Cloud Phone Host

API Reference

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Contents

1 Before You Start

1.1 Overview

Welcome to *Cloud Phone Host API Reference*. Cloud Phone Host (CPH) is a Huawei Cloud service. Huawei cloud phones are virtual phones running on Kunpeng Bare Metal Servers (BMSs) from Huawei Cloud.

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

If you plan to access CPH through an API, ensure that you are familiar with CPH concepts. For details, see **Service Overview**.

1.2 API Calling

CPH supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see **Calling APIs**.

1.3 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**.

1.4 Limitations and Constraints

- Your quota determines the number of cloud phone servers that you can create. To view your quota or apply for a quota increase, see **Adjusting Resource Quotas**.
- For detailed limitations and constraints, see the description of each specific API.

1.5 Concepts

- Account

  An account is created upon successful registration. 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 directly 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 ventilation, fire, water, 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 isolation model
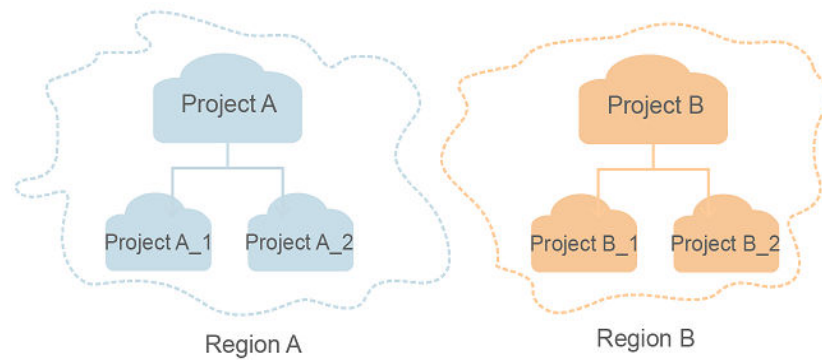
- Enterprise project

  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.

3 Calling APIs

Making an API Request

Authentication

Response

3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for **obtaining a user token** 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 *Parameter name=Parameter value*. For example, **? limit=10** indicates that a maximum of 10 data records will be displayed.

For example, to obtain an IAM token 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/auth/tokens) in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens

Figure 3-1 Example URI
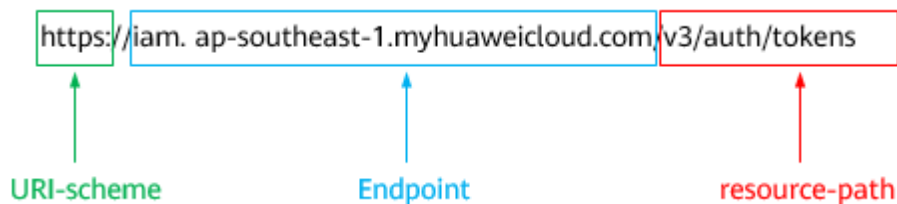
□ NOTE

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 used to **obtain a user token**, the request method is **POST**. The request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

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.

Common request header fields are as follows.

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 *Hostname:Port number*. 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
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

Parameter	Description	Mandatory	Example Value
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in **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.	e9993fc787d94b6c886cbaa340f9c0f4
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: MIIPAgYJKoZIhvcNAQcCo...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 "Authentication Using AK/SK" in **Authentication**.

The API used to **obtain a user token** does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

(Optional) Request Body

This part is optional. The body of a request is often sent in a structured format as specified in the **Content-Type** header field. The request body transfers content except the request header.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to **obtain a user token**, the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *username*,

domainname, ******** (login password), and *xxxxxxxxxxxxxxxxx* (project name) with the actual values. Obtain a project name from **Regions and Endpoints**.

📖 NOTE

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see **Obtaining a User Token**.

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json

{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",
                    "password": "*******",
                    "domain": {
                        "name": "domainname"
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "xxxxxxxxxxxxxxxxx"
            }
        }
    }
}
```

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 **Obtaining User Token** API.

IMS 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: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.

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

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 **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
→ MIIYXQYJKoZIhvcNAQcCoIIYTjCCGEoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6IjIwMTktMDItMTNUMD
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JIGzrpd18LGXK5txIdfq4IqHCYb8P4NaY0NYejcAgzJVeFIYtLWT1GSO0zxKZmIQHQj82HBqHdgIZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXI1jipPEGA270g1FruooL6jqgIFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-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 **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

Cloud Phone Server Management

Bandwidth Management

Cloud Phone Management

Task Management

Key Management

Encoding Server Management

ADB Commands

5.1 Cloud Phone Server Management

5.1.1 Querying Cloud Phone Servers

Function Description

- API name

  ListCloudPhoneServers

- Function

  This API is used to query cloud phone servers by page and list them in descending order by creation time. 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?
offset={offset}&limit={limit}&server_name={server_name}&network_version={network_version}

Table 5-1 lists URI parameters.

Table 5-1 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
offset	No	Integer	Specifies the offset. If the offset is an integer greater than 0 but fewer than the number of resources, all resources after this offset will be queried. The default value is **0**.
limit	No	Integer	Specifies the number of resources to be returned on each page. Value range: 1 to 100 (default value: **100**) Generally, set this parameter 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 which type of network the cloud phone server uses. The type can be: ● **v1**: system network ● **v2**: custom network

Request

- Request parameters

  None

- Example request

  GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers?offset=0&limit=10

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.

Parameter	Type	Description
servers	Array of objects	Specifies information about the cloud phone server. For details, see **Table 5-2**.

Table 5-2 Data structure description of **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.
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. For details, see **Server Flavors**.
phone_model_name	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes. For details, see **Cloud Phone Flavor List**.
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 status of the cloud phone server. ● **0**, **1**, **3**, or **4**: Creating ● **2**: Abnormal ● **5**: Normal ● **8**: Frozen ● **10**: Stopped ● **11**: Being stopped ● **12**: Stopping failed ● **13**: Starting
vpc_id	String	Specifies the ID of the Virtual Private Cloud (VPC) where the cloud phone server is deployed. When **network_version** is set to ● **v1**, the value of **vpc_id** is the ID of the tenant VPC to which the cloud phone server belongs. ● **v2**, the value of **vpc_id** is the ID of the VPC specified by the tenant during the cloud phone server creation.
resource_project_id	String	Specifies the project ID of the cloud phone server.
cidr	String	Specifies the CIDR block of the VPC where the cloud phone server is deployed. When **network_version** is set to ● **v1**, the value of **cidr** is the CIDR block of the tenant VPC to which the cloud phone server belongs. ● **v2**, the value of **cidr** is the CIDR block of the VPC specified by the tenant during the cloud phone server creation. **NOTE** The value of this field is the same as that of **vpc_cidr**. This field will be discarded later.

Parameter	Type	Description
vpc_cidr	String	Specifies the CIDR block of the VPC where the cloud phone server is deployed. When **network_version** is set to ● **v1**, the value of **vpc_cidr** is the CIDR block of the tenant VPC to which the cloud phone server belongs. ● **v2**, the value of **vpc_cidr** is the CIDR block of the VPC specified by the tenant during the cloud phone server creation.
subnet_id	String	Specifies the ID of the subnet where the cloud phone server is deployed. Only when **network_version** is set to ● **v2**, the value of **subnet_id** is the ID of the subnet specified by the tenant during the cloud phone server creation. ● **v1**, the value of **subnet_id** is the ID of the tenant subnet to which the cloud phone server belongs.
subnet_cidr	String	Specifies the subnet CIDR block where the cloud phone server is deployed. When **network_version** is set to ● **v2**, the value of **subnet_cidr** is the CIDR block of the subnet specified by the tenant during the cloud phone server creation. ● **v1**, the value of **subnet_cidr** is the CIDR block of the tenant subnet to which the cloud phone server belongs.

Parameter	Type	Description
metadata	Object	Specifies the order and product information. For details, see **Table 5-3**.
addresses	Array of objects	Specifies IP addresses of the cloud phone server. For details, see **Table 5-4**.
network_version	String	Specifies which type of network the cloud phone server uses. ● **v1**: system network ● **v2**: custom network Cloud phone servers can be filtered by network type.
enterprise_project_id	String	Specifies the ID of the enterprise project to which the cloud phone server belongs.
create_time	String	Specifies when the cloud phone server was created. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
update_time	String	Specifies when the cloud phone server was updated. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.

Table 5-3 Data structure description of **metadata**

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.

Table 5-4 Data structure description of **address**

Parameter	Type	Description
intranet_ip	String	Specifies the internal IP address of the cloud phone server. This field has expired.
access_ip	String	Specifies the public IP address of the cloud phone server. This field has expired.
server_ip	String	Specifies the internal IP address of the cloud phone server. This field is newly added.
public_ip	String	Specifies the public IP address of the cloud phone server. This field is newly added.

- Example response

```
{
  "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"
      },
      "availability_zone": "br-iaas-odin1a",
      "network_version": "v2",
      "enterprise_project_id": "0",
      "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": "OFFI635412973496623104",
              "order_id": "CS21083015171L1CA"
          },
          "availability_zone": "br-iaas-odin1a",
          "network_version": "v1",
          "enterprise_project_id": "0",
          "create_time": "2021-08-30T07:17:40Z",
          "update_time": "2021-11-05T09:07:57Z"
        }
      ],
      "request_id": "4336f6c61d2048c6b58b4368d9d95ecd"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.2 Querying Details About a Cloud Phone Server

Function Description

- API name

  GetCloudPhoneServerDetail

- Function

  This API is used to query details about a cloud phone server based on its ID.

URI

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

Table 5-5 lists URI parameters.

Table 5-5 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
server_id	Yes	String	Specifies the unique identifier of the cloud phone server.

Request

- Request parameters

  None

- Example request

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

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
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.
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. For details, see **Server Flavors**.

Parameter	Type	Description
phone_model_name	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes. For details, see **Cloud Phone Flavor List**.
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.
status	Integer	Specifies the status of the cloud phone server. ● **0**, **1**, **3**, or **4**: Creating ● **2**: Abnormal ● **5**: Normal ● **8**: Frozen ● **10**: Stopped ● **11**: Being stopped ● **12**: Stopping failed ● **13**: Starting
vpc_id	String	Specifies the ID of the VPC where the cloud phone server is deployed. When **network_version** is set to ● **v1**, the value of **vpc_id** is the ID of the tenant VPC to which the cloud phone server belongs. ● **v2**, the value of **vpc_id** is the ID of the VPC specified by the tenant during the cloud phone server creation.

Parameter	Type	Description
cidr	String	Specifies the CIDR block of the VPC where the cloud phone server is deployed. When **network_version** is set to ● **v1**, the value of **cidr** is the CIDR block of the tenant VPC to which the cloud phone server belongs. ● **v2**, the value of **cidr** is the CIDR block of the VPC specified by the tenant during the cloud phone server creation. **NOTE** The value of this field is the same as that of **vpc_cidr**. This field will be discarded later.
vpc_cidr	String	Specifies the CIDR block of the VPC where the cloud phone server is deployed. When **network_version** is set to ● **v1**, the value of **vpc_cidr** is the CIDR block of the tenant VPC to which the cloud phone server belongs. ● **v2**, the value of **vpc_cidr** is the CIDR block of the VPC specified by the tenant during the cloud phone server creation.
subnet_id	String	Specifies the ID of the VPC where the cloud phone server is deployed. Only when **network_version** is set to ● **v2**, the value of **subnet_id** is the ID of the subnet specified by the tenant during the cloud phone server creation. ● **v1**, the value of **subnet_id** is the ID of the tenant subnet to which the cloud phone server belongs.

Parameter	Type	Description
subnet_cidr	String	Specifies the subnet CIDR block where the cloud phone server is deployed. When **network_version** is set to ● **v2**, the value of **subnet_cidr** is the CIDR block of the subnet specified by the tenant during the cloud phone server creation. ● **v1**, the value of **subnet_cidr** is the CIDR block of the tenant subnet to which the cloud phone server belongs.
resource_project_id	String	Specifies the project ID of the cloud phone server.
metadata	Object	Specifies the order and product information. For details, see **Table 5-6**.
addresses	Array of objects	Specifies IP addresses of the cloud phone server. For details, see **Table 5-7**.
band_widths	Array of objects	Specifies the structure array of the bandwidths used by the cloud phone server. For details, see **Table 5-8**.
volumes	Array of objects	Specifies the structure array of volumes used by the cloud phone server. For details, see **Table 5-9**.
network_version	String	Specifies which type of network the cloud phone server uses. The type can be: ● **v1**: system network ● **v2**: custom network
enterprise_project_id	String	Specifies the ID of the enterprise project to which the cloud phone server belongs.

Parameter	Type	Description
security_groups	Array of strings	Specifies the security group bound to the extension NIC of the cloud phone server. For cloud phone servers that use a custom network, an empty list will be returned for this field.
create_time	String	Specifies when the cloud phone server was created. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
update_time	String	Specifies when the cloud phone server was updated. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.

Table 5-6 Data structure description of **metadata**

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.

Table 5-7 Data structure description of **address**

Parameter	Type	Description
intranet_ip	String	Specifies the internal IP address of the cloud phone server. This field has expired.
access_ip	String	Specifies the public IP address of the cloud phone server. This field has expired.
server_ip	String	Specifies the internal IP address of the cloud phone server. This field is newly added.

