

Cloud Phone

API Reference

Issue 07
Date 2020-07-30



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1 Before You Start

1.1 Overview

Welcome to *Cloud Phone API Reference*. Cloud phones are cloud servers that run native Android OSs and function as virtual phones.

You can use the APIs described in this document to perform operations on cloud phones, such as purchasing Cloud Phone servers, querying the cloud phone list, 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 Cloud Phone through an API, ensure that you are familiar with Cloud Phone concepts. For details, see [Service Overview](#).

1.2 API Calling

Cloud Phone 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 Cloud Phone, see [Regions and Endpoints](#).

1.4 Limitations and Constraints

- The number of cloud phones that you can create is determined by your quota. To view or increase the quota, see [Quota Adjustment](#).
- 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. To ensure account security, 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).

You can view the account ID and IAM user ID on the [My Credentials](#) page of the management console. API authentication requires information such as the account name, username, and password.
- **Region**

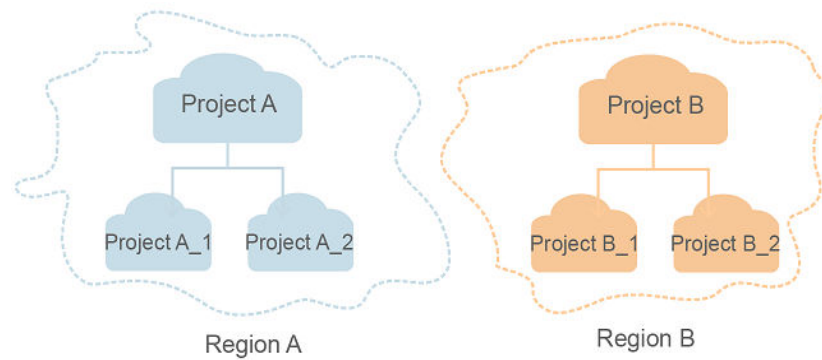
Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. 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 a group and have physically isolated resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources in the region under their accounts. 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



To view a project ID, go to the [My Credentials](#) page.

- 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 Calling APIs

2.1 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 2-1 URI parameter description

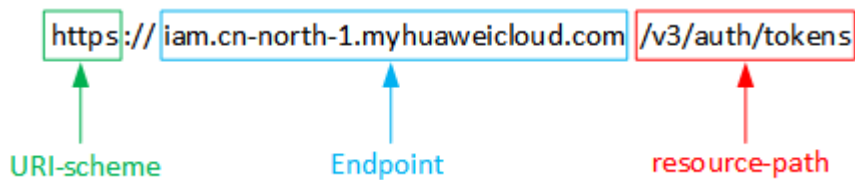
Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM in the CN North-Beijing1 region is iam.cn-north-1.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to obtain a user token is /v3/auth/tokens .

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

For example, to obtain an IAM token in the **CN North-Beijing1** region, obtain the endpoint of IAM (**iam.cn-north-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.cn-north-1.myhuaweicloud.com/v3/auth/tokens
```

Figure 2-1 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 2-2 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.cn-north-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 2-3 Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
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 a user token. It is a response to the API for obtaining a user token (only this API 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: MIIPAgYJKoZlHvcNAQcCo...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.cn-north-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 *xxxxxxxxxxxxxxxxxxxxxx* (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.cn-north-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": "xxxxxxxxxxxxxxxxxxxxxx"
      }
    }
  }
}
```

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.

2.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. AK/SK-based authentication is recommended because it is more secure than token-based authentication.

Token-based 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. When you call the API, set **auth.scope** in the request body to **project**.

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

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.cn-north-1.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

AK/SK-based Authentication

NOTE

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

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

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

2.3 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 2-2](#) 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 2-2 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
→ MIIVXQVJKoZIhvcNAQcCoIIYJCCEoCAQExDTALBglghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOansiZXhwaXJlc19hdCI6ijlwMTktMDItMTNUMC
fj3KIs6YgKnpVNRbW2eZ5eb78SZOkqjACgkIQ1wi4JlGzrpd18LGXK5tdfq4lqHCYb8P4NaY0NyejcAgzJVeFYtLWT1GSO0zxKZmlQHqJ82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRC9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXI1jipPEGA270g1FruooL6jqglFkNPQuFSOUB+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUUpvGw-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.

3 Getting Started

This topic describes how to manage cloud phones by calling Cloud Phone 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](#).

4 Cloud Phone APIs

4.1 Cloud Phone Server Management

4.1.1 Querying the Cloud Phone Servers

Function Description

- API Name
ListCloudPhoneServers
- Function
Query the Cloud Phone servers by page. The Cloud Phone servers are sorted in descending order of the creation time. You can specify the values of **offset** and **limit**. If no Cloud Phone server exists, an empty list is returned.

URI

```
GET /v1/{project_id}/cloud-phone/servers?  
offset={offset}&limit={limit}&server_name={server_name}
```

For details, see [Table 4-1](#).

Table 4-1 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_name	No	String	Specifies the Cloud Phone server name. Fuzzy query is supported.

Parameter	Mandatory	Type	Description
offset	No	Integer	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 Cloud Phone servers returned on each page. Value range: 1–100 (default value: 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/servers?offset=0&limit=10

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
servers	Array of objects	Specifies the information about the Cloud Phone server. For details, see Table 4-2 .

Table 4-2 server field description

Parameter	Type	Description
server_name	String	Specifies the Cloud Phone server name. The value can contain a maximum of 65 characters, including only letters, digits, underscores (_), and hyphens (-).

Parameter	Type	Description
availability_zone	String	Specifies the AZ where the Cloud Phone server is located.
server_id	String	Specifies the unique identifier of the Cloud Phone server. The value can contain a maximum of 32 bytes.
server_model_name	String	Specifies the Cloud Phone server flavor. The value can contain a maximum of 64 bytes. For details, see Server Flavors .
phone_model_name	String	Specifies the cloud phone flavor. The value 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 the cloud phone. The value can contain a maximum of 64 bytes.
status	Integer	Specifies the Cloud Phone server status. <ul style="list-style-type: none">● 0, 1, 3, and 4: Creating● 2: Abnormal● 5: Normal● 8: Frozen● 10: Stopped
vpc_id	String	Specifies the ID of the Virtual Private Cloud (VPC) which the Cloud Phone server belongs to.
resource_project_id	String	Specifies the project ID of the Cloud Phone server.
cidr	String	Specifies the VPC CIDR block which the Cloud Phone server belongs to.
metadata	Object	Specifies the order and product information. For details, see Table 4-3 .

Parameter	Type	Description
addresses	Array of objects	Specifies the IP address of the Cloud Phone server. For details, see Table 4-4 .
create_time	String	Specifies the time when the Cloud Phone server is created in UTC format, YYYY-MM-DDTHH:MM:SSZ.
update_time	String	Specifies the time when the Cloud Phone server is updated in UTC format, YYYY-MM-DDTHH:MM:SSZ.

Table 4-3 metadata field description

Parameter	Type	Description
order_id	String	Specifies the order ID, which contains a maximum of 64 bytes.
product_id	String	Specifies the product ID, which contains a maximum of 64 bytes.
probation_begin_time	String	Specifies the cloud phone trial start time in UTC format, YYYY-MM-DDTHH:MM:SSZ.
probation_end_time	String	Specifies the cloud phone trial end time in UTC format, YYYY-MM-DDTHH:MM:SSZ.

Table 4-4 address field description

Parameter	Type	Description
intranet_ip (expired)	String	Specifies the internal IP address of the Cloud Phone server.
access_ip (expired)	String	Specifies the public IP address of the Cloud Phone server.
server_ip (new)	String	Specifies the internal IP address of the Cloud Phone server.

Parameter	Type	Description
public_ip (new)	String	Specifies the public IP address of the Cloud Phone server.

- Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "servers": [
    {
      "server_name": "server-1",
      "availability_zone": "br-iaas-1",
      "server_id": "88b8449b896f3a4f0ad57222dd91909",
      "server_model_name": "physical.rx1.xlarge",
      "phone_model_name": "aphs1.medium.4.aosp",
      "keypair_name": "",
      "status": 5,
      "vpc_id": "6e3feb2c-b9c9-4ac5-abf1-96d60e3dfea2",
      "resource_project_id": "2347275010d3440d963d3fcb8931ff55",
      "cidr": "172.31.0.0/16",
      "metadata": {
        "order_id": "CS1710111105S8IPB",
        "product_id": "00301-25217-0--0"
      },
      "addresses": [ {
        "intranet_ip": "10.237.0.111",
        "access_ip": "122.237.0.111",
        "server_ip": "10.237.0.111",
        "public_ip": "122.237.0.111"
      } ],
      "create_time": "2017-10-10T00:00:00Z",
      "update_time": "2018-10-10T00:00:00Z"
    },
    {
      "server_name": "server-2",
      "availability_zone": "br-iaas-2",
      "server_id": "88b8449b896f3a4f0ad57222dd91909",
      "server_model_name": "physical.rx1.xlarge",
      "phone_model_name": "aphs1.large.2.aosp",
      "keypair_name": "",
      "status": 2,
      "vpc_id": "6e3feb2c-b9c9-4ac5-abf1-96d60e3dfea2",
      "resource_project_id": "2347275010d3440d963d3fcb8931ff55",
      "cidr": "172.31.0.0/16",
      "metadata": {
        "order_id": "CS1710111105S8IPB",
        "product_id": "00301-25217-0--0"
      },
      "addresses": [ {
        "intranet_ip": "10.237.0.123",
        "access_ip": "122.237.0.123",
        "server_ip": "10.237.0.123",
        "public_ip": "122.237.0.123"
      } ],
      "create_time": "2017-10-10T00:00:00Z",
      "update_time": "2018-11-12T00:00:00Z"
    }
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.1.2 Querying the Cloud Phone Server Details

Function Description

- API Name
GetCloudPhoneServerDetail
- Function
Query details about a Cloud Phone server based on the server ID.

