CPS.0110	Failed to add alarm topic subscriber list.	Failed to add alarm topic subscriber list.	Contact customer service.
400	CPS.0111	desc.json is invalid.	desc.json is invalid.	Contact customer service.
400	CPS.0112	Upload version didn't equals version defined in desc.json.	Upload version didn't equals version defined in desc.json.	Contact customer service.
400	CPS.0113	Upload file not founded.	Upload file not founded.	Contact customer service.
400	CPS.0114	Update system_parameter failed.	Update system_parameter failed.	Contact customer service.
400	CPS.0116	Parameter: type is invalid.	Parameter: type is invalid.	Specify a valid type and try again.
400	CPS.0117	Parameter: command is invalid.	Parameter: command is invalid.	Specify a valid command and try again.
400	CPS.0118	Parameter: content is invalid.	Parameter: content is invalid.	Specify a valid content and try again.
400	CPS.0119	Parameter: filename doesn't end .apk.	Parameter: filename doesn't end .apk.	End the file with .apk and try again.
400	CPS.0121	Parameter: Encode server id is invalid.	Parameter: Encode server id is invalid.	Specify a valid Encode server id and try again.
400	CPS.0122	Parameter: Encode server id list is invalid.	Parameter: Encode server id list is invalid.	Specify a valid Encode server id list and try again.
400	CPS.0123	Encode server not found.	Encode server not found.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0124	Encode server is creating.	Encode server is creating.	Contact customer service.
400	CPS.0125	Parameter: Property [build_id] is invalid.	Parameter: Property [build_id] is invalid.	Specify a valid build_id and try again.
400	CPS.0126	Parameter: Property [android_id] is invalid.	Parameter: Property [android_id] is invalid.	Specify a valid android_id and try again.
400	CPS.0127	Parameter: Property [hide_navigate] is invalid.	Parameter: Property [hide_navigate] is invalid.	Specify a valid hide_navigate and try again.
400	CPS.0128	Parameter: Property [gsm_country] is invalid.	Parameter: Property [gsm_country] is invalid.	Specify a valid gsm_country and try again.
400	CPS.0129	Parameter: Property [gsm_number] is invalid.	Parameter: Property [gsm_number] is invalid.	Specify a valid gsm_number and try again.
400	CPS.0130	Parameter: Property [gsm_operator] is invalid.	Parameter: Property [gsm_operator] is invalid.	Specify a valid gsm_operator and try again.
400	CPS.0131	Parameter: Property [sim_country] is invalid.	Parameter: Property [sim_country] is invalid.	Specify a valid sim_country and try again.
400	CPS.0132	Parameter: Property [sim_number] is invalid.	Parameter: Property [sim_number] is invalid.	Specify a valid sim_number and try again.
400	CPS.0133	Parameter: Property [sim_operator] is invalid.	Parameter: Property [sim_operator] is invalid.	Specify a valid operator and try again.
400	CPS.0134	Parameter: bucket_name is invalid.	Parameter: bucket_name is invalid.	Specify a valid bucket_name and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0135	Parameter: object_path is invalid.	Parameter: object_path is invalid.	Specify a valid object_path and try again.
400	CPS.0136	Available server not found.	Available server not found.	Contact customer service.
400	CPS.0137	Server does not support push share files.	Server does not support push share files.	Contact customer service.
400	CPS.0138	The bandwidth name is invalid.	The bandwidth name is invalid.	Specify a valid bandwidth name and try again.
400	CPS.0139	The port_name_list is invalid.	The port_name_list is invalid.	Contact customer service.
400	CPS.0140	Parameter: manage_bandwidth is invalid.	Parameter: manage_bandwidth is invalid.	Specify a valid manage_bandwidth and try again.
400	CPS.0141	Phone is not in running status.	Phone is not in running status.	Contact customer service.
400	CPS.0142	Parameter: image_label is invalid.	Parameter: image_label is invalid.	Specify a valid image_label and try again.
400	CPS.0143	Parameter: is_public is invalid.	Parameter: is_public is invalid.	Specify a valid is_public and try again.
400	CPS.0144	Parameter: product_type is invalid.	Parameter: product_type is invalid.	Specify a valid product_type and try again.
400	CPS.0145	Parameter: ports exceeds the limit.	Parameter: ports exceeds the limit.	Specify a valid ports and try again.
400	CPS.0147	Server does not support push share apps.	Server does not support push share apps.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0148	Parameter: pre_install_app is invalid.	Parameter: pre_install_app is invalid.	Specify a valid pre_install_app and try again.
400	CPS.0155	The file_paths is invalid.	The file_paths is invalid.	Contact customer service.
400	CPS.0156	The server_id is not found.	The server_id is not found.	Contact customer service.
400	CPS.0157	The phone model is invalid.	The phone model is invalid.	Contact customer service.