Parameter	Type	Description
public_ip	String	Specifies the public IP address of the cloud phone server. This field is newly added.

Table 5-8 Data structure description of **band_widths**

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 by which the bandwidth used by the cloud phone server is billed. The value can be: ● **0**: billed by bandwidth ● **1**: billed by traffic
band_width_share_ty pe	Integer	Specifies the bandwidth type of the cloud phone server. ● **0**: dedicated bandwidth ● **1**: shared bandwidth
create_time	String	Specifies when the cloud phone server bandwidth was created. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
update_time	String	Specifies when the cloud phone server bandwidth was updated. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.

Table 5-9 Data structure description of **volumes**

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 GB.
volume_type	String	Specifies the disk type of the cloud phone server.
create_time	String	Specifies when the disk was created. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
update_time	String	Specifies when the disk was updated. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.

- Example response

```
{
    "server_name": "cph-418540-1620-40-old-1",
    "availability_zone": "br-iaas-odin1a",
    "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",
    "subnet_cidr": "172.31.0.0/16",
    "request_id": "91d5bf46a817466daa25fc5824ab9717",
    "status": 5,
    "network_version": "v1",
    "enterprise_project_id": "0",
    "security_groups": []
}
```

- Example response - cloud phone server that uses a custom network

```
{
    "server_name": "cph-2ykg-asdv-2",
    "server_id": "95bf815ae612435d9ab2af7ad91dcaab",
    "server_model_name": "physical.kg1.4xlarge.cp",
    "phone_model_name": "kg1.cp.c150.d10GPSSD.e2v2.br150",
    "keypair_name": "KeyPair-wangnan",
    "status": 5,
    "availability_zone": "br-iaas-odin1a",
    "create_time": "2021-02-18T11:36:20Z",
    "update_time": "2021-02-18T11:50:14Z",
    "resource_project_id": "06a5b529fa80d28b2f53c014024bed44",
    "metadata": {
        "product_id": "OFFI454827367575412738",
        "order_id": "CS2102181935Q80Q9"
    },
    "volumes": [
        {
            "volume_name": "VOLUME_519ebd1fff7e4bd78af1c4ebe5d9477b",
            "volume_id": "2a5dae30-8d28-4759-8d2c-5081237ea3cb",
            "volume_size": 600,
            "volume_type": "SSD",
            "create_time": "2021-02-18T11:36:20Z",
            "update_time": "2021-02-18T11:48:41Z"
        },
        {
            "volume_name": "VOLUME_ad0221b2e22c41d295831133491dd0d2",
            "volume_id": "8905aa69-51a9-4439-add5-5c8fb8aceeab",
            "volume_size": 600,
            "volume_type": "SSD",
            "create_time": "2021-02-18T11:36:20Z",
            "update_time": "2021-02-18T11:49:08Z"
        },
        {
            "volume_name": "VOLUME_88ac4752585c49dea6031931e60aebb4",
            "volume_id": "2673a67b-4154-4e24-a107-1c41bfb7efc4",
            "volume_size": 600,
            "volume_type": "SSD",
            "create_time": "2021-02-18T11:36:20Z",
            "update_time": "2021-02-18T11:48:41Z"
        }
    ],
    "addresses": [
        {
            "intranet_ip": "192.168.0.74",
            "access_ip": "10.246.169.234",
            "server_ip": "192.168.0.74",
            "public_ip": "10.246.169.234"
        },
        {
            "intranet_ip": "192.168.0.120",
            "access_ip": "10.246.168.135",
            "server_ip": "192.168.0.120",
            "public_ip": "10.246.168.135"
        }
    ],
    "band_widths": [
        {
            "band_width_name": "d2d5f7f49e2e409283d41cc0a63cacee",
            "band_width_id": "8b85d44b-ac6f-48fb-bbab-e876e9c3502a",
            "band_width_size": 300,
            "band_width_charge_mode": 1,
            "band_width_share_type": 0,
            "create_time": "2021-02-18 11:48:40",
            "update_time": "2021-02-18 11:48:40"
        },
        {
            "band_width_name": "5435eeaa669d4b84aea25e404cf3acf1",
            "band_width_id": "fa788f38-7198-44ec-867b-93d49e2c5c14",
```

```
                "band_width_size": 300,
                "band_width_charge_mode": 1,
                "band_width_share_type": 0,
                "create_time": "2021-02-18 11:48:38",
                "update_time": "2021-02-18 11:48:38"
            }
        ],
        "vpc_id": "4fdf12dc-7a53-489e-b448-32e0eed99ea7",
        "subnet_id": "99462cb1-511c-4b3e-8f09-c80565304843",
        "cidr": "172.31.0.0/16",
        "vpc_cidr": "172.31.0.0/16",
        "subnet_cidr": "172.31.0.0/16",
        "network_version": "v2",
        "enterprise_project_id": "0",
        "security_groups": ["7f46bf9e-9050-48d6-9034-65711f9595f8"],
        "request_id": "e09b46f28bfa4ee58c3cbd0075db48fc"
    }
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.3 Querying Cloud Phone Server Flavors

Function Description

- API name

  GetCloudPhoneServerModels

- Function

  This API is used to query cloud phone server flavors.

URI

GET /v1/{project_id}/cloud-phone/server-models?product_type={product_type}

For details, see **Table 5-10**.

Table 5-10 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
product_type	No	Integer	Specifies the cloud phone server type. • **0**: cloud phone • **1**: cloud mobile gaming

Request

- Request parameters

  None

- Example request

  GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/server-models?product_type=0

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
server_models	Array of objects	Specifies the cloud phone server specifications. For details, see **Table 5-11**.

Table 5-11 Data structure description of **server_model**

Parameter	Type	Description
server_model_name	String	Specifies the cloud phone server flavor, which can contain a maximum of 64 bytes.
server_type	String	Specifies the model of the cloud phone server, for example, Hi1616. The model 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	Object	Specifies the attribute description of the cloud phone server, which contains a maximum of 512 bytes. For details, see **Table 5-12**.
product_type	Integer	Specifies the product type. - **0**: cloud phone - **1**: cloud mobile gaming

Table 5-12 Data structure description of **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 BMS specifications 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 response

```
{
   "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
         }
      }
   ]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.4 Buying a Cloud Phone Server That Uses a System Network

Function Description

- API name

  CreateCloudPhoneServer

- Function

  This API is used to buy a cloud phone server that uses a system network.

  ### NOTE

  CPH supports two network types:
  - Custom network: You can reuse existing VPCs to deploy cloud phone servers and reuse resources such as shared bandwidths that you have purchased.
  - Default network: The system automatically creates VPCs and configures bandwidths for your cloud phone servers. Existing VPCs and bandwidths cannot be reused.

URI

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

Table 5-13 lists the URI parameter.

Table 5-13 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request 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 server will be **server-1-0001**, and the name of the second 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. You can query supported cloud phone server flavors by referring to **Querying Cloud Phone Server Flavors**.
phone_model _name	Yes	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes. You can query the supported cloud phone flavors by referring to **Querying Cloud Phone Flavors**.
image_id	Yes	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes. You can query the image ID corresponding to the cloud phone specifications by referring to **Querying a Cloud Phone Image**.

Parameter	Mandatory	Type	Description
count	Yes	Integer	Specifies the number of cloud phone servers to be purchased. A maximum of 10 servers can be purchased.
band_width	Yes	Object	Specifies the bandwidth used by the cloud phone. The dedicated bandwidth is billed by traffic. The size of a shared bandwidth can be configured. For details, see **Table 5-14**.
extend_param	Yes	Object	Specifies parameters related to the billing mode. For details, see **Table 5-15**.
keypair_name	No	String	Specifies the key pair name, which can contain a maximum of 64 bytes. The key pair is used for logging in to the cloud phone through ADB. You can obtain the key pair as follows: 1. Log in to the management console, click **Service List**, and choose **Compute** > **Elastic Cloud Server**. 2. In the navigation pane on the left, choose **Key Pair**.
vnc_enable	No	String	(Discarded) Specifies whether to enable the VNC login. ● When **vnc_enable** is set to **true** (case insensitive), this feature is enabled. ● When **vnc_enable** is set to other values, this feature is disabled.
ports	No	Array of objects	Specifies the application port enabled by the cloud phone. The CPH service forwards requests to and from the port. For details, see **Table 5-16**.

Parameter	Mandatory	Type	Description
subnet_cidr	No	String	Specifies the subnet of the server.

📖 **NOTE**

The original **vnc_enable** field has been discarded. All cloud phone servers support the VNC function by default.

Table 5-14 Data structure description of **band_width**

Parameter	Mandatory	Type	Description
band_width_id	No	String	Specifies the shared bandwidth ID. This parameter is preferred to bind a bandwidth to the cloud phone. You can obtain the bandwidth ID by referring to **Querying the Bandwidth Used by a Cloud Phone**.
band_width_share_type	No	Integer	Specifies the bandwidth type. This parameter is mandatory when **band_width_id** does not need to be configured. ● **0**: dedicated bandwidth ● **1**: shared bandwidth
band_width_size	No	Integer	The default range of a shared bandwidth is 5 Mbit/s to 2,000 Mbit/s. The default size of a dedicated bandwidth is 300 Mbit/s. This parameter is mandatory when **band_width_share_type** is set to **1**. **NOTE** The specific range may vary depending on the configuration in each region. You can see the bandwidth range of each region on the management console.

Table 5-15 Data structure description of **extend_param**

Parameter	Mandatory	Type	Description
charging_mode	Yes	Integer	Specifies how a cloud phone server is billed. **0**: yearly/monthly
period_type	Yes	Integer	Specifies the subscription period. ● **2**: month ● **3**: year
period_num	Yes	Integer	Specifies the 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 the fee is automatically deducted from the customer's account balance after an order is submitted. ● **1**: Automatic payment is enabled. ● **0**: Automatic payment is disabled.
is_auto_renew	No	Integer	Specifies whether to automatically renew the subscription. By default, the subscription is not automatically renewed. ● **1**: automatic renewal ● **0**: The subscription is not automatically renewed.
enterprise_project_id	No	String	Specifies the enterprise project ID. This parameter is set to **0** by default, indicating that resources will be bound to the **default** enterprise project.

Table 5-16 Data structure description of **ports**

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_acces sible	Yes	String	● When **internet_accessible** is set to **true** (case insensitive), a port on the public network is mapped to **listen_port** for accessing cloud phones. ● When **internet_accessible** is set to other values, no port mapping is performed.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones
{
    "server_name": "myPhoneServer",
    "server_model_name": "physical.rx1.xlarge",
    "phone_model_name": "aphs1.medium.4.aosp",
    "image_id": "88b8449b896f3a4f0ad57222dd919899",
    "count": 3,
    "keypair_name": "mykeypair",
      "ports": [