URI

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

For details, see [Table 4-5](#).

Table 4-5 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.

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 request ID, which is unique.

Parameter	Type	Description
server_name	String	Specifies the Cloud Phone server name. The value can contain a maximum of 65 characters, including only letters, digits, underscores (_), and hyphens (-).
availability_zone	String	Specifies the AZ where the Cloud Phone server is located.
server_id	String	Specifies the unique identifier of the Cloud Phone server. The value can contain a maximum of 32 bytes.
server_model_name	String	Specifies the flavor name of the Cloud Phone server. The value can contain a maximum of 64 bytes. For details, see Server Flavors .
phone_model_name	String	Specifies the cloud phone flavor. The value 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 the cloud phone. The value can contain a maximum of 64 bytes.
status	Integer	Specifies the Cloud Phone server status. <ul style="list-style-type: none"> ● 0, 1, 3, and 4: Creating ● 2: Abnormal ● 5: Normal ● 8: Frozen ● 10: Stopped
vpc_id	String	Specifies the ID of the VPC which the Cloud Phone server belongs to.
resource_project_id	String	Specifies the project ID of the Cloud Phone server.

Parameter	Type	Description
cidr	String	Specifies the VPC CIDR block which the Cloud Phone server belongs to.
metadata	Object	Specifies the order and product information. For details, see Table 4-6 .
addresses	Array of objects	Specifies the IP address of the Cloud Phone server. For details, see Table 4-7 .
create_time	String	Specifies the time when the Cloud Phone server is created. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
update_time	String	Specifies the time when the Cloud Phone server is updated. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 4-6 metadata field description

Parameter	Type	Description
order_id	String	Specifies the order ID. The value can contain a maximum of 64 bytes.
product_id	String	Specifies the product ID. The value can contain a maximum of 64 bytes.
probation_begin_time	String	Specifies the cloud phone trial start time. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.
probation_end_time	String	Specifies the cloud phone trial end time. The UTC time is in YYYY-MM-DDTHH:MM:SSZ format.

Table 4-7 address field description

Parameter	Type	Description
intranet_ip (expired)	String	Specifies the internal IP address of the Cloud Phone server.
access_ip (expired)	String	Specifies the public IP address of the Cloud Phone server.
server_ip (new)	String	Specifies the internal IP address of the Cloud Phone server.
public_ip (new)	String	Specifies the public IP address of the Cloud Phone server.

- 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",
  "request_id": "91d5bf46a817466daa25fc5824ab9717",
  "status": 5
}
```

Returned Value

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.1.3 Querying the Cloud Phone Server Flavors

Function

- API Name
GetCloudPhoneServerModels
- Function
Query the Cloud Phone server flavors.

URI

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

For details, see [Table 4-8](#).

Table 4-8 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. <ul style="list-style-type: none"> • 0: cloud phone • 1: cloud mobile gaming phone

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 4-9 .

Table 4-9 server_model field description

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

- 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"
      }
    }
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.1.4 Purchasing a Cloud Phone Server

Function Description

- API Name
CreateCloudPhoneServer
- Function
Purchase a Cloud Phone server.

URI

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

For details, see [Table 4-10](#).

Table 4-10 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 .

Request

- Request parameters

Parameter	Mandatory	Type	Description
server_name	Yes	String	Specifies the Cloud Phone server name. The value 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, the system automatically changes server-1 you set to server-1-0001 .

Parameter	Mandatory	Type	Description
server_model_name	Yes	String	Specifies the Cloud Phone server flavor. The value can contain a maximum of 64 bytes. You can query the supported Cloud Phone server flavors by referring to Querying the Cloud Phone Server Flavors . Offline flavors cannot be used to purchase Cloud Phone servers.
phone_model_name	Yes	String	Specifies the cloud phone flavor, which contains a maximum of 64 bytes. You can query the supported cloud phone specifications by referring to Querying the Cloud Phone Flavors .
image_id	Yes	String	Specifies the cloud phone image ID, which contains 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 .
count	Yes	Integer	Specifies the number of Cloud Phone servers to be purchased. A maximum of 10 servers can be purchased.
band_width	Yes	band_width structure	Specifies the bandwidth used by the cloud phone. The dedicated bandwidth is charged by traffic. The size of a shared bandwidth can be set. For details, see Table 4-11 .
extend_param	Yes	extend_param structure	Specifies the billing mode parameters. For details, see Table 4-12 .

Parameter	Mandatory	Type	Description
keypair_name	No	String	<p>Specifies the key pair name, which contains a maximum of 64 bytes and is used for logging in to the cloud phone through ADB.</p> <p>You can obtain the key pair as follows:</p> <ol style="list-style-type: none">1. Log in to the HUAWEI CLOUD management console. On the Service List page, choose Computing > Elastic Cloud Server.2. In the navigation pane on the left, choose Key Pair.
vnc_enable	No	String	<p>Specifies whether to enable the VNC login.</p> <ul style="list-style-type: none">• This feature is enabled when vnc_enable is set to true (case insensitive).• If the value is others, the feature is disabled.
ports	No	Port structure array	<p>Specifies the application port enabled by the cloud phone. The Cloud Phone service forwards the port. For details, see Table 4-13.</p>
subnet_cidr	No	String	<p>Specifies the Cloud Phone server subnet. The system automatically creates a 172.31.0.0/16 subnet when you purchase the server for the first time. If you want to customize the subnet, you need to purchase all the subnets through APIs. The configured subnet must be in the subnet format and cannot overlap the existing subnet.</p>

Table 4-11 band_width field description

Parameter	Mandatory	Type	Description
band_width_id	No	String	Specifies the shared bandwidth ID. This parameter is preferentially used to bind a bandwidth to the cloud phone. You can obtain the bandwidth ID by referring to Querying Bandwidth Information .
band_width_share_type	No This parameter is mandatory when band_width_id does not exist.	Integer	Specifies the bandwidth type. <ul style="list-style-type: none"> • 0: dedicated bandwidth • 1: shared bandwidth
band_width_size	No This parameter is mandatory when band_width_share_type is set to 1 .	Integer	Specifies the bandwidth size. The value is greater than 0 and less than or equal to 300. (Unit: Mbit/s) The default dedicated bandwidth is 300 Mbit/s.

Table 4-12 extend_param field description

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. <ul style="list-style-type: none"> • 2: month • 3: year

Parameter	Mandatory	Type	Description
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. <ul style="list-style-type: none"> • 1: automatic payment • 0: Automatic payment is disabled.

Table 4-13 Port structure array

Parameter	Mandatory	Type	Description
name	Yes	String	Specifies the application port name, which contains a maximum of 16 bytes. The key service name cannot be adb or vnc .
listen_port	Yes	Integer	Specifies the port number. The value ranges from 10000 to 50000.
internet_accessible	Yes	String	<ul style="list-style-type: none"> • If the value is true (case insensitive), public network access is mapped. • Otherwise, the mapping is not 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",
  "vnc_enable": "true",
  "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

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique. The value can contain a maximum of 32 bytes.
order_id	String	Specifies the order ID, which contains a maximum of 64 bytes.
product_id	String	Specifies the product ID, which contains 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](#).

4.1.5 Restarting Cloud Phone Servers In Batches

Function Description

- API Name
RestartCloudPhoneServer
- Function
Restart Cloud Phone servers in batches.

URI

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

For details, see [Table 4-14](#).

Table 4-14 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 the 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 4-15 .

Table 4-15 Job structure

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.
error_code	String	Specifies the error code. For details, see Error Codes .
error_msg	String	Specifies the error description.

- 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](#).

4.1.6 Pushing Shared Storage Files

Function Description

- API Name
PushShareFiles
- Function

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

NOTE

You need to create an OBS bucket in advance, create permissions for the bucket, and upload the 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

For details, see [Table 4-16](#).

Table 4-16 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
bucket_name	Yes	String	Specifies the valid Object Storage Service (OBS) bucket name. The value contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and dots (.).
object_path	Yes	String	A valid OBS object key can contain a maximum of 1024 characters. Only .tar files can be pushed. The file is pushed to the cloud phone based on the directory structure of the decompressed .tar file.
server_ids	Yes	Array of strings	Specifies the ID list of the Cloud Phone servers. Obtain it based on Querying the 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

- 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 4-17 .

Table 4-17 job field description

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](#).

4.1.7 Querying Shared Storage Files

Function Description

- API Name
ListShareFiles

- Function

Query the files in the specified path of the shared storage. This function is supported only by cloud phones that support shared storage. You can use the **extend_spec** parameter in [Querying the Cloud Phone Flavors](#) to check

whether shared storage is supported. (If the **extend_spec** parameter contains the **max_share_disk_size_g** field, 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 4-18](#).

Table 4-18 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 value can contain uppercase letters, lowercase letters, digits, periods (.), plus signs (+), hyphens (-), underscores (_), and slashes (/). The value 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 the value of this parameter by referring to Querying the Cloud Phone Servers . Use commas (,) to separate multiple server IDs.
offset	No	Integer	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 .

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 4-19 .

Table 4-19 job field description

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 4-20 execute_msg description

Parameter	Type	Description
files_in_path	String	Specifies the files in a specified directory. The format is as follows: [File size Time File name]

Parameter	Type	Description
share_base_capacity	String	Specifies the overall capacity information about the shared storage. The four fields are as follows: Size Used Avail Use%

Example result:

```
{
  "error_msg": null,
  "execute_msg": "{\"files_in_path\":[\"4096\\t Jul\\t 28\\t 15:28\\t com.dygame.hyry.dayu\\t \"],
  \\share_base_capacity\\\": \"33G\\t 186M\\t 31G\\t 1%\\t \"]\",
  \"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](#).