400	CPS.0158	The server is not available for being restarted.	The server is not available for being restarted.	Contact customer service.
400	CPS.0159	Server not found.	Server not found.	Contact customer service.
400	CPS.0160	Only the size of shared bandwidth can be changed.	Only the size of shared bandwidth can be changed.	Contact customer service.
400	CPS.0161	Parameter: the number of request IDs has exceeded the limit.	Parameter: the number of request IDs has exceeded the limit.	Specify a valid number and try again.
400	CPS.0162	Parameter: image_name is invalid.	Parameter: image_name is invalid.	Specify a valid image_name and try again.
400	CPS.0163	Parameter: property {0} not supported.	Parameter: property {0} not supported.	Specify a valid property and try again.
400	CPS.0164	Parameter: Invalid property {0}.	Parameter: Invalid property {0}.	Specify a valid property and try again.
400	CPS.0165	The phone must be in stopped or running status.	The phone must be in stopped or running status.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0166	Phone image not found.	Phone image not found.	Contact customer service.
400	CPS.0167	Parameter: storage_infos is invalid.	Parameter: storage_infos is invalid.	Specify a valid storage_infos and try again.
400	CPS.0168	Parameter: include_files is invalid.	Parameter: include_files is invalid.	Specify a valid include_files and try again.
400	CPS.0169	Parameter: exclude_files is invalid.	Parameter: exclude_files is invalid.	Specify a valid exclude_files and try again.
400	CPS.0170	Parameter: storage_infos exceeds the limit.	Parameter: storage_infos exceeds the limit.	Specify a valid storage_infos and try again.
400	CPS.0171	Parameter: restore_infos is invalid.	Parameter: restore_infos is invalid.	Specify a valid restore_infos and try again.
400	CPS.0172	Parameter: object_path is unregistered.	Parameter: object_path is unregistered.	Specify a valid object_path and try again.
400	CPS.0173	Parameter: package_name is invalid.	Parameter: package_name is invalid.	Specify a valid package_name and try again.
400	CPS.0174	Parameter: time is invalid.	Parameter: time is invalid.	Specify a valid time and try again.
400	CPS.0175	Parameter: run_time is invalid.	Parameter: run_time is invalid.	Specify a valid run_time and try again.
400	CPS.0176	Parameter: session_id is invalid.	Parameter: session_id is invalid.	Specify a valid session_id and try again.
400	CPS.0190	The number of phones exceeds the limit.	The number of phones exceeds the limit.	Contact customer service.
400	CPS.0191	Parameter: subnet_cidr is invalid.	Parameter: subnet_cidr is invalid.	Specify a valid subnet_cidr and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0192	Cannot delete the latest agent because it is in use.	Cannot delete the latest agent because it is in use.	Contact customer service.
400	CPS.0193	Parameter: is_key_version is invalid.	Parameter: is_key_version is invalid.	Specify a valid is_key_version and try again.
400	CPS.0194	The subnet overlaps with an existing one.	The subnet overlaps with an existing one.	Contact customer service.
400	CPS.0195	Encode server is frozen, no permission to request resources.	Encode server is frozen, no permission to request resources.	Contact customer service.
400	CPS.0196	Quota is insufficient.	Quota is insufficient.	Contact customer service.
400	CPS.0197	Parameter: vpc_cidr is invalid.	Parameter: vpc_cidr is invalid.	Specify a valid vpc_cidr and try again.
400	CPS.0198	The VPC CIDR block must be the same with the existing one.	The VPC CIDR block must be the same with the existing one.	Specify a valid vpc_cidr and try again.
400	CPS.0199	The path is invalid.	The path is invalid.	Contact customer service.
400	CPS.0200	Parameter: peering_id is invalid	Parameter: peering_id is invalid	Specify a valid peering_id and try again.
400	CPS.0201	The peering connection cannot be found.	The peering connection cannot be found.	Specify a valid peering connection ID and try again.
400	CPS.0202	You can only configure routes for active peering connections.	You can only configure routes for active peering connections.	Ensure that the VPC peering connection is in the Accepted state.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0203	Failed to obtain the VPC ID. Buy a server first.	Failed to obtain the VPC ID. Buy a server first.	Create a cloud phone server first.
400	CPS.0204	The subnet cannot be used when in delete or error status.	The subnet cannot be used when in delete or error status.	Contact customer service.
400	CPS.0205	Parameter: br_cidr is invalid.	Parameter: br_cidr is invalid.	Specify a valid br_cidr.
400	CPS.0206	The br_cidr overlaps with an existing subnet cidr.	The br_cidr overlaps with an existing subnet cidr.	Specify a valid br_cidr.