      {
          "name": "myServer1",
          "listen_port": 20000,
          "internet_accessible": "false"
      },
      {
          "name": "myServer2",
          "listen_port": 20001,
          "internet_accessible": "true"
      }
    ],
    "band_width":{
        "band_width_share_type": 0
    },
    "extend_param": {
        "charging_mode": 0,
        "period_type": 2,
        "period_num": 1,
        "is_auto_pay": 1
    }
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID. The ID can contain a maximum of 32 bytes.
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 response

```
{
    "request_id": "1564567b8bab40f34711234cb80d8574",
    "order_id": "CS1710111105S8IPB",
    "product_id": "00301-25217-0--0",
    "server_ids": [
        "1234567b8bab40ffb711234cb80d0234",
        "1678567b8bab40f93711234cb80d0764"
    ]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.5 Buying a Cloud Phone Server That Uses a Custom Network (Recommended)

Function Description

- API name

  CreateNet2CloudPhoneServer

- Function

  This API is used to buy a cloud phone server that uses a custom network.

  ☐ NOTE

  CPH supports two network types:

  - Custom network: You can reuse existing VPCs to deploy cloud phone servers and reuse resources such as shared bandwidths that you have purchased.
  - Default network: The system automatically creates VPCs and configures bandwidths for your cloud phone servers. Existing VPCs and bandwidths cannot be reused.

Constraints

Before calling the CPH API to create a cloud phone server that uses a custom network, check whether the following conditions are met:

- Two VPCs are available. You need to specify an existing VPC when creating a server. Otherwise, the server cannot be created.

- An agency with **Agency Name** set to **cph_admin_trust**, **Agency Type** to **Cloud service**, and cloud service set to **Cloud Phone (CPH)** is available. The agency has the **VPC FullAccess** permissions and allows CPH to call cloud services. If the agency and permission verification fail, the cloud server creation will fail. For details about how to create an agency, see **Cloud Service Delegation**.

- Your account has the **Security Administrator** permissions or the **iam:agencies:createAgency** permissions to create agencies.

- Your quotas for servers and networks that can be created have not been reached. If the quota verification fails, the creation will fail. For details about how to view quotas, see **Quotas**.

URI

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

Table 5-17 lists the URI parameter.

Table 5-17 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request 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 server will be **server-1-0001**, and the name of the second 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. You can query supported cloud phone server flavors by referring to **Querying Cloud Phone Server Flavors**.
phone_model_name	Yes	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes. You can query the supported cloud phone flavors by referring to **Querying Cloud Phone Flavors**.
image_id	Yes	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes. You can query the image ID corresponding to the cloud phone specifications by referring to **Table 5-17**.

Parameter	Mandatory	Type	Description
count	Yes	Integer	Specifies the number of cloud phone servers to be purchased. A maximum of 10 servers can be purchased.
band_width	Yes	Object	Specifies the bandwidth used by the cloud phone. For details, see **Table 5-18**.
extend_param	Yes	Object	Specifies parameters related to the billing mode. For details, see **Table 5-19**.
keypair_name	No	String	Specifies the key pair name, which can contain a maximum of 64 bytes. The key pair is used for logging in to the cloud phone through ADB. You can obtain the key pair as follows: 1. Log in to the management console, click **Service List**, and choose **Compute** > **Elastic Cloud Server**. 2. In the navigation pane on the left, choose **Key Pair**.
ports	No	Array of objects	Specifies the application port enabled by the cloud phone. The CPH service forwards requests to and from the port. For details, see **Table 5-20**.
tenant_vpc_id	Yes	String	Specifies the ID of the VPC you specified, which is the VPC where the cloud server to be created is deployed. The VPC ID is in UUID format. You can obtain the VPC ID from the management console or by following instructions provided in **Querying VPCs** in *Virtual Private Cloud API Reference*.

Parameter	Mandatory	Type	Description
nics	Yes	Array of objects	Specifies the structure of the NIC you customized, which is the NIC information of the cloud server to be created. For details, see **Table 5-21**.
public_ip	Yes	Object	Specifies the structure of the EIP you specified. For details, see **Table 5-22**. To configure an EIP for a cloud server, you can perform either of the following operations: ● Let the system automatically assign an EIP. You need to specify information about the new EIP. ● Specify the ID of an existing EIP.
availability_zone	No	String	Specifies the name of the AZ where the cloud server is located. See **Regions and Endpoints**.

☐ **NOTE**

The original **vnc_enable** field has been discarded. All cloud phone servers support the VNC function by default.

Table 5-18 Data structure description of **band_width**

Parameter	Mandatory	Type	Description
band_width_id	No	String	Specifies the bandwidth ID. When you assign an EIP for a shared bandwidth, you can specify an existing shared bandwidth. Value: ID of the shared bandwidth Remarks: This parameter is mandatory when you create a shared bandwidth.
band_width_share_type	Yes	Integer	Specifies the bandwidth type. ● **0**: dedicated bandwidth ● **1**: shared bandwidth

Parameter	Mandatory	Type	Description
band_width_size	No	Integer	Specifies the bandwidth, in Mbit/s. The value range is 1 to 2,000. The minimum increment for bandwidth adjustment varies depending on the bandwidth range. The details are as follows: • The minimum increment is 1 Mbit/s if the bandwidth ranges from 0 to 300 Mbit/s. • The minimum increment is 50 Mbit/s if the bandwidth ranges from 301 Mbit/s to 1,000 Mbit/s. • The minimum increment is 500 Mbit/s if the bandwidth is greater than 1,000 Mbit/s. Remarks: This parameter is mandatory for a dedicated bandwidth. If the bandwidth is a shared bandwidth and the bandwidth ID is specified, this parameter is not required.
band_width_charge_mode	Yes	Integer	Specifies by which the bandwidth used by the cloud phone server is billed. The value can be: • **0**: billed by bandwidth • **1**: billed by traffic

Table 5-19 Data structure description of **extend_param**

Parameter	Mandatory	Type	Description
charging_mode	Yes	Integer	Specifies how a cloud phone server is billed. **0**: yearly/monthly

Parameter	Mandatory	Type	Description
period_type	Yes	Integer	Specifies the subscription period. ● **2**: month ● **3**: year
period_num	Yes	Integer	Specifies the 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. ● **1**: Automatic payment is enabled. ● **0**: Automatic payment is disabled.
is_auto_renew	No	Integer	Specifies whether to automatically renew the subscription. By default, the subscription is not automatically renewed. ● **1**: automatic renewal ● **0**: The subscription is not automatically renewed.
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 5-20 Data structure description of **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**.

Parameter	Mandatory	Type	Description
listen_port	Yes	Integer	Specifies the port number, which ranges from 10000 to 50000.
internet_accessible	Yes	String	• When **internet_accessible** is set to **true** (case insensitive), public network access is mapped. • When **internet_accessible** is set to other values, no mapping is performed.

Table 5-21 Data structure description of **nics**

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	Specifies the ID of the subnet you specified, which is the subnet where the cloud server to be created is deployed. The value must be the ID of the subnet created in the VPC specified by **tenant_vpc_id** and in the UUID format. You can obtain the parameter value by calling the VPC API for **Querying Subnet Details**.

Table 5-22 Data structure description of **public_ip**

Parameter	Mandatory	Type	Description
eip	No	Object	Specifies the configuration parameter of an EIP when you set to automatically assign an EIP to a server. Either this parameter or **ids** must be specified. For details, see **Table 5-23**.

Parameter	Mandatory	Type	Description
ids	No	Array of strings	Specifies the ID of an existing EIP that you will use when you are creating a server. Only one existing EIP ID can be specified. Either **ids** or **eip** must be specified.

Table 5-23 Data structure description of **eip**

Parameter	Mandatory	Type	Description
type	Yes	String	Specifies the EIP type. The options are as follows: **5_telcom** (China Telecom), **5_union** (China Unicom), **5_bgp** (dynamic BGP), and **5_sbgp** (static BGP). For details, see the **publicip** field in **Assigning an EIP (Pay-per-Use)**.

- Example request

```
{
    "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": {
        "ids": "",
        "eip": {
            "type": "5_bgp"
```

```
        }
    },
    "band_width": {
        "band_width_share_type": 0,
        "band_width_size": 300,
        "band_width_charge_mode": 0
    }
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID. The ID can contain a maximum of 32 bytes.
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 response

```
{
    "request_id": "1564567b8bab40f34711234cb80d8574",
    "order_id": "CS1710111105S8IPB",
    "product_id": "00301-25217-0--0",
    "server_ids": [
        "1234567b8bab40ffb711234cb80d0234",
        "1678567b8bab40f93711234cb80d0764"
    ]
}
```

5.1.6 Restarting Cloud Phone Servers In Batches

Function Description

- API name

  RestartCloudPhoneServer

- Function

  This API is used to restart cloud phone servers in batches.

URI

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

For details, see **Table 5-24**.

Table 5-24 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

Parameter	Mandatory	Type	Description
server_ids	Yes	Array of strings	Specifies the unique identifier of the cloud phone server, which can be obtained by referring to **Querying Cloud Phone Servers**.

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

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-25**.

Table 5-25 Data structure description of **job**

Parameter	Type	Description
server_id	String	Specifies the unique identifier of the cloud phone server.
job_id	String	Specifies the unique ID of a task.

Parameter	Type	Description
error_code	String	Specifies the error code. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.7 Pushing a Shared Storage File

Function Description

- API name

  PushShareFiles

- Function

  This API is used to push files to a shared storage directory. This function is available only on cloud phones that support shared storage. You can use parameter **extend_spec** in **Querying Cloud Phone Flavors** to check whether shared storage is supported. (If **extend_spec** contains field **max_share_disk_size_g**, shared storage is supported.)

  ☐ NOTE

  > You need to create an Object Storage Service (OBS) bucket in advance, configure permissions for the bucket, and upload files to be pushed to the OBS bucket. For details, see **Managing Cloud Phones in Batches**.

URI

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

Table 5-26 lists the URI parameter.

Table 5-26 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	Specifies the OBS bucket name, which can contain 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	Yes	String	Specifies the path of the OBS object. The path can contain a maximum of 1,024 characters, including only letters, digits, periods (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), and equal signs (=). Only .tar files can be pushed to the **/data** or **/cache** directory of cloud phones. The files are pushed based on the directory structure of the decompressed .tar file.
server_ids	Yes	Array of strings	Specifies IDs of the cloud phone servers. Obtain them by referring to **Querying Cloud Phone Servers**.

- Example request

```
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"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of objects	Specifies the job information. For details, see **Table 5-27**.

Table 5-27 Data structure description of **job**

Parameter	Type	Description
server_id	String	Specifies the unique identifier of the cloud phone server.
job_id	String	Specifies the unique ID of a job.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.8 Querying Shared Storage Files

Function Description

- API name

  ListShareFiles

- Function

  This API is used to query files in a specified path of the shared storage. This function is supported only by cloud phones that support shared storage. You can use parameter **extend_spec** in **Querying Cloud Phone Flavors** to check whether shared storage is supported. (If **extend_spec** contains field **max_share_disk_size_g**, shared storage is supported.)

URI

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

For details, see **Table 5-28**.

Table 5-28 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
path	Yes	String	Specifies the name of the directory to be queried. The name can contain letters, digits, periods (.), plus signs (+), hyphens (-), underscores (_), slashes (/), and equal signs (=). The name must start with a slash (/) and cannot contain only slashes (/). // or ../ is not allowed. Example: **/data/data**
server_ids	Yes	String	Specifies the ID list of the cloud phone servers. You can obtain server IDs by referring to **Querying Cloud Phone Servers**. Use commas (,) to separate multiple server IDs.
offset	No	Integer	Specifies the offset. If the value is an integer greater than 0 but less than the number of resources, all resources after this offset will be queried. The default value is **0**.
limit	No	Integer	Specifies the number of resources returned on each page. Value range: 1–100 (default value: **50**) Generally, set this parameter to **10**, **20**, or **50**.

Request

- Request parameters

  None

- Example request

  GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/share-files?path=/data/
  data&server_ids=203a7243181646b190047ade6bfd882d

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-29**.

Table 5-29 Data structure description of **job**

Parameter	Type	Description
server_id	String	Specifies the unique identifier of the cloud phone server.
job_id	String	Specifies the unique ID of a task.

- Example response

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

Task Result Description

The query result is returned through the **execute_msg** field of the task. For details about the task query result, see **Querying the Task Execution Status**.

Table 5-30 execute_msg description

Parameter	Type	Description
files_in_path	files_in_path	Specifies the files in a specified directory. The format is as follows: [File size Time File name]
share_base_capacity	String	Specifies the overall capacity information about the shared storage. The four fields are as follows: Size Used Avail Use%

Parameter	Type	Description
share_base_max_size	String	Specifies the total size of shared storage.

Table 5-31 files_in_path description

Parameter	Type	Description
total	Integer	Specifies the total number of files in a specified directory.
count	Integer	Specifies the number of files in the specified directory returned in this query.
files	Array of strings	Specifies the files in a specified directory. The format is as follows: [File size Time File name]

Example result:

```
{
    "error_msg": null,
    "execute_msg": "{\"files_in_path\":{\"total\":1,\"count\":1,\"files\":[\"4096 Apr 15 09:49 com.tencent.mm
\"]},\"share_base_max_size\":\"50G\",\"share_base_capacity\":\"8.9G 323M 8.2G 4%\"}",
    "job_id": "1564567b8bab40f34711234cb80d0123",
    "end_time": "2020-07-28T07:32:14Z",
    "begin_time": "2020-07-28T07:31:50Z",
    "error_code": null,
    "request_id": "af28fb2c79f84b74821e99a4b3aace53",
    "status": 2
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.9 Deleting a Shared Storage File

Function Description

- API name

    DeleteShareFiles

- Function

    This API is used to delete a shared storage file from the shared storage directory. This function is available only on cloud phones that support shared storage. You can use parameter **extend_spec** in **Querying Cloud Phone**

Flavors to check whether shared storage is supported. (If **extend_spec** contains field **max_share_disk_size_g**, shared storage is supported.)

URI

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

For details, see **Table 5-32**.

Table 5-32 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
file_paths	Yes	Array of strings	Specifies the absolute path of the shared storage file to be deleted. The path starts with a slash (/) and can contain a maximum of 4,096 bytes. Only letters, digits, dots (.), slashes (/), hyphens (-), spaces. underscores (_), and equal signs (=) are supported. The path cannot contain the upper-level directory path to prevent cross-directory attacks.
server_ids	Yes	Array of strings	Specifies the ID list of the cloud phone servers. Obtain it by referring to **Querying Cloud Phone Servers**.

- Example request
  POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/share-files
  ```
  {
      "file_paths": [
          "/data/app",
          "/data/data/test.apk"
      ],
      "server_ids": [
  ```

```
      "1234567b8bab40ffb711234cb80d0234",
      "1678567b8bab40f93711234cb80d0764"
   ]
}
```

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-33**.

Table 5-33 Data structure description of **job**

Parameter	Type	Description
server_id	String	Specifies the unique identifier of the cloud phone server.
job_id	String	Specifies the unique ID of a task.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.10 Pushing a Shared Application

Function Description

- API name

  PushShareApps

- Function

  This API is used to push tar. files of applications to a shared storage directory. This function is available only on cloud phones that support shared applications. You can view parameter **extend_spec** in **Querying Cloud Phone Flavors** to check whether the cloud phone flavor supports shared applications.