4.1.8 Deleting a Shared Storage File

Function Description

- API Name
DeleteShareFiles
- Function
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 the **extend_spec** parameter in [Querying the Cloud Phone Flavors](#) to check whether shared storage is supported. (If the **extend_spec** parameter contains the **max_share_disk_size_g** field, shared storage is supported.)

URI

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

For details, see [Table 4-21](#).

Table 4-21 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	String	Specifies the absolute path of the shared storage file to be deleted. The path starts with a slash (/) and contains a maximum of 4096 bytes. Currently, only uppercase letters, lowercase letters, digits, dots (.), slashes (/), hyphens (-), and spaces are supported. The path cannot contain upper-level directory path to prevents cross-directory attacks.
server_ids	Yes	Array of strings	Specifies the ID list of the Cloud Phone servers. Obtain it based on Querying the 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 4-22 .

Table 4-22 job field description

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](#).

4.2 Bandwidth Management

4.2.1 Querying Bandwidth Information

Function Description

- API Name
QueryBandwidth
- Function
Query the bandwidth used by a cloud phone.

URI

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

For details, see [Table 4-23](#).

Table 4-23 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/bandwidths

Response

- Parameter description

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
band_widths	Array of objects	Specifies the bandwidth information. For details, see Table 4-24 .

Table 4-24 band_width field description

Parameter	Type	Description
band_width_id	String	Specifies the bandwidth ID. The value can contain a maximum of 32 bytes.
band_width_name	String	Specifies the bandwidth name. The value 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. <ul style="list-style-type: none"> 0: dedicated bandwidth 1: shared bandwidth
create_time	String	Specifies the time when the bandwidth is created. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.
update_time	String	Specifies the time when the bandwidth is updated. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.

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

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.2.2 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 4-25](#).

Table 4-25 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 Bandwidth Information .

Request

- Parameter description

Parameter	Mandatory	Type	Description
band_width_size	Yes	Integer	<ul style="list-style-type: none"> ≤ 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. > 1000 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](#).

4.3 Cloud Phone Management

4.3.1 Querying the Cloud Phones

Function Description

- API Name
ListCloudPhones
- Function

Query the cloud phones by page. The cloud phones are sorted in descending order of the creation time. You can specify the values of **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 4-26](#).

Table 4-26 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.
server_id	No	String	Specifies the cloud phone server ID.

Parameter	Mandatory	Type	Description
status	No	Integer	Specifies the cloud phone status. The options are as follows: <ul style="list-style-type: none"> ● 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
offset	No	Integer	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 cloud phones 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. <ul style="list-style-type: none"> ● 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 4-27 .

Table 4-27 phone field description

Parameter	Type	Description
phone_name	String	Specifies the cloud phone name. The value can contain a maximum of 65 bytes.
server_id	String	Specifies the cloud phone server ID. The value can contain a maximum of 32 bytes.
phone_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes. For details, see Cloud Phone Flavor List .
image_id	String	Specifies the cloud phone image ID. The value can contain a maximum of 32 bytes.
vnc_enable	String	Specifies whether to enable VNC login on a cloud phone. <ul style="list-style-type: none"> ● true: enable ● false: disable
metadata	Object	Specifies the order and product information. For details, see Table 4-28 .

Parameter	Type	Description
status	Integer	Specifies the cloud phone status. <ul style="list-style-type: none"> ● 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. <ul style="list-style-type: none"> ● 0: common cloud phone ● 1: trial cloud phone
create_time	String	Specifies the time when the cloud phone is created. The time format is UTC.
update_time	String	Specifies the time when the cloud phone is updated. The time format is UTC.

Table 4-28 metadata field description

Parameter	Type	Description
order_id	String	Specifies the order ID, which contains a maximum of 64 bytes.
product_id	String	Specifies the product ID, which contains a maximum of 64 bytes.
probation_begin_time	String	Specifies the cloud phone trial start time in UTC format, YYYY-MM-DDTHH:MM:SSZ.
probation_end_time	String	Specifies the cloud phone trial end time in UTC format, YYYY-MM-DDTHH:MM:SSZ.

- 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"
      },
      "create_time": "2017-10-10T00:00:00Z",
      "update_time": "2018-10-10T00:00:00Z"
    },
    .....
  ]
}

```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.3.2 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 4-29](#).

Table 4-29 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
phone_id	Yes	String	Specifies the unique identifier of the cloud phone. You can obtain it by referring to Querying the 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. The value can contain a maximum of 65 bytes.
phone_id	String	Specifies the unique identifier of the cloud phone. The value can contain a maximum of 32 bytes.
image_id	String	Specifies the cloud phone image ID. The value can contain a maximum of 32 bytes.
vnc_enable	String	Specifies whether to enable VNC login on a cloud phone. <ul style="list-style-type: none"> true: enable false: disable
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes. For details, see Cloud Phone Flavor List .

Parameter	Type	Description
property	jsonString	Specifies the cloud phone attribute character string. The value can contain a maximum of 2048 bytes. For details, see Cloud Phone Attribute List .
access_infos	Array of objects	Specifies the cloud phone access information. For details, see Table 4-30 .
status	Integer	Specifies the cloud phone status. <ul style="list-style-type: none"> ● 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. <ul style="list-style-type: none"> ● 0: common cloud phone ● 1: trial cloud phone
metadata	Object	Specifies the order and product information. For details, see Table 4-31 .
create_time	String	Specifies the time when the cloud phone is created. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.
update_time	String	Specifies the time when the cloud phone is updated. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.

Table 4-30 access_info field description

Parameter	Type	Description
phone_ip (new)	String	Specifies the cloud phone IP address.
server_ip (new)	String	Specifies the internal IP address of the cloud phone server.
public_ip (new)	String	Specifies the public IP address of the cloud phone server.
listen_port	Integer	Specifies the listening port of the cloud phone.
access_port	Integer	Specifies the access port of Cloud Phone mapped to the public network.
type	String	Specifies the user-defined port type. The value can contain a maximum of 16 bytes.
device_ip (expired)	String	Specifies the cloud phone IP address.
intranet_ip (expired)	String	Specifies the internal IP address of the cloud phone server.
access_ip (expired)	String	Specifies the public IP address of the cloud phone server.

 **NOTE**

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

Table 4-31 metadata field description

Parameter	Type	Description
order_id	String	Specifies the order ID. The value can contain a maximum of 64 bytes.
product_id	String	Specifies the product ID. The value can contain a maximum of 64 bytes.
probation_begin_time	String	Specifies the cloud phone trial start time. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.

Parameter	Type	Description
probation_end_time	String	Specifies the cloud phone trial end time. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.

- Example response

```
{
  "request_id": "70bb40bef50e4a14b116a5a527fd7432",
  "phone_name": "mobile-0049",
  "server_id": "88b8449b896f3a4f0ad5722dd91909",
  "phone_id": "1564567b8bab40f34711234cb80d8574",
  "image_id": "88b8449b896f3a4f0ad5722dd91909",
  "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": {"phone_num": "13666666666", "imsi": "460021624617113", "iccid": "42947a38410b137c", "wifi_name": "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"
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.3.3 Querying the Cloud Phone Flavors

Function Description

- API Name
ListCloudPhoneModels
- Function
Query the cloud phone flavors.

URI

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

For details, see [Table 4-32](#).

Table 4-32 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 .
status	No	Integer	Specifies the flavor status. <ul style="list-style-type: none"> • 1: normal • 0: offline If this parameter is not specified, flavors in all states are queried.

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_model	Array of objects	Specifies the cloud phone flavor. For details, see Table 4-33 .

Table 4-33 phone_model field description

Parameter	Type	Description
server_model_name	String	Specifies the flavor the cloud phone server. The value can contain a maximum of 64 bytes.
phone_model_name	String	Specifies the cloud phone flavor. The value can contain a maximum of 64 bytes.
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 GB.
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	jsonString	Specifies the cloud phone extended configuration. The value 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. <ul style="list-style-type: none"> ● 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. <ul style="list-style-type: none"> ● 0: cloud phone ● 1: cloud mobile gaming phone
image_label	String	Specifies the image type. The following types are supported: <ul style="list-style-type: none"> ● 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](#).

4.3.4 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 4-34](#).

Table 4-34 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 4-35 .

Table 4-35 phone_images field description

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. <ul style="list-style-type: none"> • 1: public image • 2: private image
image_label	String	Specifies the cloud phone flavors to which the image is applicable. <ul style="list-style-type: none"> • cloud_phone: cloud phones • cloud_game: cloud games • qemu_phone: QEMU cloud phones

- 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](#).

4.3.5 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 4-36](#).

Table 4-36 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 4-37 .