400	CPS.0207	Parameter: traffic type is invalid.	Parameter: traffic type is invalid.	Specify a valid traffic type and try again.
400	CPS.0208	Encode server is not in running status, not allowed to request resources.	Encode server is not in running status, not allowed to request resources.	Contact customer service.
400	CPS.0209	Parameter: the number of requested phone ids has exceeded the limit.	Parameter: the number of requested phone ids has exceeded the limit.	Specify a valid number and try again.
400	CPS.0210	Parameter: br_cidr mask has exceeded 16 under the multi bridge specification.	Parameter: br_cidr mask has exceeded 16 under the multi bridge specification.	Specify a valid br_cidr and try again.
400	CPS.0211	Parameter: availability_zone is invalid.	Parameter: availability_zone is invalid.	Specify a valid availability_zone and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0212	Parameter: no permission to request availability_zone.	Parameter: no permission to request availability_zone.	Contact customer service.
400	CPS.0213	Phone is creating.	Phone is creating.	Contact customer service.
400	CPS.0214	Parameter: access_ip is invalid.	Parameter: access_ip is invalid.	Specify a valid access_ip and try again.
400	CPS.0215	Parameter: access_port is invalid.	Parameter: access_port is invalid.	Specify a valid access_port and try again.
400	CPS.0216	Phone is not in stop status.	Phone is not in stop status.	Contact customer service.
400	CPS.0217	The br_cidr overlaps with the reserved network segment 10.238.0.0/15.	The br_cidr overlaps with the reserved network segment 10.238.0.0/15.	Contact customer service.
400	CPS.0218	Parameter: image_sub_type is invalid.	Parameter: image_sub_type is invalid.	Specify a valid image_sub_type and try again.
400	CPS.0219	Phone does not support export and import image.	Phone does not support export and import image.	Contact customer service.
400	CPS.0220	Phone image status is not active.	Phone image status is not active.	Contact customer service.
400	CPS.0221	Phone image type is not whole image.	Phone image type is not whole image.	Contact customer service.
400	CPS.0222	Phone image labels do not match up.	Phone image labels do not match up.	Contact customer service.
400	CPS.0223	Parameter: tenant_vpc_id is invalid.	Parameter: tenant_vpc_id is invalid.	Specify a valid tenant_vpc_id.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0224	Parameter: subnet_id is invalid.	Parameter: subnet_id is invalid.	Specify a valid subnet_id.
400	CPS.0225	Parameter: ip_address is invalid.	Parameter: ip_address is invalid.	Specify a valid ip_address and try again.
400	CPS.0226	Parameter: nics is invalid.	Parameter: nics is invalid.	Enter a valid nics.
400	CPS.0227	IP address is not a valid IP for the specified subnet.	IP address is not a valid IP for the specified subnet.	Enter a valid IP address and try again.
400	CPS.0228	Subnet does not belong to the VPC.	Subnet does not belong to the VPC.	Use a subnet in the VPC.
400	CPS.0230	The number of this phone image has reached the upper limit 1000000000, please try again tomorrow.	The number of this phone image has reached the upper limit 1000000000, please try again tomorrow.	Contact customer service.
400	CPS.0231	Source phone and target phone can not be the same.	Source phone and target phone can not be the same.	Specify a target cloud phone that is different from the source cloud phone.
400	CPS.0232	Parameter: source_phone_id is invalid.	Parameter: source_phone_id is invalid.	Specify a valid source_phone_id and try again.
400	CPS.0233	Parameter: target_phone_id is invalid.	Parameter: target_phone_id is invalid.	Specify a valid target_phone_id and try again.
400	CPS.0234	Parameter: migrate_infos is invalid.	Parameter: migrate_infos is invalid.	Specify a valid migrate_infos and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0235	Parameter: is_migrate_property is invalid.	Specify a valid is_migrate_property and try again.	Specify a valid is_migrate_property and try again.
400	CPS.0237	Parameter: ip_address is in use.	Parameter: ip_address is in use.	Specify an IP address that is not in use and try again.
400	CPS.0238	Parameter: public_ip is invalid.	Parameter: public_ip is invalid.	Check the public_ip structure.
400	CPS.0239	Parameter: eip is invalid.	Parameter: eip is invalid.	Check the structure body of eip.
400	CPS.0240	Parameter: network_version is invalid.	Parameter: network_version is invalid.	The value of network_version must be v1 or v2 and is case-insensitive.
400	CPS.0241	Insufficient IP addresses.	Insufficient IP addresses.	Contact customer service.
400	CPS.0242	Insufficient Bms Quantity.	Insufficient Bms Quantity.	Contact customer service.
400	CPS.0244	Bms event name is invalid.	Bms event name is invalid.	Contact customer service.