  📖 **NOTE**

  This function is available only on cloud phones that support shared applications. To use this function, **submit a service ticket** to make cloud phones of such specifications be available for you.

URI

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

Table 5-34 lists the URI parameter.

Table 5-34 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
package_name	Yes	String	Specifies the valid name of the application package.
pre_install_app	No	Integer	Specifies whether to preinstall applications. **1**: Preinstall applications. **0**: (Default) Applications do not need to be preinstalled.
bucket_name	Yes	String	Specifies the valid OBS bucket name, which can contain 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).

Parameter	Mandatory	Type	Description
object_path	Yes	String	A valid OBS object path can contain a maximum of 1,024 characters, including only letters, digits, periods (.), 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 IDs of the cloud phone servers. Obtain them by referring to **Querying Cloud Phone Servers**.

- Example request

```
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"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of objects	Specifies the job information. For details, see **Table 5-35**.

Table 5-35 Data structure description of **job**

Parameter	Type	Description
server_id	String	Specifies the unique identifier of the cloud phone server.
job_id	String	Specifies the unique ID of a job.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.11 Deleting a Shared Application

Function Description

- API name

  DeleteShareApps

- 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. You can view parameter **extend_spec** in **Querying Cloud Phone Flavors** to check whether the cloud phone flavor supports shared applications.

  □ NOTE

  This function is available only on cloud phones that support shared applications. To use this function, **submit a service ticket** to make cloud phones of such specifications be available for you.

URI

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

Table 5-36 lists the URI parameter.

Table 5-36 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
package_name	Yes	String	Specifies the package name of the shared application to be deleted. The name can contain a maximum of 128 bytes, including only letters, digits, underscores (_), and periods (.). The package name cannot start with a digit or underscore (_) or end with a period (.). The package name must contain at least one period (.).
server_ids	Yes	Array of strings	Specifies IDs of the cloud phone servers. Obtain them by referring to **Querying Cloud Phone Servers**.

- Example request

```
DELETE https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/share-apps
{
    "package_name": "com.miniteck.miniworld" ,
    "server_ids": [
        "1234567b8bab40ffb711234cb80d0234",
        "1678567b8bab40f93711234cb80d0764"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of objects	Specifies the job information. For details, see **Table 5-37**.

Table 5-37 Data structure description of **job**

Parameter	Type	Description
server_id	String	Specifies the unique identifier of the cloud phone server.
job_id	String	Specifies the unique ID of a job.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.12 Modifying the Flavor of a Cloud Phone Server

Function Description

- API name

  ChangeCloudPhoneServerModel

- Function

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

- Constraint

  – The flavor to be modified must be a special flavor.

  – After the API is successfully invoked, the flavor change will be completed in about 2 minutes later. 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 view that the new flavor has been applied.

URI

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

Table 5-38 lists the URI parameter.

Table 5-38 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
server_id	Yes	String	Specifies the unique identifier of the cloud phone server. You can modify the flavor of a cloud phone server whose flavor is a special one.
server_model_ name	Yes	String	Specifies the flavor of the cloud phone server. The flavor can contain a maximum of 64 bytes. Flavors can be switched only between servers of the same generation.
phone_model_ name	Yes	String	Specifies the flavor of the target 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	Object	Specifies the purchase mode parameter. For details, see **Table 5-39**.

Table 5-39 Data structure description of **extend_param**

Parameter	Mandatory	Type	Description
is_auto_pay	No	Integer	Specifies whether to automatically pay fees. By default, automatic payment is disabled. If the flavor is upgraded, you need to pay extra fees. If the flavor is downgraded, the price different will be automatically refunded. ● **1**: Automatic payment is enabled. ● **0**: Automatic payment is disabled.

- Example request
  ```
  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
      }
  }
  ```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID. The ID can contain a maximum of 32 bytes.
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.

- Example response
  ```
  {
      "request_id": "1564567b8bab40f34711234cb80d8574",
      "order_id": "CS1710111105S8IPB",
      "product_id": "00301-25217-0--0"
  }
  ```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.1.13 Modifying the Cloud Phone Server Name

Function Description

- API name

  UpdateServerName
- Function

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

URL

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

For details, see **Table 5-40**.

Table 5-40 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
server_id	Yes	String	Specifies the unique identifier of the cloud phone server, which can be obtained by referring to **Querying Cloud Phone Servers**.

Request

- Parameter description

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

- Example request

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

```
{
    "server_name": "newName"
}
```

Response

- Response parameters

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

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.2 Bandwidth Management

5.2.1 Querying the Bandwidth Used by a Cloud Phone

Function Description

- API name

  QueryBandwidth

- Function

  This API is used to query the bandwidth used by a cloud phone.

URI

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

Table 5-41 lists the URI parameter.

Table 5-41 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Parameter	Mandatory	Type	Description
offset	No	Integer	Specifies the offset. The offset must be an integer greater than 0 but less than the number of resources. All resources after this offset will be queried.
limit	No	Integer	Specifies the number of resources to be returned on each page. Value range: 1–100 Generally, set this parameter to **10**, **20**, or **50**.

Request

- Request parameters

  None

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

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
band_widths	Array of objects	Specifies the bandwidth information. For details, see **Table 5-42**.

Table 5-42 Data structure description of **band_width**

Parameter	Type	Description
band_width_id	String	Specifies the bandwidth ID, which can contain a maximum of 32 bytes.
band_width_name	String	Specifies the bandwidth name, which can contain a maximum of 64 bytes.
band_width_size	Integer	Specifies the bandwidth size in Mbit/s.

Parameter	Type	Description
band_width_share_type	Integer	Specifies the bandwidth type. ● **0**: dedicated bandwidth ● **1**: shared bandwidth
band_width_charge_mode	Integer	Specifies by which the bandwidth used by the cloud phone server is billed. The value can be: ● **0**: billed by bandwidth ● **1**: billed by traffic
create_time	String	Specifies when the bandwidth was created. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
update_time	String	Specifies when the bandwidth was updated. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.

- Example response

```
{
    "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,
            "band_width_charge_mode": 0,
            "create_time": "2017-10-10T00:00:00Z",
            "update_time": "2018-11-12T00:00:00Z"
        }
    ]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.2.2 Modifying a Shared Bandwidth

Function Description

- API name

  UpdateBandwidth

- **Function**

  Change the shared bandwidth size used by the cloud phone.

URI

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

For details, see **Table 5-43**.

Table 5-43 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
band_width_id	Yes	String	Specifies the shared bandwidth ID, which can be obtained in **Querying the Bandwidth Used by a Cloud Phone**.

Request

- **Parameter description**

Parameter	Mandatory	Type	Description
band_width_size	Yes	Integer	- ≤ 300 Mbit/s: The default minimum increment step is 1 Mbit/s. - 300 Mbit/s to 1000 Mbit/s: The default minimum increment step is 50 Mbit/s. - > 1,000 Mbit/s: The default minimum increment step is 500 Mbit/s.

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

Response

- **Parameter description**

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

- Example response
  ```
  {
     "request_id": "70bb40bef50e4a14b116a5a527fd7432"
  }
  ```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3 Cloud Phone Management

5.3.1 Querying Cloud Phones

Function Description

- API name

  ListCloudPhones

- Function

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

URI

GET /v1/{project_id}/cloud-phone/phones?
phone_name={phone_name}&server_id={server_id}&status={status}&offset={offset}&limit={limit}&type={type}

For details, see **Table 5-44**.

Table 5-44 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
phone_name	No	String	Specifies the cloud phone name. Fuzzy query is supported.

Parameter	Mandatory	Type	Description
server_id	No	String	Specifies the cloud phone server ID.
status	No	Integer	Specifies the cloud phone status. **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**: Stopping failed
offset	No	Integer	Specifies the offset. If the value is an integer greater than 0 but less than the number of resources, all resources after this offset will be queried. The default value is **0**.
limit	No	Integer	Specifies the number of resources returned on each page. Value range: 1–100 (default value: **100**) Generally, set this parameter to **10**, **20**, or **50**.
type	No	Integer	Specifies the cloud phone type. **0**: common cloud phone **1**: trial cloud phone

Request

- Request parameters

  None

- Example request

  ```
  GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones?offset=0&limit=10
  ```

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
phones	Array of objects	Specifies the cloud phone information. For details, see **Table 5-45**.

Table 5-45 Data structure description of **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, which can contain a maximum of 32 bytes.
phone_model_name	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes. For details, see **Cloud Phone Flavor List**.
image_id	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes.
vnc_enable	String	Specifies whether to enable VNC login on a cloud phone. ● **true**: enable ● **false**: disable
metadata	Object	Specifies the order and product information. For details, see **Table 5-46**.

Parameter	Type	Description
status	Integer	Specifies the cloud phone status. ● **0** and **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**: Stopping failed
type	Integer	Specifies the cloud phone type. ● **0**: common cloud phone ● **1**: trial cloud phone
create_time	String	Specifies when the cloud phone was created. The time format is UTC.
update_time	String	Specifies when the cloud phone was updated. The time format is UTC.
availability_zone	String	Specifies the AZ where the cloud phone is located.

Table 5-46 Data structure description of **metadata**

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.

● Example response

```
{
    "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
    "phones": [
```

```
    {
        "phone_name": "mobile-0001",
        "server_id": "88b8449b896f3a4f0ad57222dd91909",
        "phone_id": "1234567b8bab40ffb711234cb80d0234",
        "phone_model_name": "AOSP-1U4G15G-001",
        "image_id": "88b8449b896f3a4f0ad57222dd91909",
        "vnc_enable": "true",
        "status": 2,
        "type": 0,
        "metadata": {
            "order_id": "CS1710111105S8IPB",
            "product_id": "00301-25217-0--0"
        },
        "availability_zone": "br-iaas-odin1a",
        "create_time": "2017-10-10T00:00:00Z",
        "update_time": "2018-10-10T00:00:00Z"
    }
  ]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.2 Querying Details of a Cloud Phone

Function Description

- API name

  GetCloudPhoneDetail

- Function

  Query details of a cloud phone.

URI

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

For details, see **Table 5-47**.

Table 5-47 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
phone_id	Yes	String	Specifies the unique identifier of the cloud phone. You can obtain it by referring to **Querying Cloud Phones**.

Request

- Request parameters

  None

- Example request

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

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
server_id	String	Specifies the cloud phone server ID. The value can contain a maximum of 32 bytes.
phone_name	String	Specifies the cloud phone name, which can contain a maximum of 65 bytes.
phone_id	String	Specifies the unique identifier of the cloud phone, which can contain a maximum of 32 bytes.
image_id	String	Specifies the cloud phone image ID, which can contain a maximum of 32 bytes.
vnc_enable	String	Specifies whether to enable VNC login on a cloud phone. ● **true**: enable ● **false**: disable
phone_model_na me	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes. For details, see **Cloud Phone Flavor List**.
property	String	Specifies the cloud phone attribute. The value is a string in JSON format and cannot exceed 2,048 bytes. For details, see **Cloud Phone Attribute List**.
access_infos	Array of objects	Specifies the cloud phone access information. For details, see **Table 5-48**.

Parameter	Type	Description
status	Integer	Specifies the cloud phone status. ● **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**: Stopping failed
metadata	Object	Specifies the order and product information. For details, see **Table 5-49**.
create_time	String	Specifies when the cloud phone was created. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
update_time	String	Specifies when the cloud phone was updated. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
availability_zone	String	Specifies the AZ where the cloud phone is located.

Table 5-48 Data structure description of **access_info**

Parameter	Type	Description
phone_ip	String	Specifies the cloud phone IP address. This field is newly added.
server_ip	String	Specifies the internal IP address of the cloud phone server. This field is newly added.

Parameter	Type	Description
public_ip	String	Specifies the public IP address of the cloud phone server. This is a new field. If non-public access is configured for the port, an empty string "" is returned.
listen_port	Integer	Specifies the listening port of a program that is enabled in a cloud phone to provide services.
access_port	Integer	Specifies the access port of a program that is mapped to the public network. The program is enabled in a cloud phone to provide services.
type	String	Specifies the user-defined port type. The value can contain a maximum of 16 bytes.
device_ip	String	Specifies the cloud phone IP address. This field has expired.
intranet_ip	String	Specifies the internal IP address of the cloud phone server. This field has expired.
access_ip	String	Specifies the access IP address of the cloud phone server. This field has expired.

◻ **NOTE**

The functions of new parameters are the same as those of expired parameters.

Table 5-49 Data structure description of **metadata**

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.