Table 4-37 phones field description

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID. The value can contain a maximum of 32 bytes.
property	No	jsonString	Specifies the cloud phone attribute list. 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": "{\\"phone_num\\":\\"13666666666\\",\\"imsi\\":\\"460021624617113\\",\\"iccid\\":\\"42947a38410b137c\\",\\"wifi_name\\":\\"test_wifi\\"}"
  }
  {
    "phone_id": "1678567b8bab40f93711234cb80d0764",
    "property": "{\\"phone_num\\":\\"13666666666\\",\\"imsi\\":\\"460021624617113\\",\\"iccid\\":\\"42947a38410b137c\\",\\"wifi_name\\":\\"test_wifi\\"}"
  }
]
}

```

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 4-38 .

Table 4-38 job field description

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 description.

- 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](#).

4.3.6 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 4-39](#).

Table 4-39 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 4-40 .
image_id	No	String	Specifies the ID of the image to be updated.

Table 4-40 phones field description

Parameter	Mandatory	Type	Description
phone_id	Yes	String array	Specifies the cloud phone ID.
property	No	jsonString	Specifies the cloud phone attribute list. 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": "{\"phone_num\":\"13666666666\",\"imsi\":\"460021624617113\",\"iccid\":
\\42947a38410b137c\",\"wifi_name\":\"test_wifi\"}"
    },
    {
      "phone_id": "1678567b8bab40f93711234cb80d0764",
      "property": "{\"phone_num\":\"13666666666\",\"imsi\":\"460021624617113\",\"iccid\":
\\42947a38410b137c\",\"wifi_name\":\"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 4-41 .

Table 4-41 job field description

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 description.

- 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](#).

4.3.7 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 4-42](#).

Table 4-42 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 the 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 4-43 .

Table 4-43 job field description

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 description.

- 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](#).

4.3.8 Changing the Cloud Phone Name

Function Description

- API Name
UpdatePhoneNumber
- Function
Change the cloud phone name based on the cloud phone ID.

URI

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

For details, see [Table 4-44](#).

Table 4-44 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_id	Yes	String	Specifies the unique identifier of the cloud phone. Obtain it by referring to Querying the Cloud Phones .

Request

- Parameter description

Parameter	Mandatory	Type	Description
phone_name	Yes	String	Specifies the cloud phone name. The value can contain a maximum of 60 characters, including lowercase letters, uppercase 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](#).

4.3.9 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 4-45](#).

Table 4-45 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 4-46 .

Table 4-46 phones field description

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the cloud phone ID. The value can contain a maximum of 32 bytes.
property	Yes	jsonString	Specifies the cloud phone attribute list. 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": "{\"phone_num\": \"1366666666\", \"imsi\": \"460021624617113\", \"wifi_name\": \"test_wifi\"}"
    },
    {
      "phone_id": "1678567b8bab40f93711234cb80d0764",
      "property": "{\"phone_num\": \"1366666666\", \"imsi\": \"460021624617113\", \"wifi_name\": \"test_wifi\"}"
    }
  ]
}
```

```

{"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 4-47 .

Table 4-47 Job structure

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 description.

- 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](#).

4.4 Task Management

4.4.1 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 4-48](#).

Table 4-48 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 .
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.

Parameter	Type	Description
begin_time	String	Specifies the task start time. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.
end_time	String	Specifies the task end time. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.
status	int	Specifies the task status. The value can be any of the following: <ul style="list-style-type: none"> • 1: Running • 2: Succeeded • -1: Failed
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 1024 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](#).

4.4.2 Querying the Task Execution Status List

Function Description

- API Name
ListJobs
- Function
Query tasks with the same request ID.

URI

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

For details, see [Table 4-49](#).

Table 4-49 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.

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 4-50 .

Table 4-50 job field description

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.

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.
begin_time	String	Specifies the task start time. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.
end_time	String	Specifies the task end time. The time format is UTC, YYYY-MM-DDTHH:MM:SSZ.
status	Integer	Specifies the task status. The value can be any of the following: <ul style="list-style-type: none"> • 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 1024 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](#).

4.5 Key Management

4.5.1 Changing a Key Pair

Function Description

- API Name
UpdateKeypair
- Function
Change the key pair for connecting to the cloud phone.

URI

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

For details, see [Table 4-51](#).

Table 4-51 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 4-52 .

Table 4-52 servers field description

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 the Cloud Phone Servers .
keypair_name	Yes	String	Specifies the key pair name. <ul style="list-style-type: none"> If you want to use an existing key pair of the current account, you can query the SSH key list 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 Creating a Key Pair.

- 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 4-53 .

Table 4-53 job field description

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](#).

4.6 Encoding Server Management

4.6.1 Querying Encoding Servers

Function Description

- API Name
ListEncodeServers
- Function
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 4-54](#).

Table 4-54 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 .
offset	No	Integer	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 encoding servers 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. <ul style="list-style-type: none"> • 0: server • 1: container
status	No	Integer	Specifies the encoding server status. <ul style="list-style-type: none"> • 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 4-55 .

Table 4-55 encode_server field description

Parameter	Type	Description
encode_server_name	String	Specifies the encoding server name. The value can contain a maximum of 64 bytes.
encode_server_id	String	Specifies the unique ID of the encoding server. The value 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. The value 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. <ul style="list-style-type: none"> • 0: server • 1: container
status	Integer	Specifies the encoding server status. <ul style="list-style-type: none"> • 1: The encoding server is running. • 2: The encoding server is abnormal. • 3: The encoding server is restarting. • 0, 4, or 5: The encoding server is being created.
access_infos	Array of objects	Specifies the access information of the encoding server. For details, see Table 4-56 .

Table 4-56 access_info field description

Parameter	Type	Description
listen_port	Integer	Specifies the listening port of the encoding server.
access_ip (expired)	String	Specifies the public IP address accessed by the encoding server.
internet_ip (expired)	String	Specifies the private IP address accessed by the encoding server.
public_ip (new)	String	Specifies the public IP address accessed by the encoding server.
server_ip (new)	String	Specifies the private IP address accessed by the encoding server.
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. Possible values are as follows: <ul style="list-style-type: none"> • 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": "00b00d1b35094f13b360cdf15a9bfee",
    "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](#).

4.6.2 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 4-57](#).

Table 4-57 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

- 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 4-58 .

Table 4-58 job field description

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": "00b00d1b35094f13b360cdf15a9bfee"
    }
  ],
  "request_id": "c775bdf09bc0400a9138199b346cab62"
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

4.7 ADB Commands

The ADB command API is an asynchronous API. Currently, the push, install, uninstall, and shell ADB command operations are supported, and each operation has a timeout period. Therefore, you are advised not to run timeout commands when using this API.

4.7.1 Pushing Files

Function Description

- API Name

PushFile

- Function

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 permission 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. Therefore, 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 4-59](#).

Table 4-59 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 1024 bytes, including only uppercase letters, lowercase 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 This parameter is mandatory when parameter server_ids does not exist. If parameter server_ids exists, set phone_ids only.	Array of strings	Specifies the cloud phone ID list. Obtain it from Querying the Cloud Phones .
server_ids	No This parameter is mandatory when parameter phone_ids does not exist. If parameter phone_ids exists, set phone_ids only.	Array of strings	Specifies the ID list of the cloud phone servers. Obtain it from Querying the 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 4-60 .

Table 4-60 job field description

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](#).

4.7.2 Installing the APK

Function Description

- API Name
InstallApk
- Function
Install the APK on a cloud phone. The system downloads the specified APK file and installs it on the cloud phone. Only one APK 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 permission 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.

URI

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

For details, see [Table 4-61](#).

Table 4-61 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 installation scenario, this parameter is fixed at install .
content	Yes	String	Specifies the APK file in the specified OBS bucket. (The APK file must be uploaded to the specified bucket in advance.) The value can contain a maximum of 1024 bytes, including only uppercase letters, lowercase letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-). Only .apk files can be pushed. File format: obs://obs-bucket-name/obs-file-path/file.apk

Parameter	Mandatory	Type	Description
server_ids	No This parameter is mandatory when the phone_ids parameter does not exist.	Array of strings	Specifies the ID list of the Cloud Phone servers. Obtain it from Querying the Cloud Phone Servers .
phone_ids	No This parameter is mandatory when parameter server_ids does not exist.	Array of strings	Specifies the cloud phone ID list. Obtain it from Querying the Cloud Phones .

- Example request