400	CPS.0245	Server does not allow to change model.	Server does not allow to change model.	Contact customer service.
400	CPS.0246	Server model not found.	Server model not found.	Contact customer service.
400	CPS.0247	Server model is not supported.	Server model is not supported.	Contact customer service.
400	CPS.0248	Get change resource price failed.	Get change resource price failed.	Contact customer service.
400	CPS.0249	Change cbc order failed.	Change cbc order failed.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0250	The server specifications cannot be the same as the specifications to be modified.	The server specifications cannot be the same as the specifications to be modified.	Contact customer service.
400	CPS.0251	Existing EIPs cannot be assigned to servers created in batches.	Existing EIPs cannot be assigned to servers created in batches.	Contact customer service.
400	CPS.0252	EIPs of cloud phones whose phone_model_name has more than one EIPs cannot be configured from existing EIPs.	EIPs of cloud phones whose phone_model_name has more than one EIPs cannot be configured from existing EIPs.	Contact customer service.
400	CPS.0253	Parameter: public_ip: ids is invalid.	Parameter: public_ip: ids is invalid.	Specify a valid public_ip: ids and try again.
400	CPS.0254	Image version is invalid.	Image version is invalid.	Contact customer service.
400	CPS.0255	Parameter: image_id is not supported.	Parameter: image_id is not supported.	Specify a valid image_id and try again.
400	CPS.0256	Servers you want can only be requested by using the POST /v2/{project_id}/cloud-phone/servers URI.	Servers you want can only be requested by using the POST /v2/{project_id}/cloud-phone/servers URI.	Contact customer service.
400	CPS.0257	Phone model is not supported.	Phone model is not supported.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0258	VNC is under maintenance.	VNC is under maintenance.	Contact customer service.
400	CPS.0259	The agent version is not supported.	The agent version is not supported.	Contact customer service.
400	CPS.0260	Sub job execute failed.	Sub job execute failed.	Contact customer service.
400	CPS.0261	The phone image is not supported.	The phone image is not supported.	Contact customer service.
400	CPS.0262	The agent version and phone image is not supported.	The agent version and phone image is not supported.	Contact customer service.
400	CPS.0263	Cloud phones running Android 9 do not support VNC.	Cloud phones running Android 9 do not support VNC.	Contact customer service.
400	CPS.0264	Parameter: request_id is invalid.	Parameter: request_id is invalid.	Specify a valid request_id and try again.
400	CPS.0265	version is invalid.	version is invalid.	Contact customer service.
400	CPS.0266	Duplicate mac addresses in request parameters.	Duplicate mac addresses in request parameters.	Contact customer service.
400	CPS.0267	The mac address already exists.	The mac address already exists.	Contact customer service.
400	CPS.0300	Parameter: Invalid resource type.	Parameter: Invalid resource type.	Enter a valid resource type and try again.
400	CPS.0301	Parameter: Invalid resource id.	Parameter: Invalid resource id.	Enter a valid resource ID and try again.
400	CPS.0303	Parameter: Invalid tags.	Parameter: Invalid tags.	Enter valid tags and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0304	Parameter: Invalid tag key.	Parameter: Invalid tag key.	Enter a valid tag key and try again.
400	CPS.0305	Parameter: Invalid tag value.	Parameter: Invalid tag value.	Enter a valid tag value and try again.
400	CPS.0306	Parameter: Key start with <code>_sys_</code> is reserved to system user.	Parameter: Key start with <code>_sys_</code> is reserved to system user.	Do not start key with <code>sys</code> and try again.
400	CPS.0307	Parameter: The number of created tags has reached the limit.	Parameter: The number of created tags has reached the limit.	Delete some tags and try again.
400	CPS.0309	Parameter: The number of tag keys has reached the limit.	Parameter: The number of tag keys has reached the limit.	Delete some tag keys and try again.
400	CPS.0310	Parameter: The number of tag values has reached the limit.	Parameter: The number of tag values has reached the limit.	Delete some tag values and try again.
400	CPS.0311	Parameter: Invalid matches.	Parameter: Invalid matches.	Change matches to a list and try again.
400	CPS.0312	Parameter: Invalid match.	Parameter: Invalid match.	Change match to a map and try again.
400	CPS.0313	Parameter: Invalid match key.	Parameter: Invalid match key.	Enter a valid key and try again.
400	CPS.0314	Parameter: Invalid match value.	Parameter: Invalid match value.	Enter a valid value and try again.
400	CPS.0315	Parameter: Invalid tag values.	Parameter: Invalid tag values.	Enter valid tag values and try again.