● Example response

```
{
  "request_id": "70bb40bef50e4a14b116a5a527fd7432",
  "phone_name": "mobile-0049",
  "server_id": "88b8449b896f3a4f0ad57222dd91909",
  "phone_id": "1564567b8bab40f34711234cb80d8574",
  "image_id" : "88b8449b896f3a4f0ad57222dd91909",
```

```
        "vnc_enable": "true",
        "phone_model_name": "aphs1.large.2.aosp",
        "status": 2,
        "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
            },
            {
                "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
            }
        ],
        "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",
        "availability_zone": "br-iaas-odin1a"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.3 Querying Cloud Phone Flavors

Function Description

- API name

    ListCloudPhoneModels

- Function

    This API is used to query cloud phone flavors.

URI

GET /v1/{project_id}/cloud-phone/phone-models?status={status}

For details, see **Table 5-50**.

Table 5-50 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
status	No	Integer	Specifies the flavor status. ● **1**: normal ● **0**: offline If this parameter is not specified, flavors in all states are queried.
offset	No	Integer	Specifies the offset. The offset must be an integer greater than 0 but less than the number of resources. All resources after this offset will be queried.
limit	No	Integer	Specifies the number of resources to be returned on each page. Value range: 1–100 Generally, set this parameter to **10**, **20**, or **50**.

Request

- Request parameters

  None

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

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
phone_models	Array of objects	Specifies the cloud phone flavor. For details, see **Table 5-51**.

Table 5-51 Data structure description of **phone_model**

Parameter	Type	Description
server_model_name	String	Specifies the cloud phone server flavor, which can contain a maximum of 64 bytes.
phone_model_name	String	Specifies the cloud phone flavor, which can contain a maximum of 64 bytes.
spec_code	String	Specifies the flavor name. The value can contain a maximum of 64 bytes.
cpu	Integer	Specifies the number of CPU cores.
memory	Integer	Specifies the memory size in MB.
disk	Integer	Specifies the storage size in GB.
resolution	String	Specifies the cloud phone resolution. The value can contain a maximum of 16 bytes.
extend_spec	String	Specifies the extended description, which is a string in JSON format and can contain a maximum of 512 bytes.
phone_capacity	Integer	Specifies the number of cloud phones of the current flavor.
status	Integer	Specifies the flavor status. ● **1**: normal ● **0**: offline The cloud phone flavors that have been brought offline cannot be selected when you purchase cloud phone servers.
product_type	Integer	Specifies the cloud phone type. ● **0**: cloud phone ● **1**: cloud mobile gaming
image_label	String	Specifies the image type. The following types are supported: ● qemu_phone ● cloud_phone ● cloud_game

● Example response

```
{
    "phone_models": [
        {
            "server_model_name": "physical.rx1.xlarge",
            "phone_model_name": "rx1.cp.c60.d32.e1v1.qemu",
            "status": 1,
            "cpu": 2.0,
            "memory": 3072,
            "disk": 32,
            "resolution": "540x960",
            "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": 2.0,
            "memory": 3584,
            "disk": 10,
            "resolution": "720x1280",
            "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"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.4 Querying a Cloud Phone Image

Function Description

- API name

  ListPhoneImages

- Function

  Query available cloud phone images by project ID.

URI

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

For details, see **Table 5-52**.

Table 5-52 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

  None

- Example request

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

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
phone_images	Array of objects	Specifies the cloud phone image information. For details, see **Table 5-53**.

Table 5-53 Data structure description of **phone_images**

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. The value can contain a maximum of 16 bytes.
os_name	String	Specifies the cloud phone OS. The value can contain a maximum of 36 bytes.
image_id	String	Specifies the unique identifier of the cloud phone image. The value can contain a maximum of 32 bytes.

Parameter	Type	Description
is_public	Integer	Specifies the image type. ● **1**: public image ● **2**: private image
image_label	String	Specifies the cloud phone image. ● **cloud_phone**: applicable to physical.rx1.xlarge cloud phone servers ● **cloud_phone_1620**: applicable to physical.kg1.4xlarge.cp cloud phone servers ● **cloud_game**: applicable to physical.rx1.xlarge.cg cloud mobile game servers ● **cloud_game_1620**: applicable to physical.rx1.xlarge.cg cloud mobile gaming servers ● **qemu_phone**: applicable to qemu cloud phones on physical.rx1.xlarge cloud phone servers

● Example response

```
{
    "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"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.5 Resetting Cloud Phones

Function Description

- API name

  ResetCloudPhone

- Function

  Reset cloud phones in batches to restore them to factory settings. This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

URI

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

For details, see **Table 5-54**.

Table 5-54 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
phones	Yes	Array of objects	Specifies the information about the cloud phone to be reset. For details, see **Table 5-55**.
image_id	No	String	Specifies the ID of the image to be updated.

Table 5-55 Data structure description of **phones**

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID. The value can contain a maximum of 32 bytes.
property	No	String	Specifies the cloud phone attribute. The value is a JSON string. For details, see **Cloud Phone Attribute List**.

- Example request

```
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"
}
```

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-56**.

Table 5-56 Data structure description of **job**

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.

Parameter	Type	Description
error_code	String	Specifies the error code. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.6 Restarting Cloud Phones

Function Description

- API name

  RestartCloudPhone

- Function

  Restart cloud phones in batches or start cloud phones. This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

URI

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

For details, see **Table 5-57**.

Table 5-57 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
phones	Yes	Array of objects	Specifies the information about the cloud phone to be restarted. For details, see **Table 5-58**.
image_id	No	String	Specifies the ID of the image to be updated.

Table 5-58 Data structure description of **phones**

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
property	No	String	Specifies the cloud phone attribute. The value is a JSON string. For details, see **Cloud Phone Attribute List**.

- Example request

```
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"
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-59**.

Table 5-59 Data structure description of **job**

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. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.7 Stopping Cloud Phones

Function Description

- API name

PowerOffCloudPhone

- Function

  Stop cloud phones in batches.

URI

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

For details, see **Table 5-60**.

Table 5-60 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

Parameter	Mandatory	Type	Description
phone_ids	Yes	Array of strings	Specifies the unique identifier of the cloud phone. Obtain it by referring to **Querying Cloud Phones**.

- Example request

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

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Job structure array	Specifies the task information. For details, see **Table 5-61**.

Table 5-61 Data structure description of **job**

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. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.8 Editing the Name of a Cloud Phone

Function Description

- API name

  UpdatePhoneName

- Function

  Edit the cloud phone name based on the cloud phone ID.

URI

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

For details, see **Table 5-62**.

Table 5-62 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
phone_id	Yes	String	Specifies the unique identifier of the cloud phone. Obtain it by referring to **Querying Cloud Phones**.

Request

- Parameter description

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 (_).

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

Response

- Parameter description

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

- Example response
  ```
  {
      "request_id": "135d898e69344a13925a0899e1a4ac53"
  }
  ```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.9 Updating Cloud Phone Attributes

Function Description

- API name

  UpdateCloudPhoneProperty

- Function

  Only some cloud phone attributes can be updated. Some attributes take effect only after the cloud phone is restarted. For details about the attribute restrictions, see **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. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

URI

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

For details, see **Table 5-63**.

Table 5-63 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

Parameter	Mandatory	Type	Description
phones	Yes	Array of objects	Specifies the cloud phone information. For details, see **Table 5-64**.

Table 5-64 Data structure description of **phones**

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID. The value can contain a maximum of 32 bytes.
property	Yes	String	Specifies the cloud phone attribute. The value is a JSON string. For details, see **Cloud Phone Attribute List**.

- Example request
```
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\"}"
        }
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-65**.

Table 5-65 Data structure description of **job**

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. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.10 Exporting Data from Cloud Phones in Batches

Function Description

- API name

  BatchStorageCloudPhoneData

- Function

  This asynchronous API is used to export data from cloud phones in batches. You can query the job execution result by calling the following two APIs: **Querying the Task Execution Status** and **Querying the Task Execution Status List**.

URI

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

Table 5-66 lists the URI parameter.

Table 5-66 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameter

Parameter	Mandatory	Type	Description
storage_infos	Yes	Array of objects	Specifies information about the cloud phone whose data is to be exported. For details, see **Table 5-67**.

Table 5-67 Data structure description of **storage_info**

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID.
include_files	Yes	Array of strings	Specifies the absolute path for storing the data to be exported. The maximum length is 4,096 bytes. Only data in the **/data** and **/cache** directories can be exported. The path can contain only letters, digits, periods (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), and equal signs (=).
exclude_files	No	Array of strings	Specifies the path under which the 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. This parameter is optional. If this parameter is to be configured, it cannot be left blank. The path requirements are the same as those for **include_files**.

Parameter	Mandatory	Type	Description
bucket_name	Yes	String	Specifies the name of the OBS bucket for storing the exported data. An 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 path name must contain a maximum of 1,024 characters, including only letters, digits, periods (.), slashes (/), hyphens (-), underscores (_), plus signs (+), number signs (#), and equal signs (=). The read and write permissions on the bucket path must be granted to the cloud phone account. For details, see **Managing Cloud Phones in Batches**.

- Example request

```
POST /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"
        }
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.

Parameter	Type	Description
jobs	Array of objects	Specifies the job information. For details, see **Table 5-68**.

Table 5-68 Data structure description of **job**

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in jobs related to cloud phones.
job_id	String	Specifies the unique ID of a job.
error_code	String	Specifies the error code. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.11 Restoring Cloud Phone Data

Function Description

- API name

  BatchReStoreCloudPhoneData

- Function

  This API is used to restore data to the cloud phone in batches. This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

URI

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

For details, see **Table 5-69**.

Table 5-69 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameter

Parameter	Mandatory	Type	Description
restore_infos	Yes	Array of objects	Specifies information about the cloud phone for which the data is to be restored. For details, see **Table 5-70**.

Table 5-70 Data structure description of **restore_info**

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 cloud phone data. A valid OBS bucket name contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).

Parameter	Mandatory	Type	Description
object_path	Yes	String	Specifies the path of the OBS bucket for storing the restored cloud phone data. A valid OBS object key can contain a maximum of 1,024 characters.

The read and write permissions on the bucket path must be granted to the cloud phone account. For details, see . |

- Example request
```
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"
        }
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-71**.

Table 5-71 Data structure description of **job**

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. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.12 Migrating a Cloud Phone

Function Description

- API name

  BatchMigrateCloudPhone

- Function

  This API is used to migrate the entire cloud phone in batches, including migrating data on the system disks and data disks of the cloud phones. This API is an asynchronous API. The migration time required depends on the data volume of the cloud phones. If the data volume of a cloud phone is 11 GB, the migration of one cloud phone takes about 3 to 5 minutes. Before the migration, stop the cloud phone. You can call the **Querying the Task Execution Status** and **Querying the Task Execution Status List** APIs to query the migration task execution result.

URI

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

For details, see **Table 5-72**.

Table 5-72 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

Parameter	Mandatory	Type	Description
migrate_infos	Yes	Array of objects	Specifies information about the cloud phone for which the data is to be migrated. For details, see **Table 5-73**.

Table 5-73 Data structure description of **migrate_info**

Parameter	Mandatory	Type	Description
source_phone_id	Yes	String	Specifies the ID of the source cloud phone.
target_phone_id	Yes	String	Specifies the ID of the target cloud phone.
is_migrate_property	No	String	Specifies whether to migrate the attributes of the source cloud phone to the target cloud phone. If this parameter is set to **true** (case-insensitive), migration is performed. If this parameter is left blank or set to another value, migration is not performed.

- Example request

```
POST /v1/{project_id}/cloud-phone/phones/batch-migrate
{
  "migrate_infos": [
      {
          "source_phone_id": "1234567b8bab40ffb711234cb80d0234",
          "target_phone_id": "6837531fd3f54550927b930180a706bf",
          "is_migrate_property": "true"
      }
   ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-74**.

Table 5-74 job structure

Parameter	Type	Description
source_phone_id	String	Specifies the ID of the source cloud phone.
target_phone_id	String	Specifies the ID of the target cloud phone.
job_id	String	Specifies the unique ID of a task.
error_code	String	Specifies the error code. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

```
{
    "request_id": "6837531fd3f54550927b930180a706bf",
    "jobs": [
        {
            "source_phone_id": "1234567b8bab40ffb711234cb80d0234",
            "target_phone_id": "6637531fd3f54550927b930180a706cf",
            "job_id": "1564567b8bab40f34711234cb80d0123"
        },
        {
            "source_phone_id": "1678567b8bab",
            "target_phone_id": "6837531fd3f54550927b930180a706bf",
            "error_code": "CPS.0232",
            "error_msg": "Parameter: source_phone_id is invalid."
        }
    ]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.3.13 Diverting Cloud Phone Traffic

Function Description

- API name

  PhoneTraffic

- Function

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

URI

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

For details, see **Table 5-75**.

Table 5-75 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

Parameter	Mandatory	Type	Description
traffic_type	Yes	String	**direct**: default route **routing**: routing traffic to the encoding container
phone_ids	Yes	Array of strings	A maximum of 100 IDs can be invoked at a time.

- Example request

```
POST /v1/{project_id}/cloud-phone/phones-traffic
{
    "traffic_type":"routing",
    "phone_ids":["631056bfb66b4f4ea02ba25f04830cb4"]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-76**.

Table 5-76 Data structure description of **job**

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.

Parameter	Type	Description
error_code	String	Specifies the error code. For details, see **Error Codes**.
error_msg	String	Specifies the error message.