```
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"
  ]
}
```

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 4-62 .

Table 4-62 job field description

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

Parameter	Type	Description
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](#).

4.7.3 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 permission 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 4-63](#).

Table 4-63 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

- Request parameters

Parameter	Mandatory	Type	Description
command	Yes	String	Specifies the ADB command. In the APK uninstallation scenario, this parameter is fixed at uninstall .
content	Yes	String	Specifies the name of the app to be uninstalled. The value can contain a maximum of 1024 bytes, including only uppercase letters, lowercase letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
server_ids	No This parameter is mandatory when the phone_ids parameter does not exist.	Array of strings	Specifies the ID list of the Cloud Phone servers. Obtain it from Querying the Cloud Phone Servers .
phone_ids	No This parameter is mandatory when parameter server_ids does not exist.	Array of strings	Specifies the cloud phone ID list. Obtain it from Querying the 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 4-64 .

Table 4-64 job field description

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](#).

4.7.4 Running the Asynchronous ADB shell Commands

Function Description

- API Name
RunShellCommand
- Function
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 permission 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 4-65](#).

Table 4-65 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 .

Parameter	Mandatory	Type	Description
content	Yes	String	Specifies the command to be executed. The value can contain a maximum of 1024 bytes, including only uppercase letters, lowercase letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
server_ids	No This parameter is mandatory when parameter phone_ids does not exist.	Array of strings	Specifies the ID list of the Cloud Phone servers. Obtain it from Querying the Cloud Phone Servers .
phone_ids	No This parameter is mandatory when parameter server_ids does not exist.	Array of strings	Specifies the cloud phone ID list. Obtain it from Querying the 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.

Parameter	Type	Description
jobs	Array of objects	Specifies the task information. For details, see Table 4-66 .

Table 4-66 job field description

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](#).

4.7.5 Running the Synchronous ADB shell Commands

Function Description

- API Name
RunSyncCommand

- Function

Synchronously execute commands and return the command execution output on a cloud phone. This API supports only the execution of the ADB shell command. The command execution timeout on each cloud phone is 2 seconds, and the API timeout cannot exceed 30 seconds. The more cloud phones are executed, the longer the API consumes.

URI

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

For details, see [Table 4-67](#).

Table 4-67 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	Currently, only shell is supported.
content	Yes	String	Specifies the command to be executed. The value can contain a maximum of 1024 bytes, including only uppercase letters, lowercase letters, digits, underscores (_), periods (.), slashes (/), colons (:), and hyphens (-).
server_ids	No This parameter is mandatory when parameter phone_ids does not exist.	Array of strings	Specifies the ID list of the Cloud Phone servers. Obtain it from Querying the Cloud Phone Servers .

Parameter	Mandatory	Type	Description
phone_ids	No This parameter is mandatory when parameter server_ids does not exist.	Array of strings	Specifies the cloud phone ID list. Obtain it from Querying the 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

- 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 4-68 .

Table 4-68 job field description

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.
status	Integer	Specifies the task status. <ul style="list-style-type: none"> • 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.

Parameter	Type	Description
execute_msg	String	Specifies the content returned after a task is executed. The value can contain a maximum of 1024 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](#).

5 APIs for Cloud Mobile Gaming Management

5.1 Application Management

5.1.1 Querying the List of Servers Where Applications Are Deployed

Function Description

- API Name
QueryAppDeployServers
- Function
Query the list of servers where applications are deployed. A maximum of 100 records can be returned for each request.

URI

GET /v1/{project_id}/cloud-phone/apps/{app_id}/servers?offset=0&limit=100

For details, see [Table 5-1](#).

Table 5-1 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 .
app_id	Yes	String	Specifies the application ID.

Parameter	Mandatory	Type	Description
offset	No	Integer	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 .

Request

- Request parameters
None
- Example request
GET `https://{CPH Endpoint}/v1/{project_id}/cloud-phone/apps/{app_id}/servers?offset=0&limit=100`

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
servers	Array of objects	Specifies the server information. For details, see Table 5-2 .

Table 5-2 server field description

Parameter	Type	Description
server_id	String	Specifies the server ID that is unique.
app_version_id	String	Specifies the application package name.
version_code	String	Specifies the application version code.

Parameter	Type	Description
version_name	String	Specifies the application version name.
launch_activity	String	Specifies the application startup path.

- Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "servers": [{
    "server_id": "88b8449b896f3a4f0ad57222dd91909",
    "app_verison_id": "",
    "version_code": "",
    "version_name": "",
    "launch_activity": "xxx",
  },
  {
    "server_id": "88b8449b896f3a4f0ad57222dd91909",
    "app_verison_id": "",
    "version_code": "",
    "version_name": "",
    "launch_activity": "xxx",
  }
}]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.1.2 Querying the List of Cloud Phones Where Applications Are Deployed

Function Description

- API Name
QueryAppDeployPhones
- Function
Query the list of cloud phones where applications are deployed. A maximum of 100 records can be returned for each request.

URI

GET /v1/{project_id}/cloud-phone/apps/{app_id}/phones?offset=0&limit=100

For details, see [Table 5-3](#).

Table 5-3 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 .
app_id	Yes	String	Specifies the application ID. The value can contain a maximum of 32 characters.
offset	No	Integer	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 .

Request

- Request parameters

None

- Example request

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/apps/{app_id}/phones?offset=0&limit=100

Response

- Response parameters

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 5-4 .

Table 5-4 phone field description

Parameter	Type	Description
phone_id	String	Specifies the unique identifier of the cloud phone.
app_version_id	String	Specifies the application package name.
version_code	String	Specifies the application version code.
version_name	String	Specifies the application version name.
launch_activity	String	Specifies the application startup path.

- Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "phones": [{
    "phone_id": "88b8449b896f3a4f0ad57222dd91909",
    "app_verison_id": "",
    "version_code": "",
    "version_name": "",
    "launch_activity": "xxx",
  },
  {
    "phone_id": "88b8449b896f3a4f0ad57222dd91909",
    "app_verison_id": "",
    "version_code": "",
    "version_name": "",
    "launch_activity": "xxx",
  }
}]
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.1.3 Querying the Application List

Function Description

- API Name
ListApps
- Function

Query the applications by page. The application list is sorted by creation time in descending order. You can specify the values of **offset** and **limit**. If no application exists, an empty list is returned. A maximum of 100 records can be returned for each request.

URI

GET /v1/{project_id}/cloud-phone/apps?name=app_name&offset=0&limit=100

For details, see [Table 5-5](#).

Table 5-5 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 .
name	No	String	Specifies the application name. The value can contain a maximum of 64 characters. The value can contain letters, digits, hyphens (-), periods (.), and underscores (_). Fuzzy search is supported.
offset	No	Integer	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 .

Request

- Request parameters

None

- Example request

GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/apps?name=app_name&offset=0&limit=100

Response

- Response parameters

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

Parameter	Type	Description
apps	Array of objects	Specifies the application information. For details, see Table 5-6 .

Table 5-6 app field description

Parameter	Type	Description
package_name	String	Specifies the application package name. The value can contain a maximum of 128 characters, including uppercase letters, lowercase letters, digits, hyphens (-), periods (.), and underscores (_).
name	String	Specifies the application name. The value can contain a maximum of 64 characters, including only letters, digits, hyphens (-), periods (.), and underscores (_).
launch_activity	String	Specifies the application startup path. The value can contain a maximum of 256 characters, including uppercase letters, lowercase letters, digits, hyphens (-), periods (.), and underscores (_).
app_id	String	Specifies the application ID. The value can contain a maximum of 32 characters.
description	String	Provides supplementary information about the application. The value can contain a maximum of 256 characters.
create_time	String	Specifies the time when the application is created. The value is a UTC time.

Parameter	Type	Description
update_time	String	Specifies the time when the application is updated. The value is a UTC time.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "apps": [{
    "name": "app_name",
    "package_name": "com.game.package",
    "launch_activity": "com.game.package.main_activity",
    "app_id": "1564567b8bab40f34711234cb80d0123",
    "description": "app_description",
    "create_time": "2020-01-01T00:00:00Z",
    "update_time": "2020-01-03T00:00:00Z"
  }]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.1.4 Querying Application Details

Function Description

- API Name
QueryAppDetail
- Function
Query details about an application based on a specified application ID.

URI

GET /v1/{project_id}/cloud-phone/apps/{app_id}

For details, see [Table 5-7](#).

Table 5-7 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
app_id	Yes	String	Specifies the application ID. The value can contain a maximum of 32 characters.

Request

- Request parameters

None

- Example request

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

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
package_name	String	Specifies the application package name. The value can contain a maximum of 128 characters, including uppercase letters, lowercase letters, digits, hyphens (-), periods (.), and underscores (_).
name	String	Specifies the application name. The value can contain a maximum of 64 characters, including only letters, digits, hyphens (-), periods (.), and underscores (_).
description	String	Provides supplementary information about the application. The value can contain a maximum of 256 characters.
app_versions	Array of objects	Specifies the application version information. For details, see Table 5-8 .

Table 5-8 app_version field description

Parameter	Type	Description
app_verison_id	String	Specifies the application version ID.
version_code	String	Specifies the application version code.
version_name	String	Specifies the application version name.
bucket_name	String	Specifies the name of the bucket where the application package is stored. A valid OBS bucket name contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	String	Specifies the storage path of the application package. A valid OBS object key can contain a maximum of 1024 characters.
launch_activity	String	Specifies the application startup path. The value can contain a maximum of 256 characters, including only uppercase letters, lowercase letters, digits, periods (.), underscores (_), and hyphens (-).
create_time	String	Specifies the time when the application is created. The value is a UTC time.
update_time	String	Specifies the time when the application is updated. The value is a UTC time.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "package_name": "com.game.package",
  "name": "app_name",
  "description": "app_description",
  "app_versions": [
    {
      "app_verison_id": "",
      "version_code": "",
      "version_name": ""
    }
  ]
}
```

```
"bucket_name": "",  
"object_path": "",  
"launch_activity": "xxx",  
"create_time": "2020-01-01T00:00:00Z",  
"update_time": "2020-01-03T00:00:00Z"  
}  
]  
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.1.5 Creating an Application

Function Description

- API Name
CreateApp
- Function
Create an application. An application is created at a time. A maximum of 10,000 applications can be created in total.

URI

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

For details, see [Table 5-9](#).

Table 5-9 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
name	Yes	String	Specifies the application name. The value can contain a maximum of 64 characters, including letters, digits, hyphens (-), periods (.), and underscores (_).
package_name	Yes	String	Specifies the application package name. The value can contain a maximum of 128 characters, including uppercase letters, lowercase letters, digits, hyphens (-), periods (.), and underscores (_).
description	No	String	Provides supplementary information about the application. The value can contain a maximum of 256 characters.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/apps
{
  "name": "app_name",
  "package_name": "com.game.package",
  "description": "app_description"
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
app_id	String	Specifies the unique ID of an application.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "app_id": "1564567b8bab40f34711234cb80d0123"
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.1.6 Deleting an Application

Function Description

- API Name
DeleteApp
- Function
Delete the application.
- Notes
Before deleting an application, ensure that no application pool or application version is associated with the application.

URI

DELETE /v1/{project_id}/cloud-phone/apps/{app_id}

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 .
app_id	Yes	String	Specifies the application ID.

Request

- Request parameters
None
- Example request
DELETE https://{CPH Endpoint}/v1/{project_id}/cloud-phone/apps/{app_id}

Response

- Response parameters

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

- Example response

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

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.2 Application Version Management

5.2.1 Querying Application Version Details

Function Description

- API Name
QueryAppVersionDetail
- Function
Query application version details.

URI

GET /v1/{project_id}/cloud-phone/app-versions/{app_version_id}

For details, see [Table 5-11](#).

Table 5-11 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 .
app_version_id	Yes	String	Specifies the unique ID of the application version.

Request

- Request parameters
None
- Example request
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/app-versions/{app_version_id}

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
app_id	String	Specifies the unique ID of an application.
app_version_id	String	Specifies the unique ID of the application version.
version_code	String	Specifies the application version code. The value can contain a maximum of 64 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
version_name	String	Specifies the application version name. The value can contain a maximum of 64 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
launch_activity	String	Specifies the application startup path. The value can contain a maximum of 256 characters, including uppercase letters, lowercase letters, digits, periods (.), underscores (_), and hyphens (-).
bucket_name	String	Specifies the bucket name. A valid OBS bucket name contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	String	Specifies the storage path of the application version. A valid OBS object key can contain a maximum of 1024 characters.
create_time	String	Specifies the time when the application version is created. The value is a UTC time.

Parameter	Type	Description
update_time	String	Specifies the time when the application version is updated. The value is a UTC time.

- Example response