Status Code	Error Codes	Error Message	Description	Solution
400	CPS.0316	Parameter: enterprise_project_id is invalid.	Parameter: enterprise_project_id is invalid.	Enter a valid enterprise project ID and try again.
403	CPS.0001	No permission to request resources.	No permission to request resources.	Apply for the required permissions on IAM or set the token scope to project and try again.
403	CPS.0006	No permission to request resources. Role is op_restricted.	No permission to request resources. Role is op_restricted.	Top up your account and try again.
403	CPS.0007	No permission to request resources. Role is op_suspended.	No permission to request resources. Role is op_suspended.	Contact customer service.
403	CPS.0008	No permission to request resources. Role is op_unverified.	No permission to request resources. Role is op_unverified.	Complete real-name authentication.
404	CPS.0005	Phone is not found.	Phone is not found.	Change the cloud phone ID and try again.
404	CPS.0011	Job not found.	Job not found.	Contact customer service.
404	CPS.0015	server_id not found.	server_id not found.	Change the server ID and try again.
404	CPS.0017	Event callback not found.	Event callback not found.	Contact customer service.
404	CPS.0018	Access info not found.	Access info not found.	Contact customer service.

Status Code	Error Codes	Error Message	Description	Solution
404	CPS.0019	Ticket not found.	Ticket not found.	Contact customer service.
404	CPS.0044	bms not found.	bms not found.	Contact customer service.
404	CPS.0050	Jobs related to this requestId is not found.	Jobs related to this requestId is not found.	Contact customer service.
404	CPS.0104	File doesn't exists in OBS.	File doesn't exists in OBS.	Contact customer service.
404	CPS.0115	Band width not found.	Band width not found.	Contact customer service.
404	CPS.0229	Query subnet by id fail.	Query subnet by id fail.	Ensure the subnet ID that you entered is available.
404	CPS.0236	Query vpc by id not found.	Query vpc by id not found.	Ensure that the entered VPC ID is available.
404	CPS.0243	User not found.	User not found.	Contact customer service.
404	CPS.0302	The resource_id is not found.	The resource_id is not found.	Enter a valid resource ID and try again.
500	CPS.0003	Service internal error.	Service internal error.	Try again later.