- Example response

```
{
    "jobs": [{
        "job_id": "5c16af7649c8464cb506e1a777c535bf",
        "phone_id": "631056bfb66b4f4ea02ba25f04830cb4"
    }],
    "request_id": "f2c85aa5057a496285d8565b19eb01c3"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.4 Task Management

5.4.1 Querying the Task Execution Status

Function Description

- API name

  QueryJobs

- Function

  Query task execution status.

URI

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

For details, see **Table 5-77**.

Table 5-77 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Parameter	Mandatory	Type	Description
job_id	Yes	String	Specifies the job ID in the response after the task request is issued.

Request

- Request parameters

  None

- Example request

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

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
job_id	String	Specifies the unique ID of a task.
begin_time	String	Specifies the task start time. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
end_time	String	Specifies the task end time. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
status	int	Specifies the task status. - **1**: The task is running. - **2**: The task succeeds. - **-1**: The task fails.
error_code	String	Specifies the task error code.
error_msg	String	Specifies the task error code description.
execute_msg	String	Specifies the content returned after a task is executed. The value can contain a maximum of 1,024 bytes.

- Example response

```
{
    "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
    }
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.4.2 Querying the Task Execution Status List

Function Description

- API name

  ListJobs

- Function

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

URI

GET /v1/{project_id}/cloud-phone/jobs?request_id={request_id}

For details, see **Table 5-78**.

Table 5-78 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
request_id	Yes	String	Specifies the request ID in the response after the task request is issued. **NOTICE** Either **request_id** or **request_ids** must be specified. If both **request_id** and **request_ids** are specified, the value of **request_ids** prevails.

Parameter	Mandatory	Type	Description
request_ids	Yes	String	If there are multiple request IDs in the response, use commas (,) to separate them. A maximum of 20 request IDs are allowed. **NOTE** If both **request_id** and **request_ids** are specified, the value of **request_ids** prevails.
offset	No	Integer	Specifies the offset. The offset must be an integer greater than 0 but less than the number of resources. All resources after this offset will be queried.
limit	No	Integer	Specifies the number of resources to be returned on each page. Value range: 1–100 Generally, set this parameter to **10**, **20**, or **50**.

Request

- Request parameters

  None

- Example request

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

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-79**.

Table 5-79 Data structure description of **job**

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in tasks related to cloud phones.
server_id	String	Specifies the unique ID of a cloud phone server. This parameter is contained in tasks related to cloud phone servers.
node_id	String	(Discarded) Specifies the unique ID of a cloud phone server. This parameter is contained in server-related tasks.
job_id	String	Specifies the unique ID of a task.
begin_time	String	Specifies the task start time. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
end_time	String	Specifies the task end time. It is a UTC time in **YYYY-MM-DDTHH:MM:SSZ** format.
status	Integer	Specifies the task status. ● **1**: The task is running. ● **2**: The task succeeds. ● **-1**: The task fails.
error_code	String	Specifies the task error code.
error_msg	String	Specifies the task error code message.
execute_msg	String	Specifies the content returned after a task is executed. The value can contain a maximum of 1,024 bytes.

● Example response

```
{
  "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": ""
      }
   ]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.5 Key Management

5.5.1 Changing a Key Pair

Function Description

- API name

  UpdateKeypair

- Function

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

URI

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

For details, see **Table 5-80**.

Table 5-80 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
servers	Yes	Array of objects	Specifies information about the target cloud phone server. For details, see **Table 5-81**.

Table 5-81 Data structure description of **servers**

Parameter	Mandatory	Type	Description
server_id	Yes	String	Specifies the cloud phone server ID. The value can contain a maximum of 32 bytes. You can obtain the value of this parameter from the **server_id** field in the response in **Querying Cloud Phone Servers**.
keypair_name	Yes	String	Specifies the key pair name. ● If you want to use an existing key pair of the current account, you can **query SSH key pairs** to view all key pairs of the account and obtain the value of **keypair_name**. ● If you want to use a new key pair, log in to the management console and create a key pair. For details, see **(Recommended) Creating a Key Pair on the Management Console**.

- Example request
  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"
        }
     ]
  }
  ```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-82**.

Table 5-82 Data structure description of **job**

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.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.6 Encoding Server Management

5.6.1 Querying Encoding Servers

Function Description

- API name

  ListEncodeServers
- Function

  This API is used to query the encoding servers.

URI

GET /v1/{project_id}/cloud-phone/encode-servers?
offset={offset}&limit={limit}&type={type}&status={status}&server_id={server_id}

For details, see **Table 5-83**.

Table 5-83 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.
offset	No	Integer	Specifies the offset. If the value is an integer greater than 0 but less than the number of resources, all resources after this offset will be queried. The default value is **0**.
limit	No	Integer	Specifies the number of resources returned on each page. Value range: 1–100 (default value: **100**) Generally, set this parameter to **10**, **20**, or **50**.
type	No	Integer	Specifies the encoding server type. ● **0**: server ● **1**: container
status	No	Integer	Specifies the encoding server status. ● **1**: Running ● **2**: Abnormal ● **3**: Restarting ● **4**: Frozen ● **5**: Sopped ● **100**, **1014**, or **0**: Creating
server_id	No	String	Specifies the cloud phone server ID.

Request

- Request parameters

  None

- Example request

  GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/encode-servers?
  offset=0&limit=100&type=0&status=0

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
encode_servers	Array of objects	Specifies the encoding server information. For details, see **Table 5-84**.

Table 5-84 Data structure description of **encode_server**

Parameter	Type	Description
encode_server_name	String	Specifies the encoding server name, which can contain a maximum of 64 bytes.
encode_server_id	String	Specifies the unique ID of the encoding server, which can contain a maximum of 32 bytes.
encode_server_ip	String	Specifies the IP address of the encoding server.
server_id	String	Specifies the cloud phone server ID, which can contain a maximum of 32 bytes.
keypair_name	String	Specifies the key for logging in to the encoding server.
type	Integer	Specifies the encoding server type. ● **0**: server ● **1**: container
status	Integer	Specifies the encoding server status. ● **1**: Running ● **2**: Abnormal ● **3**: Restarting ● **0**, **4**, or **5**: Being created

Parameter	Type	Description
access_infos	Array of objects	Specifies the access information of the encoding server. For details, see **Table 5-85**.

Table 5-85 Data structure description of **access_info**

Parameter	Type	Description
listen_port	Integer	Specifies the listening port of the encoding server.
access_ip	String	Specifies the public IP address accessed by the encoding server. This field has expired.
intranet_ip	String	Specifies the private IP address accessed by the encoding server. This field has expired.
public_ip	String	Specifies the public IP address accessed by the encoding server. This field is newly added.
server_ip	String	Specifies the private IP address accessed by the encoding server. This field is newly added.
access_port	Integer	Specifies the port used by the encoding server to access the public network.
type	String	Specifies the port type of the encoding server. ● **adb**: ADB port of the cloud phone ● **vnc**: VNC port of the cloud phone ● **cph_app_server**: access port of the cloud gaming client ● **cph_h5_server**: H5 web page access port of cloud gaming ● **Others**: user-defined port

- Example response

```
{
    "encode_servers": [{
        "encode_server_name": "ENCODE_SERVER_2",
        "encode_server_id": "00b00d1b35094f13b360cdfe15a9bfee",
        "encode_server_ip": "10.237.0.233",
        "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",
              "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",
              "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",
              "public_ip": "",
              "type": "port3"
          },
          {   "listen_port": 6901,
              "intranet_ip": "172.31.240.115",
              "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"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.6.2 Restarting the Encoding Server

Function Description

- API name

  RestartEncodeServer

- Function

  Restart the encoding server in batches.

URI

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

For details, see **Table 5-86**.

Table 5-86 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

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

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/encode-servers/batch-restart
{
    "encode_server_ids": [
        "d5cfa92995da40168c39b38d2aa478b3",
        "00b00d1b35094f13b360cdfe15a9bfee"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-87**.

Table 5-87 Data structure description of **job**

Parameter	Type	Description
encode_server_id	String	Specifies the unique ID of the encoding server. This parameter is contained in tasks related to the encoding server.
job_id	String	Specifies the unique ID of a task.

- Example response
```
{
    "jobs":
    [
        {
            "job_id": "e9d7b1a2572c4f2c9bf056a3d1b35e39",
            "encode_server_id": "d5cfa92995da40168c39b38d2aa478b3"
        },
        {
            "job_id": "4d0a42447cac4c9697b97f07934b74bd",
            "encode_server_id": "00b00d1b35094f13b360cdfe15a9bfee"
        }
    ],
    "request_id": "c775bdf09bc0400a9138199b346cab62"
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.7 ADB Commands

5.7.1 Pushing Files

Function Description

- API name

  PushFile

- Function

  This API is used to push files to the cloud phone file system. The system downloads and decompresses the specified file, and pushes the decompressed content 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. This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

- Notes

You have granted the read-only permissions on the OBS bucket to the Cloud Phone service system account. For details, see **Managing Cloud Phones in Batches** in the *Cloud Phone User Guide*.

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

The maximum size of a file that can be pushed is 6 GB. That is, files larger than 6 GB in the OBS bucket cannot be pushed to cloud phones. If the size of a file exceeds 6 GB, an error message is returned.

URI

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

For details, see **Table 5-88**.

Table 5-88 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Specifies the command for managing the cloud phones. Set this parameter to **push** for file pushing.
content	Yes	String	Specifies the specified .tar file in the OBS bucket. The value can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-). Only .tar files can be pushed. File format: **obs://obs-bucket-name/obs-file-path/file.tar**

Parameter	Mandatory	Type	Description
phone_ids	No	Array of strings	Specifies the cloud phone ID list. This parameter is mandatory when **server_ids** does not need to be configured. If both **phone_ids** and **server_ids** are available, set **phone_ids** only. Obtain it by referring to **Querying Cloud Phones**.
server_ids	No	Array of strings	Specifies the ID list of the cloud phone servers. This parameter is mandatory when **phone_ids** does not need to be configured. If both **phone_ids** and **server_ids** are available, set **phone_ids** only. Obtain it by referring to **Querying Cloud Phone Servers**.

- Example request

```
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"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-89**.

Table 5-89 Data structure description of **job**

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.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.7.2 Installing the APK

Function Description

- API name

  InstallApk

- Function

  This API is used to install the APK on a cloud phone. The system downloads the specified APK file and installs it on the cloud phone.

  A single APK application or multiple APK applications can be installed. You can run the **install** command to install a single APK. Only one APK can be installed at a time. You can 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.

  This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

- Notes

  You have granted the read-only permissions on the OBS bucket to the Cloud Phone service system account. For details, see **Managing Cloud Phones in Batches** in the *Cloud Phone User Guide*.

The management plane performance is limited. Executing ADB commands in batches on the same server blocks the execution of other tasks on the cloud phone. You are advised to install the APK by developing an app store. The maximum size of an APK that can be installed is 2 GB. That is, an APK larger than 2 GB in the OBS bucket cannot be installed on a cloud phone. If the size of an APK exceeds 2 GB, an error is returned.

URI

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

For details, see **Table 5-90**.

Table 5-90 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Specifies the ADB command. If a single APK is installed, set this parameter to **install**. If multiple APKs are installed, set this parameter to **install-multiple**.

Parameter	Mandatory	Type	Description
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.
			File format: **obs://obs-bucket-name/obs-file-path/file.apk**
			In the single-APK scenario, only one APK can be transferred, and the maximum length is 1,024 bytes. In the multi-APK scenario, a maximum of 50 APKs separated by spaces can be transferred, and the maximum length is 8,100 bytes.
server_ids	No	Array of strings	Specifies the ID list of the cloud phone servers.
			This parameter is mandatory when **phone_ids** does not need to be configured.
			Obtain it by referring to **Querying Cloud Phone Servers**.
phone_ids	No	Array of strings	Specifies the cloud phone ID list.
			This parameter is mandatory when **server_ids** does not need to be configured.
			Obtain it by referring to **Querying Cloud Phones**.

- Example request for installing a single APK
  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"
    ]
}
```

- Example request for installing multiple APKs

```
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"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-91**.

Table 5-91 Data structure description of **job**

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.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.7.3 Uninstalling the APK

Function Description

- API name

  UninstallApk

- Function

  Uninstall the APK from a cloud phone. This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

- Notes

  You have granted the read-only permissions on the OBS bucket to the Cloud Phone service system account. For details, see **Managing Cloud Phones in Batches** in the *Cloud Phone User Guide*.

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

URI

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

For details, see **Table 5-92**.

Table 5-92 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Specifies the ADB command. In the APK uninstallation scenario, this parameter is fixed at **uninstall**.

Parameter	Mandatory	Type	Description
content	Yes	String	Specifies the name of the app to be uninstalled. The value can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
server_ids	No	Array of strings	Specifies the ID list of the cloud phone servers. This parameter is mandatory when **phone_ids** does not need to be configured. Obtain it by referring to **Querying Cloud Phone Servers**.
phone_ids	No	Array of strings	Specifies the cloud phone ID list. This parameter is mandatory when **server_ids** does not need to be configured. Obtain it by referring to **Querying Cloud Phones**.

- Example request
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands
```
{
    "command": "uninstall",
    "content": "com.myapp.test",
    "phone_ids": [
        "1234567b8bab40ffb711234cb80d0234",
        "1678567b8bab40f93711234cb80d0764"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Job structure array	Specifies the task information. For details, see **Table 5-93**.