```
{
  "request_id": "1243449b896f3a4f0ad57222dd93245",
  "app_id": "1243449b896f3a4f0ad57222dd93245",
  "app_version_id": "88b8449b896f3a4f0ad57222dd9190b",
  "version_code": "xxx",
  "version_name": "v11.1.1"
  "bucket_name": "",
  "object_path": "",
  "create_time": "2020-01-01T00:00:00Z",
  "update_time": "2020-01-03T00:00:00Z"
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.2.2 Creating an Application Version

Function Description

- API Name
CreateAppVersion
- Function
Create an application version. A single tenant can create a maximum of 100,000 application versions.

URI

POST /v1/{project_id}/cloud-phone/app-versions

For details, see [Table 5-12](#).

Table 5-12 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
app_id	Yes	String	Specifies the unique ID of an application.
version_code	Yes	String	Specifies the main version number of an application version. The main version number is unique within the application and contains a maximum of 64 characters. Only uppercase letters, lowercase letters, digits, periods (.), underscores (_), and hyphens (-) are allowed.
version_name	Yes	String	Specifies the application version name. The value can contain a maximum of 64 characters, including only uppercase letters, lowercase letters, digits, periods (.), underscores (_), and hyphens (-).
launch_activity	Yes	String	Specifies the application startup path. The value can contain a maximum of 256 characters, including uppercase letters, lowercase letters, digits, periods (.), underscores (_), and hyphens (-).
bucket_name	Yes	String	Specifies the name of the bucket where the application version file is stored. A valid OBS bucket name contains 3 to 63 characters, including only lowercase letters, digits, hyphens (-), and periods (.).
object_path	Yes	String	Specifies the path of the application version file in the bucket, which must be a .tar package. A valid OBS path can contain a maximum of 1024 characters.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/app-versions
{
  "app_id": "88b8449b896f3a4f0ad57222dd9190b",
  "version_code": "2100000000",
  "version_name": "1.1.0",
  "launch_activity": "com.xxx.path.main_activity",
  "bucket_name": "",
  "object_path": "pushfiletest/qjz/com.dygame.hyrj.dayu.tar"
}
```

Response

- Response parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
app_version_id	String	Specifies the unique ID of the application version.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "app_version_id": "1564567b8bab40f34711234cb80d0123"
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.2.3 Deleting an Application Version

Function Description

- API Name
DeleteAppVersion
- Function
Delete an application version. The application version cannot be deleted when it is in use.

URI

DELETE /v1/{project_id}/cloud-phone/app-versions/{app_version_id}

For details, see [Table 5-13](#).

Table 5-13 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 .
app_version_id	Yes	String	Specifies the unique ID of the application version.

Request

- Request parameters
None
- Example request
DELETE https://{CPH Endpoint}/v1/{project_id}/cloud-phone/app-versions/{app_version_id}

Response

- Response parameters

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

- Example response

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

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3 Application Deployment

5.3.1 Querying the List of Applications Deployed on the Server

Function Description

- API Name
QueryServerAppsDetail

- **Function**
Query the list of applications deployed on a cloud phone server. A maximum of 100 records can be returned for each request.

URI

GET /v1/{project_id}/cloud-phone/servers/{server_id}/apps?offset=0&limit=100

For details, see [Table 5-14](#).

Table 5-14 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 server ID.
offset	No	Integer	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 .

Request

- **Request parameters**
None
- **Example request**
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/{server_id}/apps?offset=0&limit=100

Response

- **Response parameters**

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

Parameter	Type	Description
apps	Array of objects	Specifies the application information. For details, see Table 5-15 .

Table 5-15 app field description

Parameter	Type	Description
app_id	String	Specifies the application ID.
package_name	String	Specifies the application package name.
name	String	Specifies the application name.
description	String	Provides supplementary information about the application.
app_version_id	String	Specifies the application version ID.
version_code	String	Specifies the official application version.
version_name	String	Specifies the application version.
launch_activity	String	Specifies the application startup path.

- Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "apps": [
    {
      "app_id": "xxxxxx",
      "app_verison_id": "",
      "package_name": "com.game.package",
      "name": "",
      "description": "",
      "version_code": "",
      "version_name": "",
      "launch_activity": "xxx"
    },
    {
      "app_id": "xxxxxx",
      "package_name": "com.game.package1",
      "name": "",
      "description": "",
      "app_verison_id": "",
      "version_code": "",
      "version_name": "",
      "launch_activity": "xxx"
    }
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3.2 Deploying an Application Version on a Server

Function Description

- API Name
DeployAppVersionToServer
- Function
Deploy an application version on a server.

URI

POST /v1/{project_id}/cloud-phone/servers/action

For details, see [Table 5-16](#).

Table 5-16 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
batch_deploy_app_version	Yes	Object	Specifies information about the application version to be deployed. For details, see Table 5-17 .

Table 5-17 batch_deploy_app_version field description

Parameter	Mandatory	Type	Description
app_version_ids	Yes	Array of strings	Specifies the ID list of application versions.

Parameter	Mandatory	Type	Description
server_ids	Yes	Array of strings	Specifies the server ID list.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/action
{
  "batch_deploy_app_version": {
    "app_version_ids": ["1564567b8bab40f34711234cb80d0124"],
    "server_ids": ["88b8449b896f3a4f0ad57222dd91909"]
  }
}
```

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 5-18 , Table 5-19 , and Table 5-20 .

Table 5-18 job field description (1)

Parameter	Type	Description
job_type	Integer	Enumerated value 30: Indicates that the application is deployed on the server.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.

Table 5-19 job field description (2)

Parameter	Type	Description
job_type	Integer	Enumerated value 31: Indicates the task that the server pushes the application version package.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.

Parameter	Type	Description
app_version_id	String	Specifies the application version ID.

Table 5-20 job field description (3)

Parameter	Type	Description
job_type	Integer	Enumerated value 32: Indicates the task of installing the application version package on the cloud phone.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.
phone_id	String	Specifies the cloud phone ID.
app_version_id	String	Specifies the application version ID.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [
    {
      "job_type": 30,
      "server_id": "6837531fd3f54550927b930180a706bf",
      "job_id": "1564567b8bab40f34711234cb80d0129"
    },
    {
      "job_type": 31,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    {
      "job_type": 32,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "phone_id": "1564567b8bab40f34711234cb80d0124",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    {
      "job_type": 32,
      "job_id": "1564567b8bab40f34711234cb80d0177",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "phone_id": "1564567b8bab40f34711234cb80d0188",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    }
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3.3 Deleting an Application Version from a Server

Function Description

- API Name
RemoveAppVersionFromServer
- Function
Delete an application version from a server.

URI

POST /v1/{project_id}/cloud-phone/servers/action

For details, see [Table 5-21](#).

Table 5-21 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
batch_remove_app_version	Yes	Object	Specifies information about the application version to be deleted. For details, see Table 5-22 .