7.3 Obtaining a Project ID

Scenarios

Project IDs are required by some URLs when APIs are called. You can obtain a project ID by performing the following steps:

- [Obtain a Project ID by Calling an API](#)
- [Obtain a Project ID from the Console](#)

Obtain a Project ID by Calling an API

You can obtain a project ID by calling the API used to [query projects based on specified criteria](#).

The API used to obtain a project ID is GET `https://{Endpoint}/v3/projects`. {Endpoint} is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [3.2 Authentication](#).

The following is an example response. The value of **id** is the project ID.

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

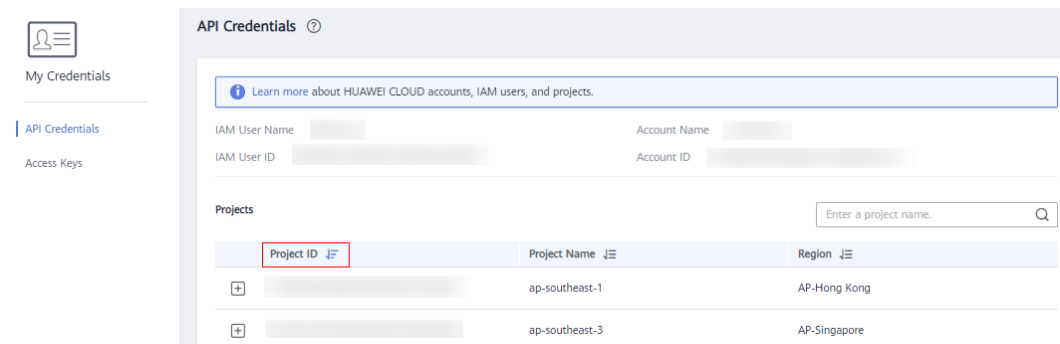
Obtain a Project ID from the Console

To obtain a project ID from the console, perform the following operations:

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list.

On the **API Credentials** page, view the project ID in the project list.

Figure 7-1 Viewing the project ID



A Appendix

A.1 Cloud Phone Attribute List

 NOTE

Attribute parameters are optional and can be modified.

- For cloud phones whose names start with aphs1 and whose flavor is rx1.cp.c60.d32.e1v1.qemu, only a few attributes can be modified.
- Some attributes may be supported only by the latest image. Update your phone image if necessary.

Parameter	Type	Description	Constraint
com.cph.mainkeys	Integer	Specifies whether to hide virtual keys. The default value is 0 . Both com.cph.mainkeys and qemu.hw.mainkeys can be used to hide or display virtual keys. qemu.hw.mainkeys has been discarded.	0 : Display virtual keys. 1 : Hide virtual keys.
disable.status.bar	Integer	Specifies whether to disable the status bar. The default value is 0 .	0 : Enable the status bar. 1 : Disable the status bar.
ro.permission.changed	Integer	Specifies whether to automatically grant all permissions requested by the app during app installation. The default value is 0 .	0 : All permissions requested by the app are not automatically granted. 1 : All permissions requested by the app are automatically granted.