Table 5-93 Data structure description of **job**

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.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.7.4 Running the Asynchronous ADB shell Commands

Function Description

- API name

  RunShellCommand

- Function

  This API is used to run the shell command on a cloud phone. This API is an asynchronous API. You can call APIs in **Querying the Task Execution Status** and **Querying the Task Execution Status List** to query the task execution result.

- Notes

  You have granted the read-only permissions on the OBS bucket to the Cloud Phone service system account. For details, see **Managing Cloud Phones in Batches** in the *Cloud Phone User Guide*.

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

URI

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

For details, see **Table 5-94**.

Table 5-94 Parameter description

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Parameter description

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 value can contain a maximum of 1,024 bytes, including only letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
server_ids	No	Array of strings	Specifies the ID list of the cloud phone servers. This parameter is mandatory when **phone_ids** does not need to be configured. Obtain it by referring to **Querying Cloud Phone Servers**.
phone_ids	No	Array of strings	Specifies the cloud phone ID list. This parameter is mandatory when **server_ids** does not need to be configured. Obtain it by referring to **Querying Cloud Phones**.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/commands
{
    "command": "shell",
    "content": "ls -l /system",
    "phone_ids": [
        "1234567b8bab40ffb711234cb80d0234",
        "1678567b8bab40f93711234cb80d0764"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
jobs	Array of objects	Specifies the task information. For details, see **Table 5-95**.

Table 5-95 Data structure description of **job**

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.

- Example response

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

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

5.7.5 Running the Synchronous ADB shell Commands

Function Description

- API name

  RunSyncCommand

- Function

  This API is only used to synchronously execute ADB shell commands and return the command execution 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-minute 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 5-96 lists the URI parameter.

Table 5-96 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Specifies the project ID. For details about how to obtain the project ID, see **Obtaining a Project ID**.

Request

- Request parameters

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

Parameter	Mandatory	Type	Description
server_ids	No	Array of strings	Specifies IDs of the cloud phone servers. This parameter is mandatory when **phone_ids** does not need to be configured. Obtain them by referring to **Querying Cloud Phone Servers**.
phone_ids	No	Array of strings	Specifies cloud phone IDs. This parameter is mandatory when **server_ids** does not need to be configured. Obtain them by referring to **Querying Cloud Phones**.

- Example request
```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/sync-commands
{
    "command": "shell",
    "content": "ls -l /system",
    "phone_ids": [
        "1234567b8bab40ffb711234cb80d0234",
        "1678567b8bab40f93711234cb80d0764"
    ]
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the unique request ID.
jobs	Array of objects	Specifies the job information. For details, see **Table 5-97**.

Table 5-97 Data structure description of **job**

Parameter	Type	Description
phone_id	String	Specifies the unique ID of a cloud phone. This parameter is contained in jobs related to cloud phones.
job_id	String	Specifies the unique ID of a job.

Parameter	Type	Description
status	Integer	Specifies the job status. • **2**: The job succeeded. • **-1**: The job failed.
error_code	String	Specifies the error code of the job.
error_msg	String	Specifies the error message of the job.
execute_msg	String	Specifies the content returned after a job is executed. The value can contain a maximum of 1,024 bytes. The command output is returned regardless of whether the command is successfully executed.

- Example response

```
{
    "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"
    }]
}
```

Returned Values

See **Returned Values**.

Error Codes

See **Error Codes**.

6 Common Parameters

6.1 General Request Return Values

6.1.1 Abnormal Response

Cloud Phone APIs

- Response parameters

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

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 6-1**.

Table 6-1 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."
        }
    ]
}
```

6.1.2 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.

6.2 Error Codes

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0001	No permission to request resources.	Apply for the required permissions on IAM or set the token **scope** to **project** and try again.
400	CPS.0002	Parameter: offset or limit is invalid.	Specify a valid **offset** or **limit**.
400	CPS.0003	Service internal error.	Try again later.
400	CPS.0004	Invalid phone id.	Enter a valid cloud phone ID.
400	CPS.0005	Phone is not found.	Change the cloud phone ID and try again.
400	CPS.0006	No permission to request resources. Role is op_restricted.	Top up your account and try again.
400	CPS.0007	No permission to request resources. Role is op_suspended.	Contact customer service.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0008	No permission to request resources. Role is op_unverified.	Complete real-name authentication.
400	CPS.0009	Parameter: phone_id list is empty.	Ensure that the cloud phone ID list is not left blank.
400	CPS.0010	Parameter: status is invalid.	Specify a valid **status** and try again.
400	CPS.0011	Job not found.	Contact customer service.
400	CPS.0014	Parameter: sd_path list is empty.	Specify **sd_path list** and try again.
400	CPS.0015	server_id not found.	Change the server ID and try again.
400	CPS.0016	server_id is invalid.	Specify a valid **server_id** and try again.
400	CPS.0017	Event callback not found.	Contact customer service.
400	CPS.0018	Access info not found.	Contact customer service.
400	CPS.0019	Ticket not found.	Contact customer service.
400	CPS.0020	VNC is not enable.	Contact customer service.
400	CPS.0021	Invalid ticket.	Contact customer service.
400	CPS.0022	Not available phone.	Contact customer service.
400	CPS.0023	Duplicate apply the phone.	Contact customer service.
400	CPS.0024	Parameter: count is invalid.	Specify a valid **count** and try again.
400	CPS.0025	Parameter: phone_name is invalid.	Specify a valid **phone_name** and try again.
400	CPS.0026	Parameter: phone_name is conflicted.	Specify a different phone name and try again.
400	CPS.0027	Parameter: phone_model_name is empty.	Specify **phone_model_name** and try again.
400	CPS.0028	Parameter: phone_model_name is invalid.	Specify a valid **phone_model_name** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0029	Parameter: image_id is empty.	Specify **image_id** and try again.
400	CPS.0030	Parameter: image_id is invalid.	Specify a valid **image_id** and try again.
400	CPS.0031	Parameter: band_width is invalid.	Specify a valid **band_width** and try again.
400	CPS.0032	Parameter: band_width_id is empty.	Specify **band_width_id** and try again.
400	CPS.0033	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.	Specify a valid **band_width_share_type** and try again.
400	CPS.0035	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.	Specify a valid **band_width_size** and try again.
400	CPS.0037	Parameter: ports is invalid.	Specify a valid **ports** and try again.
400	CPS.0038	Parameter: port name is invalid.	Specify a valid **port name** and try again.
400	CPS.0039	Parameter: port name is conflicted.	Specify a different port name and try again.
400	CPS.0040	Parameter: listen_port is invalid.	Specify a valid **listen_port** and try again.
400	CPS.0041	Parameter: listen_port is conflicted.	Specify another port number and try again.
400	CPS.0042	System busy.	Try again later.
400	CPS.0043	Parameter: bms_name is invalid.	Specify a valid **bms_name** and try again.
400	CPS.0044	bms not found.	Contact customer service.
400	CPS.0045	Parameter: device_id is invalid.	Specify a valid **device_id** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0046	Parameter: project_id is invalid.	Specify a valid **project_id** and try again.
400	CPS.0047	Parameter: action is invalid.	Specify a valid **action** and try again.
400	CPS.0048	Parameter: job_id is empty.	Specify **job_id** and try again.
400	CPS.0049	Parameter: request_id is empty.	Specify **request_id** and try again.
400	CPS.0050	Jobs related to this requestId is not found.	Contact customer service.
400	CPS.0051	The bandwidth share type of WHOLE is exist.	Contact customer service.
400	CPS.0052	Parameter: error_code is invalid.	Specify a valid **error_code** and try again.
400	CPS.0053	No permission to request resources. Phone is freezed.	Apply to unfreeze your cloud phone and try again.
400	CPS.0054	Handle job timeout.	Try again later.
400	CPS.0055	Parameter: extend_param is invalid.	Specify a valid **extend_param** and try again.
400	CPS.0056	Parameter: charging_mode is invalid.	Specify a valid **charging_mode** and try again.
400	CPS.0057	Parameter: period_type is invalid.	Specify a valid **period_type** and try again.
400	CPS.0058	Parameter: period_num is invalid.	Specify a valid **period_num** and try again.
400	CPS.0059	Parameter: isAutoRenew is invalid.	Specify a valid **isAutoRenew** and try again.
400	CPS.0060	Parameter: isAutoPay is invalid.	Specify a valid **isAutoPay** and try again.
400	CPS.0061	Inquiry order info failed.	Try again later.
400	CPS.0062	Create order failed.	Contact customer service or try again later.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0063	productInfos is empty.	Specify **productInfos** and try again.
400	CPS.0064	productId is empty.	Specify **productId** and try again.
400	CPS.0065	Quota exceeded for server.	Apply for a higher quota and try again.
400	CPS.0066	Capacity exceeded for server.	Contact customer service.
400	CPS.0067	Keypair could not found.	Contact customer service.
400	CPS.0068	Parameter: keypair_name is empty.	Specify **keypair_name** and try again.
400	CPS.0069	Parameter: topic_urn is invalid.	Specify a valid **topic_urn** and try again.
400	CPS.0070	Parameter: Property [phone_brand] is invalid.	Specify a valid **phone_brand** and try again.
400	CPS.0071	Parameter: Property [phone_type] is invalid.	Specify a valid **phone_type** and try again.
400	CPS.0072	Parameter: Property [serial_num] is invalid.	Specify a valid **serial_num** and try again.
400	CPS.0073	Parameter: Property [os_version] is invalid.	Specify a valid **os_version** and try again.
400	CPS.0074	Parameter: Property [phone_num] is invalid.	Specify a valid **phone_num** and try again.
400	CPS.0075	Parameter: Property [imsi] is invalid.	Specify a valid **imsi** and try again.
400	CPS.0076	Parameter: Property [iccid] is invalid.	Specify a valid **iccid** and try again.
400	CPS.0077	Parameter: phones list is invalid.	Specify a valid **phones list** and try again.
400	CPS.0078	Parameter: Property is invalid.	Specify a valid **Property** and try again.
400	CPS.0079	Parameter: mac_address is invalid.	Specify a valid **mac_address** and try again.
400	CPS.0080	Parameter: phone_ids is invalid.	Specify a valid **phone_ids** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0081	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.	Specify a valid **wifi_name** and try again.
400	CPS.0083	Parameter: Property [mac_address] is invalid.	Specify a valid **mac_address** and try again.
400	CPS.0084	Parameter: Property [imei] is invalid.	Specify a valid **imei** and try again.
400	CPS.0085	Parameter: order_id is invalid.	Specify a valid **order_id** and try again.
400	CPS.0086	Parameter: resourceId is invalid.	Specify a valid **resourceId** and try again.
400	CPS.0087	Parameter: server_name is invalid.	Specify a valid **server_name** and try again.
400	CPS.0088	Parameter: server_model_name is empty.	Specify **server_model_name** and try again.
400	CPS.0089	Parameter: server_model_name is invalid.	Specify a valid **server_model_name** and try again.
400	CPS.0090	Init server create data failed.	Contact customer service.
400	CPS.0091	Retry time exceeded for creating server.	Contact customer service.
400	CPS.0092	Create server failed.	Contact customer service.
400	CPS.0093	Parameter: internet_accessible is empty.	Specify **internet_accessible** and try again.
400	CPS.0094	Parameter: server_ids is invalid.	Specify a valid **server_ids** and try again.
400	CPS.0095	Parameter: server_ids is empty.	Specify **server_ids** and try again.
400	CPS.0096	The number of servers exceeds the limit.	Contact customer service.
400	CPS.0097	Parameter: server_id is invalid.	Specify a valid **server_id** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0098	Parameter: no available keypair_name or server not ready.	Specify a valid key pair name.
400	CPS.0099	Parameter: server is not ready.	Contact customer service.
400	CPS.0100	Probation phones not found.	Contact customer service.
400	CPS.0101	No available device access found.	Contact customer service.
400	CPS.0102	Failed to create OBS bucket.	Contact customer service.
400	CPS.0103	Failed to upload objects to OBS.	Contact customer service.
400	CPS.0104	File doesn't exists in OBS.	Contact customer service.
400	CPS.0105	BMS status is invalid.	Contact customer service.
400	CPS.0106	version doesn't match with agent package.	Contact customer service.
400	CPS.0107	Parameters for upload files to obs is invalid.	Contact customer service.
400	CPS.0108	Upload files to obs failed.	Contact customer service.
400	CPS.0109	Failed to create alarm topic.	Contact customer service.
400	CPS.0110	Failed to add alarm topic subscriber list.	Contact customer service.
400	CPS.0111	desc.json is invalid.	Contact customer service.
400	CPS.0112	Upload version didn't equals version defined in desc.json.	Contact customer service.
400	CPS.0113	Upload file not founded.	Contact customer service.
400	CPS.0114	Update system_parameter failed.	Contact customer service.
400	CPS.0115	Band width not found.	Contact customer service.
400	CPS.0116	Parameter: type is invalid.	Specify a valid **type** and try again.
400	CPS.0117	Parameter: command is invalid.	Specify a valid **command** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0118	Parameter: content is invalid.	Specify a valid **content** and try again.
400	CPS.0119	Parameter: filename doesn't end .apk.	End the file with **.apk** and try again.
400	CPS.0121	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.	Specify a valid **Encode server id list** and try again.
400	CPS.0123	Encode server not found.	Contact customer service.
400	CPS.0124	Encode server is creating.	Contact customer service.
400	CPS.0125	Parameter: Property [build_id] is invalid.	Specify a valid **build_id** and try again.
400	CPS.0126	Parameter: Property [android_id] is invalid.	Specify a valid **android_id** and try again.
400	CPS.0127	Parameter: Property [hide_navigate] is invalid.	Specify a valid **hide_navigate** and try again.
400	CPS.0128	Parameter: Property [gsm_country] is invalid.	Specify a valid **gsm_country** and try again.
400	CPS.0129	Parameter: Property [gsm_number] is invalid.	Specify a valid **gsm_number** and try again.
400	CPS.0130	Parameter: Property [gsm_operator] is invalid.	Specify a valid **gsm_operator** and try again.
400	CPS.0131	Parameter: Property [sim_country] is invalid.	Specify a valid **sim_country** and try again.
400	CPS.0132	Parameter: Property [sim_number] is invalid.	Specify a valid **sim_number** and try again.
400	CPS.0133	Parameter: Property [sim_operator] is invalid.	Specify a valid **operator** and try again.
400	CPS.0134	Parameter: bucket_name is invalid.	Specify a valid **bucket_name** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0135	Parameter: object_path is invalid.	Specify a valid **object_path** and try again.
400	CPS.0136	Available server not found.	Contact customer service.
400	CPS.0137	Server does not support push share files.	Contact customer service.
400	CPS.0138	The bandwidth name is invalid.	Specify a valid bandwidth name and try again.
400	CPS.0139	The port_name_list is invalid.	Contact customer service.
400	CPS.0140	Parameter: manage_band_width is invalid.	Specify a valid **manage_band_width** and try again.
400	CPS.0141	Phone is not in running status.	Contact customer service.
400	CPS.0142	Parameter: image_label is invalid.	Specify a valid **image_label** and try again.
400	CPS.0143	Parameter: is_public is invalid.	Specify a valid **is_public** and try again.
400	CPS.0144	Parameter: product_type is invalid.	Specify a valid **product_type** and try again.
400	CPS.0145	Parameter: ports exceeds the limit.	Specify a valid **ports** and try again.
400	CPS.0147	Server does not support push share apps.	Contact customer service.
400	CPS.0148	Parameter: pre_install_app is invalid.	Specify a valid **pre_install_app** and try again.
400	CPS.0155	The file_paths is invalid.	Contact customer service.
400	CPS.0156	The server_id is not found.	Contact customer service.
400	CPS.0157	The phone model is invalid.	Contact customer service.
400	CPS.0158	The server is not available for being restarted.	Contact customer service.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0159	Server not found.	Contact customer service.
400	CPS.0160	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.	Specify a valid number and try again.
400	CPS.0162	Parameter: image_name is invalid.	Specify a valid **image_name** and try again.
400	CPS.0163	Parameter: property {0} not supported.	Specify a valid property and try again.
400	CPS.0164	Parameter: Invalid property {0}.	Specify a valid property and try again.
400	CPS.0165	The phone must be in stopped or running status.	Contact customer service.
400	CPS.0166	Phone image not found.	Contact customer service.
400	CPS.0167	Parameter: storage_infos is invalid.	Specify a valid **storage_infos** and try again.
400	CPS.0168	Parameter: include_files is invalid.	Specify a valid **include_files** and try again.
400	CPS.0169	Parameter: exclude_files is invalid.	Specify a valid **exclude_files** and try again.
400	CPS.0170	Parameter: storage_infos exceeds the limit.	Specify a valid **storage_infos** and try again.
400	CPS.0171	Parameter: restore_infos is invalid.	Specify a valid **restore_infos** and try again.
400	CPS.0172	Parameter: object_path is unregistered.	Specify a valid **object_path** and try again.
400	CPS.0173	Parameter: package_name is invalid.	Specify a valid **package_name** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0174	Parameter: time is invalid.	Specify a valid **time** and try again.
400	CPS.0175	Parameter: run_time is invalid.	Specify a valid **run_time** and try again.
400	CPS.0176	Parameter: session_id is invalid.	Specify a valid **session_id** and try again.
400	CPS.0190	The number of phones exceeds the limit.	Contact customer service.
400	CPS.0191	Parameter: subnet_cidr is invalid.	Specify a valid **subnet_cidr** and try again.
400	CPS.0192	Cannot delete the latest agent because it is in use.	Contact customer service.
400	CPS.0193	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.	Contact customer service.
400	CPS.0195	Encode server is frozen, no permission to request resources.	Contact customer service.
400	CPS.0196	Quota is insufficient.	Contact customer service.
400	CPS.0197	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.	Contact customer service.
400	CPS.0199	The path is invalid.	Contact customer service.
400	CPS.0200	Parameter: peering_id is invalid	Specify a valid **peering_id** and try again.
400	CPS.0201	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.	Ensure that the VPC peering connection is in the **Accepted** state.
400	CPS.0203	Failed to obtain the VPC ID. Buy a server first.	Create a cloud phone server first.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0204	The subnet cannot be used when in delete or error status.	Contact customer service.
400	CPS.0205	Parameter: br_cidr is invalid.	Specify a valid **br_cidr**.
400	CPS.0206	The br_cidr overlaps with an existing subnet cidr.	Specify a valid **br_cidr**.
400	CPS.0207	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.	Contact customer service.
400	CPS.0209	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.	Specify a valid **br_cidr** and try again.
400	CPS.0211	Parameter: availability_zone is invalid.	Specify a valid **availability_zone** and try again.
400	CPS.0212	Parameter: no permission to request availability_zone.	Contact customer service.
400	CPS.0213	Phone is creating.	Contact customer service.
400	CPS.0214	Parameter: access_ip is invalid.	Specify a valid **access_ip** and try again.
400	CPS.0215	Parameter: access_port is invalid.	Specify a valid **access_port** and try again.
400	CPS.0216	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.	Contact customer service.
400	CPS.0218	Parameter: image_sub_type is invalid.	Specify a valid **image_sub_type** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0219	Phone does not support export and import image.	Contact customer service.
400	CPS.0220	Phone image status is not active.	Contact customer service.
400	CPS.0221	Phone image type is not whole image.	Contact customer service.
400	CPS.0222	Phone image labels do not match up.	Contact customer service.
400	CPS.0223	Parameter: tenant_vpc_id is invalid.	Specify a valid **tenant_vpc_id**.
400	CPS.0224	Parameter: subnet_id is invalid.	Specify a valid **subnet_id**.
400	CPS.0225	Parameter: ip_address is invalid.	Specify a valid **ip_address** and try again.
400	CPS.0226	Parameter: nics is invalid.	Enter a valid **nics**.
400	CPS.0227	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.	Use a subnet in the VPC.
400	CPS.0229	Query subnet by id fail.	Ensure the subnet ID that you entered is available.
400	CPS.0230	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.	Specify a target cloud phone that is different from the source cloud phone.
400	CPS.0232	Parameter: source_phone_id is invalid.	Specify a valid **source_phone_id** and try again.
400	CPS.0233	Parameter: target_phone_id is invalid.	Specify a valid **target_phone_id** and try again.
400	CPS.0234	Parameter: migrate_infos is invalid.	Specify a valid **migrate_infos** and try again.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0235	Parameter: is_migrate_property is invalid.	Specify a valid **is_migrate_property** and try again.
400	CPS.0236	Query vpc by id not found.	Ensure that the entered VPC ID is available.
400	CPS.0237	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.	Check the **public_ip** structure.
400	CPS.0239	Parameter: eip is invalid.	Check the structure body of **eip**.
400	CPS.0240	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.	Contact customer service.
400	CPS.0242	Insufficient Bms Quantity.	Contact customer service.
400	CPS.0243	User not found.	Contact customer service.
400	CPS.0244	Bms event name is invalid.	Contact customer service.
400	CPS.0245	Server does not allow to change model.	Contact customer service.
400	CPS.0246	Server model not found.	Contact customer service.
400	CPS.0247	Server model is not supported.	Contact customer service.
400	CPS.0248	Get change resource price failed.	Contact customer service.
400	CPS.0249	Change cbc order failed.	Contact customer service.
400	CPS.0250	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.	Contact customer service.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0252	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.	Specify a valid **public_ip: ids** and try again.
400	CPS.0254	Image version is invalid.	Contact customer service.
400	CPS.0255	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.	Contact customer service.
400	CPS.0257	Phone model is not supported.	Contact customer service.
400	CPS.0258	VNC is under maintenance.	Contact customer service.
400	CPS.0259	The agent version is not supported.	Contact customer service.
400	CPS.0260	Sub job execute failed.	Contact customer service.
400	CPS.0261	The phone image is not supported.	Contact customer service.
400	CPS.0262	The agent version and phone image is not supported.	Contact customer service.
400	CPS.0263	Cloud phones running Android 9 do not support VNC.	Contact customer service.
400	CPS.0264	Parameter: request_id is invalid.	Specify a valid **request_id** and try again.
400	CPS.0265	version is invalid.	Contact customer service.
400	CPS.0266	Duplicate mac addresses in request parameters.	Contact customer service.
400	CPS.0267	The mac address already exists.	Contact customer service.