Table 5-22 batch_remove_app_version field description

Parameter	Mandatory	Type	Description
server_ids	Yes	Array of strings	Specifies the server ID list.
app_version_ids	Yes	Array of strings	Specifies the ID list of application versions.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/action
{
  "batch_remove_app_version" : {
    "server_ids": ["29156bdf4d5c4d65bca6cab8fae5b0ea"],
    "app_version_ids": [1564567b8bab40f34711234cb80d0124]
  }
}
```

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 5-23 .

Table 5-23 job field description

Parameter	Type	Description
job_type	Integer	Enumerated value 41: Indicates the task of deleting an application version package from a server.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.
app_version_id	String	Specifies the application version ID.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [
    {
      "job_type": 41,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    ...
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3.4 Pushing an Application Version to a Server

Function Description

- API Name
PushAppVersionToServer
- Function
Push an application version to a server.

URI

POST /v1/{project_id}/cloud-phone/servers/action

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
batch_push_app_version	Yes	Object	Specifies information about the application version to be pushed. For details, see Table 5-25 .

Table 5-25 batch_push_app_version field description

Parameter	Mandatory	Type	Description
app_version_ids	Yes	Array of strings	Specifies the ID list of application versions.
server_ids	Yes	Array of strings	Specifies the server ID list.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/action
{
  "batch_push_app_version": {
    "app_version_ids": ["1564567b8bab40f34711234cb80d0124"],
```

```
"server_ids": ["88b8449b896f3a4f0ad57222dd91909"]
}
```

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 5-26 .

Table 5-26 job field description

Parameter	Type	Description
job_type	Integer	Enumerated value 31: Indicates the task that the server pushes the application version package.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.
app_version_id	String	Specifies the application version ID.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [
    {
      "job_type": 31,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    ...
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3.5 Uninstalling an Application Version from a Server

Function Description

- API Name
UndeployAppVersionFromServer
- Function
Uninstall an application version from a server.

URI

POST /v1/{project_id}/cloud-phone/servers/action

For details, see [Table 5-27](#).

Table 5-27 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
batch_undeploy_app_version	Yes	Object	Specifies information about the application version to be uninstalled. For details, see Table 5-28 .

Table 5-28 batch_undeploy_app_version field description

Parameter	Mandatory	Type	Description
server_ids	Yes	Array of strings	Specifies the server ID list.
app_version_ids	Yes	Array of strings	Specifies the ID list of application versions.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/servers/action
{
  "batch_undeploy_app_version": {
    "server_ids": ["29156bdf4d5c4d65bca6cab8fae5b0ea"],
```

```

    "app_version_ids": ["1564567b8bab40f34711234cb80d0124"]
  }
}

```

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 5-30 , and Table 5-31 .

Table 5-29 job field description (1)

Parameter	Type	Description
job_type	Integer	Enumerated value 40: Indicates that the application is uninstalled from the server.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.

Table 5-30 job field description (2)

Parameter	Type	Description
job_type	Integer	Enumerated value 41: Indicates the task of deleting an application version package from a server.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.
app_version_id	String	Specifies the application version ID.

Table 5-31 job field description (3)

Parameter	Type	Description
job_type	Integer	Enumerated value 42: Indicates the task of deleting the application version package on the cloud phone.
job_id	String	Specifies the task ID.
server_id	String	Specifies the server ID.
phone_id	String	Specifies the cloud phone ID.
app_version_id	String	Specifies the application version ID.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [
    {
      "job_type": 40,
      "server_id": "6837531fd3f54550927b930180a706bf",
      "job_id": "1564567b8bab40f34711234cb80d0129"
    },
    {
      "job_type": 41,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    {
      "job_type": 42,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "phone_id": "1564567b8bab40f34711234cb80d0124",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    {
      "job_type": 42,
      "job_id": "1564567b8bab40f34711234cb80d0177",
      "server_id": "0da365fde47b439ea4bdd4085fb9c6ba",
      "phone_id": "1564567b8bab40f34711234cb80d0188",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    }
  ]
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3.6 Querying the List of Applications Deployed on a Cloud Phone

Function Description

- API Name
QueryPhoneAppsDetail
- Function
Query the list of applications deployed on a cloud phone. A maximum of 100 records can be returned for each request.

URI

GET /v1/{project_id}/cloud-phone/phones/{phone_id}/apps?offset=0&limit=100

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 .
phone_id	Yes	String	Specifies the cloud phone ID.
offset	No	Integer	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 .

Request

- Request parameters
None
- Example request
GET https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/{phone_id}/apps?offset=0&limit=100

Response

- Response parameters

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

Table 5-33 app field description

Parameter	Type	Description
app_id	String	Specifies the application ID.
package_name	String	Specifies the application package name.
name	String	Specifies the application name.
description	String	Provides supplementary information about the application.
app_version_id	String	Specifies the application version ID.
version_code	String	Specifies the official application version.
version_name	String	Specifies the application version.
launch_activity	String	Specifies the application startup path.

- Example response

```
{
  "request_id": "6a63a18b8bab40ffb71ebd9cb80d0085",
  "apps": [
    {
      "app_id": "xxxxxx",
      "package_name": "com.game.package",
      "name": "",
      "description": "",
      "app_version_id": "",
      "version_code": "",
      "version_name": "",
      "launch_activity": "xxx"
    },
    {
      "app_id": "xxxxxx",
      "package_name": "com.game.package1",
      "name": "",
      "description": "",
      "app_version_id": "",
      "version_code": "",
      "version_name": "",
      "launch_activity": "xxx"
    }
  ]
}
```

```
}
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

5.3.7 Updating the Application Version on a Cloud Phone

Function Description

- API Name
UpdateAppVersionOfPhone
- Function
Update the application version on a cloud phone. Ensure that the application version has been pushed to the server.

URI

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

For details, see [Table 5-34](#).

Table 5-34 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 cloud phone ID.

Request

- Parameter description

Parameter	Mandatory	Type	Description
update_app_version	Yes	Object	Specifies the application version to be updated. For details, see Table 5-35 .

Table 5-35 update_app_version field description

Parameter	Mandatory	Type	Description
app_version_ids	Yes	Array of strings	Specifies the ID list of application versions.

- Example request

```
POST https://{CPH Endpoint}/v1/{project_id}/cloud-phone/phones/{phone_id}/action
{
  "update_app_version": {
    "app_version_ids": ["xxxx","xxxx"]
  }
}
```

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 5-36 .

Table 5-36 job field description

Parameter	Type	Description
job_type	Integer	Enumerated value 32: Indicates the task of installing the application version package on the cloud phone.
job_id	String	Specifies the unique ID of a task.
phone_id	String	Specifies the cloud phone ID.
app_version_id	String	Specifies the application version ID.

- Example response

```
{
  "request_id": "6837531fd3f54550927b930180a706bf",
  "jobs": [
    {
      "job_type": 32,
      "job_id": "1564567b8bab40f34711234cb80d0123",
      "phone_id": "1564567b8bab40f34711234cb80d0124",
      "app_version_id": "1564567b8bab40f34711234cb80d0124"
    },
    {
      "job_type": 32,
```

```
"job_id": "1564567b8bab40f34711234cb80d0177",  
"phone_id": "1564567b8bab40f34711234cb80d0188",  
"app_version_id": "1564567b8bab40f34711234cb80d0124"  
}  
]  
}
```

Returned Values

See [Returned Values](#).

Error Codes

See [Error Codes](#).

6 Cloud Mobile Gaming Instance Event API

6.1 Verifying the Access

Request Parameters

Parameter	Mandatory	Type	Description
session_id	Yes	String	Specifies the session ID of the game accessed.
ticket	Yes	String	Specifies the ticket used for authentication.
auth_ts	Yes	String	Specifies the ticket validity period, in milliseconds.
encrypted_data	Yes	String	Specifies the internal encrypted data of SDK.
aes_iv	Yes	String	Specifies the internal encrypted salt value of SDK.

Example Request

```
POST sign_check_url
{
  "session_id": "xxxx",
  "ticket": "xxxx",
  "auth_ts": "128234892384", //Timestamp in milliseconds
  "encrypted_data": "", //Decrypt encrypted_data to verify data validity based on aes_key and aes_iv and finally to improve access security.
  "aes_iv": ""
}
```

Response Parameters

Parameter	Type	Description
request_id	String	Specifies the request ID, which is unique.
aes_key	String	Specifies the symmetric encrypted key.

Example Response

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

6.2 Entering the Game Event

Request Parameters

Parameter	Mandatory	Type	Description
event_type	Yes	String	Specifies the event type. The enumerated value is app .
event	Yes	Object	Specifies the event information. For details, see Table 6-1 .

Table 6-1 event field description

Parameter	Mandatory	Type	Description
status	Yes	Integer	0 : Enter the game.
phone_id	Yes	String	Specifies the unique ID of a server. This parameter is required for server tasks.
app_id	Yes	String	Specifies the unique ID of an application.
time	Yes	String	Specifies the game access time. The value is a UTC time.
error_msg	No	String	Specifies the task error code description.
session_id	Yes	String	Specifies the ID of the session for accessing the game.

Parameter	Mandatory	Type	Description
ticket	No	String	Specifies the ticket used for authentication.

Example Request

```
{
  "event_type": "app",
  "event": {
    "phone_id": "a7f3a1c5258347d6b6f1def79e11f2bc",
    "status": 0,
    "session_id": "856f5555806443e98b7ed04c5a9d6a9a",
    "ticket": "5558064856f5555806443e98b7ed04c5a9d6a9ab7ed04c5a9d6a806443e98",
    "time": "2019-11-14T19:38:49Z",
    "app_id": "856f5555806443e98b7ed04c5a9d6a9a",
    "error_msg": null
  }
}
```

Response Parameters

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

Example Response

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

6.3 Quitting the Game Event

Request Parameters

Parameter	Mandatory	Type	Description
event_type	Yes	String	Specifies the event type. The enumerated value is app .
event	Yes	Object	Specifies the event information. For details, see Table 6-2 .