Parameter	Type	Description	Constraint
ro.install.auto	Integer	Specifies whether to automatically confirm the app installation. The default value is 0 .	0 : The app installation is not automatically confirmed. 1 : The app installation is automatically confirmed.
ro.com.cph.non_root	Integer	Specifies whether the user is a non-root user. The default value is 1 .	0 : Enable rooting. 1 : Disable rooting.
ro.com.cph.notification_disable	Integer	Specifies whether to disable message notifications. The default value is 0 .	0 : Enable message notifications. 1 : Disable message notifications.
com.cph.disable_fb_permission	Integer	Specifies whether to disable privacy protection for app screenshots. The default value is 0 .	0 : Enable the function. You cannot take screenshots of the app interfaces for which privacy protection has been configured. 1 : Disable this function. You can take screenshots of the app interfaces for which privacy protection has been configured.
com.cph.bandwidth_limit	String	Specifies the rate at which a cloud phone downloads content from the Internet.	The value ranges from 1 to 99999999 . The unit is kbit/s. -1 : The rate is not limited. Note: <ul style="list-style-type: none"> The cloud phone rate does not exceed the bandwidth upper limit. Cloud phones of the rx1.cp.c60.d32.e1v1.qemu flavor do not support rate limiting.
ro.com.cph.toast_enable	Integer	Specifies whether to enable the toast message dialog box when ro.com.cph.non_root is set to 1 . The default value is 0 .	0 : disable 1 : enable

Parameter	Type	Description	Constraint
com.cph.cam_local_pic_path	String	Specifies the path for the camera to read local images. The camera automatically loads the image of the corresponding address.	The path must contain 1 to 90 characters, including only digits, letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), and space.
persist.sys.locale	String	Specifies the language identification tag of the system when the cloud phone is started for the first time.	The parameter must be specified and can contain a maximum of 64 characters, including only digits, letters, and hyphens (-).
sys.prop.write_imsi	String	Specifies International Mobile Subscriber Identity (IMSI).	The value can contain a maximum of 15 decimal digits.
sys.prop.write_phonenum	String	Specifies the phone number.	The phone number can contain a maximum of 20 decimal digits.
sys.prop.write_wifissid	String	Specifies the wireless network name. The default value is cloudphone_wifi .	The name must be specified and can contain a maximum of 64 characters, including only digits, letters, hyphens (-), underscores (_), periods (.), and slashes (/).
gsm.sim.operator.iso-country	String	Specifies the home country of the SIM card. The default value is cn .	The value can contain a maximum of 10 characters. Only letters and commas (,) are allowed.
gsm.sim.operator.numeric	String	Specifies the identifier of the SIM card provider. The default value is 46000 .	The identifier can contain a maximum of 10 characters. Only letters and commas (,) are allowed.

Parameter	Type	Description	Constraint
gsm.sim.operator.alpha	String	Specifies the carrier of the SIM card. The default value is CMCC .	The value must contain up to 90 characters. Only digits, letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), commas (,), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
gsm.operator.iso-country	String	Specifies the country of the network carrier. The default value is cn .	The value can contain a maximum of 10 characters. Only letters and commas (,) are allowed.
gsm.operator.numeric	String	Specifies the identifier of the network provider. The default value is 46000 .	The identifier can contain a maximum of 10 characters. Only letters and commas (,) are allowed.
gsm.operator.alpha	String	Specifies the network carrier. The default value is CMCC .	The value must contain up to 90 characters. Only digits, letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), commas (,), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
ro.hardware.gpu-renderer	String	Specifies the GPU model.	Deprecated
ro.board.platform	String	Specifies the platform model. The default value is hi3660 .	Deprecated
ro.build.product	String	Specifies the product model. The default value is STF .	Deprecated
ro.product.device	String	Specifies the device model. The default value is HWSTF .	Deprecated