Status Code	Error Code	Error Message	Handling Measure
400	CPS.0300	Parameter: Invalid resource type.	Enter a valid resource type and try again.
400	CPS.0301	Parameter: Invalid resource id.	Enter a valid resource ID and try again.
400	CPS.0302	The resource_id is not found.	Enter a valid resource ID and try again.
400	CPS.0303	Parameter: Invalid tags.	Enter valid tags and try again.
400	CPS.0304	Parameter: Invalid tag key.	Enter a valid tag key and try again.
400	CPS.0305	Parameter: Invalid tag value.	Enter a valid tag value and try again.
400	CPS.0306	Parameter: Key start with _sys_ is reserved to system user.	Do not start key with **_sys_** and try again.
400	CPS.0307	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.	Delete some tag keys and try again.
400	CPS.0310	Parameter: The number of tag values has reached the limit.	Delete some tag values and try again.
400	CPS.0311	Parameter: Invalid matches.	Change **matches** to a list and try again.
400	CPS.0312	Parameter: Invalid match.	Change **match** to a map and try again.
400	CPS.0313	Parameter: Invalid match key.	Enter a valid key and try again.
400	CPS.0314	Parameter: Invalid match value.	Enter a valid value and try again.
400	CPS.0315	Parameter: Invalid tag values.	Enter valid tag values and try again.
400	CPS.0316	Parameter: enterprise_project_id is invalid.	Enter a valid enterprise project ID and try again.

6.3 Obtaining a Project ID

Scenarios

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. Two methods are available:

- **Obtain the Project ID by Calling an API**
- **Obtain the Project ID from the Console**

Obtain the 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 **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 6-1 Viewing the project ID
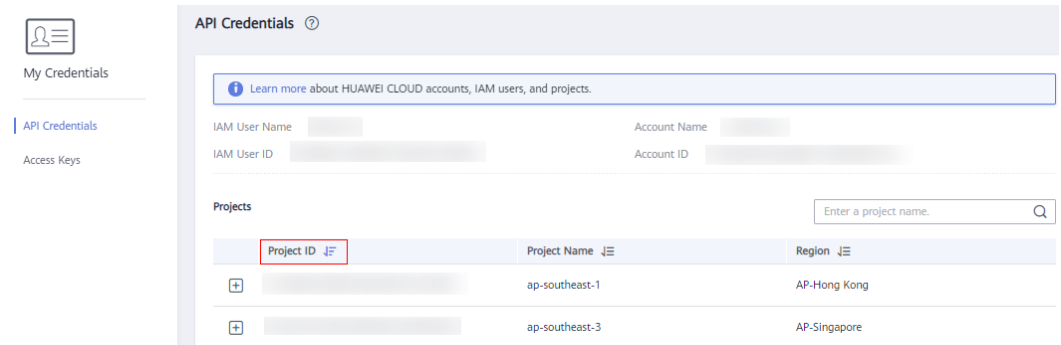
A Appendix

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 **0**.	**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 the privacy protection function 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: ● 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_pat h	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.loc ale	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.oper ator.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.oper ator.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.gpurenderer	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 the 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 engine.	This parameter is valid only for game cloud phones. **0**: Disabled the engine. **1**: Enable the engine.

A.2 Cloud Phone Flavor List

Flavor	Description
rx1.cp.c60.d10.e1v1	CPU: 2 vCPUs Memory: 3.5 GB Storage: 10 GB (Note: CPU overcommitment is enabled. The CPU has only one core.)
rx1.cg.c15.d30.e1v1	CPU: 2 vCPUs Memory: 8 GB Storage: 30 GB
kg1.cp.c100.d10SSD.e1v1	CPU: 2 vCPUs Memory: 4.2 GB Storage: 10 GB SSD
kg1.cg.c40.d30SSD.e1v1	CPU: 2 vCPUs Memory: 10 GB Storage: 30 GB SSD

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

Flavor	Description
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 disk 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

B Change History

Released On	Description
2022-11-30	This issue is the first official release.