Parameter	Type	Description	Constraint
ro.com.cph.sfs_enable	String	Specifies whether to disable SFS. The default value is 0 .	Deprecated
ro.product.manufacturer	String	Specifies the manufacturer. The default value is Huawei .	Deprecated
ro.product.name	String	Specifies the product name. The default value is monbox .	Deprecated
qemu.hw.mainkeys	Integer	Specifies whether to hide virtual keys. The default value is 0 .	Deprecated
ro.horizontal.screen	String	Specifies whether to display in landscape mode. The default value is 0 .	0 : portrait mode 1 : landscape mode
com.cph.cg.sign_check_url	String	Specifies the signature verification URL of the game cloud phone.	The value starts with http or https and can contain a maximum of 256 characters. Only letters, digits, and the following special characters are allowed: _,/;-
com.cph.cg.event_notify_url	String	Specifies the callback URL for reporting the game cloud phone events.	The value starts with http or https and can contain a maximum of 256 characters. Only letters, digits, and the following special characters are allowed: _,/;-
com.cph.cg.heartbeat_url	String	Specifies the heartbeat reporting URL of the game cloud phone.	The value starts with http or https and can contain a maximum of 256 characters. Only letters, digits, and the following special characters are allowed: _,/;-
com.cph.cg.heartbeat_interval	String	Specifies the heartbeat reporting interval of the game cloud phone, in seconds.	The value can contain 1 to 10 digits.
com.cph.cg.app_port	String	Specifies the port accessed by the cloud gaming application.	Supported range: 10000 to 11000

Parameter	Type	Description	Constraint
com.cph.cg.h5_port	String	Specifies the H5 access port of cloud gaming.	Supported range: 10000 to 11000
ro.com.cph.cloud_app_engine	String	Specifies whether to enable the device-cloud streaming engine.	0 : disable 1 : enable

A.2 Cloud Phone Flavor List

Flavor	Description
rc1.se	Quantity: 60 CPU: 4 vCPUs Memory: 8 GB Screen resolution: 720p Frame rate: 30 fps
rc1.plus	Quantity: 30 CPU: 6 vCPUs Memory: 12 GB Screen resolution: 720p Frame rate: 60 fps
rc2.se	Quantity: 100 CPU: 5 vCPUs Memory: 10 GB Screen resolution: 720p Frame rate: 30 fps
rc2.plus	Quantity: 80 CPU: 6 vCPUs Memory: 12 GB Screen resolution: 720p Frame rate: 30 fps
rc2.pro	Quantity: 60 CPU: 8 vCPUs Memory: 16 GB Screen resolution: 720p Frame rate: 60 fps

rc2.max	Quantity: 40 CPU: 16 vCPUs Memory: 24 GB Screen resolution: 1,080p Frame rate: 30 fps
rc2.pro_max	Quantity: 20 CPU: 20 vCPUs Memory: 32 GB Screen resolution: 1,080p Frame rate: 30 fps
rc3.se	Quantity: 100 CPU: 5 vCPUs Memory: 10 GB Screen resolution: 720p Frame rate: 30 fps
rc3.plus	Quantity: 90 CPU: 6 vCPUs Memory: 12 GB Screen resolution: 720p Frame rate: 60 fps
rc3.pro	Quantity: 60 CPU: 8 vCPUs Memory: 16 GB Screen resolution: 1,080p Frame rate: 60 fps
rc3.max	Quantity: 40 CPU: 16 vCPUs Memory: 24 GB Screen resolution: 1,080p Frame rate: 60 fps
rc3.pro_max	Quantity: 20 CPU: 20 vCPUs Memory: 32 GB Screen resolution: 1,080p Frame rate: 60 fps

A.3 Server Flavors

Flavor	Description
physical.rx1.xlarge	CPU: 64 vCPUs Memory: 256 GB Disk: 2 x 1.2 TB SAS + 800 GB SSD NIC: 2 x 2 x 10GE
physical.rx1.xlarge.cg	CPU: 64 vCPUs Memory: 256 GB Disk: 2 x 1.2 TB SAS + 800 GB SAS SSD NIC: 2 x 2 x 10GE Cloud mobile gaming access software
physical.kg1.4xlarge.cp	CPU: 128 vCPUs Memory: 512 GB, no local disks NIC: 2 x 2 x 10GE
physical.kg1.4xlarge.cg	CPU: 128 vCPUs Memory: 512 GB, no local disks NIC: 2 x 2 x 10GE Cloud mobile gaming access software
physical.rx2.32xlarge.4	CPU: 128 vCPUs Memory: 512 GB, no local disks NIC: 2 x 2 x 10GE
physical.rx3.32xlarge.4	CPU: 128 vCPUs Memory: 512 GB, no local disks NIC: 2 x 2 x 10GE