Table 6-2 event field description

Parameter	Mandatory	Type	Description
status	Yes	Integer	1: Quit the game.

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the unique ID of a server. This parameter is required for server tasks.
app_id	Yes	String	Specifies the unique ID of an application.
time	Yes	String	Specifies the time to quit the game. The value is a UTC time.
run_time	Yes	Integer	Specifies the duration from the time when a user accesses the game to the time when the user quits the game, in seconds.
error_msg	No	String	Specifies the task error code description.
session_id	Yes	String	Specifies the ID of the session for quitting the game.
ticket	No	String	Specifies the ticket used for authentication.

Example Request

```
{
  "event_type": "app",
  "event": {
    "phone_id": "a7f3a1c5258347d6b6f1def79e11f2bc",
    "status": 1,
    "session_id": "856f5555806443e98b7ed04c5a9d6a9a",
    "ticket": "5558064856f5555806443e98b7ed04c5a9d6a9ab7ed04c5a9d6a806443e98",
    "time": "2019-11-14T19:38:49Z",
    "run_time": 41000,
    "app_id": "856f5555806443e98b7ed04c5a9d6a9a",
    "error_msg": null
  }
}
```

Response Parameters

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

Example Response

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

6.4 Heartbeat Reporting

Request Parameters

Parameter	Mandatory	Type	Description
event_type	Yes	String	Specifies the event type. The enumerated value is app .
event	Yes	Object	Specifies the event information. For details, see Table 6-3 .

Table 6-3 event field description

Parameter	Mandatory	Type	Description
phone_id	Yes	String	Specifies the unique ID of a server. This parameter is required for server tasks.
time	Yes	String	Specifies the heartbeat report time. The value is a UTC time.
app_id	Yes	String	Specifies the unique ID of an application.
session_id	Yes	String	Specifies the unique ID of a session.

Example Request

```
{
  "event_type": "heartbeat",
  "event": {
    "phone_id": "a7f3a1c5258347d6b6f1def79e11f2bc",
    "app_id": "282fd613e04651a48225f1b2034de7", //When the cloud game is running, app_id indicates the application ID. After you exit a cloud game, the value of app_id is left blank.
    "session_id": "36728337b89f22122af4a6e08bb1e7c0", //When the cloud game is running, session_id indicates the session ID. After you exit a cloud game, the value of session_id is left blank.
    "time": "2019-11-14T19:38:49Z"
  }
}
```

Response Parameters

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

Example Response

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

7 Common Parameters

7.1 General Request Return Values

7.1.1 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 description.

- 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.
error_code	String	Specifies the error code.
error_msg	String	Specifies the error description.

Parameter	Type	Description
failures	Array of objects	For details about operation object exceptions, see Table 7-1 .

Table 7-1 failures field description

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 description.

- Example response

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

7.1.2 Returned Values

- Normal

Returned Value	Description
200 OK	Specifies the normal response code for the GET and PUT operations.
201 Created	Specifies the normal response code for the POST operation.

- Abnormal

Returned Value	Description
400 Bad Request	The request parameter is incorrect.
403 Forbidden	You do not have the right to access the requested resource.
404 Not Found	The requested resource does not exist.

Returned Value	Description
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 times out.

7.2 Error Codes

Status Code	Error Code	Description	Error Message	Handling Measure
400	CPS.0001	You do not have the permission to apply for the resource.	No permission to request resources.	Apply for the required permissions.
400	CPS.0002	Parameter error: Invalid pagination parameter.	Parameter: offset or limit is invalid.	Enter a valid parameter value.
400	CPS.0003	System error.	Service internal error.	Try again later.
400	CPS.0004	Invalid cloud phone ID	Invalid phone id.	Enter a valid cloud phone ID.
400	CPS.0005	The cloud phone you queried does not exist.	Phone is not found.	Change the parameter value and try again.
400	CPS.0006	Check whether your account has been in arrears. Top up your account and try again.	No permission to request resources. Role is op_restricted.	Top up your account and try again.

Status Code	Error Code	Description	Error Message	Handling Measure
400	CPS.0007	Your account has been frozen. Contact customer service.	No permission to request resources. Role is op_suspended.	Contact customer service.
400	CPS.0008	To ensure the security of your account and resources, you are advised to complete real-name authentication first.	No permission to request resources. Role is op_unverified.	Complete real-name authentication.
400	CPS.0009	Parameter error: The cloud phone ID cannot be left blank.	Parameter: phone_id list is empty.	Ensure that the cloud phone ID is not left blank.
400	CPS.0010	Parameter error: The cloud phone status is invalid.	Parameter: status is invalid.	Enter valid information and try again.
400	CPS.0200	Invalid parameters.	Parameter: peering_id is invalid	Enter valid information and try again.
400	CPS.0201	The VPC peering connection does not exist or is not the peering connection created with the VPC which the Cloud Phone server belongs to.	The peering connection cannot be found.	Enter a new parameter value and try again.

Status Code	Error Code	Description	Error Message	Handling Measure
400	CPS.0202	The routes fail to be configured because the VPC peering connection is not in the Accepted state.	You can only configure routes for active peering connections.	Ensure that the VPC peering connection is in the Accepted state.
400	CPS.0203	Information about the VPC which the Cloud Phone server of the tenant belongs to is not found, which may be because the Cloud Phone server has not been created or the fails to be created.	Failed to obtain the VPC ID. Buy a server first.	Create a Cloud Phone server first.

7.3 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 the project ID by calling the API used to [query for 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"
}
}
```

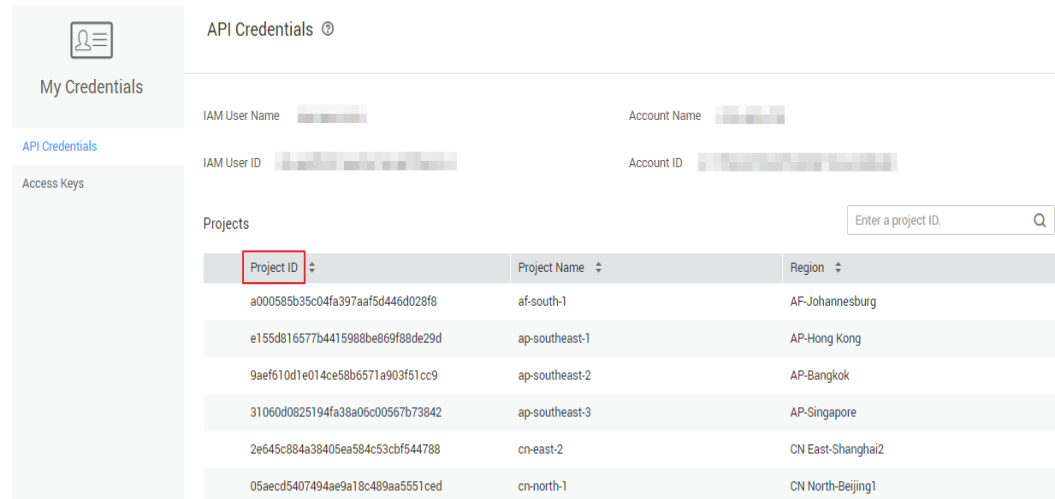
Obtain a Project ID from the Console

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 7-1 Viewing the project ID



A Appendix

A.1 Cloud Phone Attribute List

NOTE

Attribute parameter description

- For cloud phones whose names start with apha1 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	Mandatory	Can Be Modified	Type	Description	Constraint
sys.prop.writeimsi	No	Yes	String	Specifies the international mobile subscriber identity.	The value cannot be left blank and can contain a maximum of 15 characters. It must be a decimal number.
sys.prop.writephonenumber	No	Yes	String	Specifies the phone number.	The value cannot be left blank and can contain a maximum of 20 characters. It must be a decimal number.

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
sys.prop.writewifissid	No	Yes	String	Specifies the wireless network name. The default value is cloudphone_wifi .	The value cannot be left blank and can contain a maximum of 64 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), and space are allowed.
com.cph.mainkeys	No	Yes	Integer	Specifies whether to hide the virtual keys.	<ul style="list-style-type: none"> • 0 (default): to show the virtual keys • 1: to hide the virtual keys
gsm.sim.operator.iso-country	No	Yes	String	Specifies the home country of the SIM card. The default value is cn .	The value cannot be left blank and can contain a maximum of 10 characters. Only uppercase and lowercase letters are allowed.
gsm.sim.operator.numeric	No	Yes	String	Specifies the identifier of the SIM card provider. The default value is 46000 .	The value cannot be left blank and can contain a maximum of 10 characters. It must be a decimal number.
gsm.sim.operator.alpha	No	Yes	String	Specifies the carrier of the SIM card. The default value is CMCC .	The value cannot be left blank and can contain a maximum of 20 characters. Only uppercase and lowercase letters are allowed.

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
gsm.operator.iso-country	No	Yes	String	Specifies the country of the network carrier. The default value is cn .	The value cannot be left blank and can contain a maximum of 10 characters. Only uppercase and lowercase letters are allowed.
gsm.operator.numeric	No	Yes	String	Specifies the identifier of the network provider. The default value is 46000 .	The value cannot be left blank and can contain a maximum of 10 characters. It must be a decimal number.
gsm.operator.alpha	No	Yes	String	Specifies the network carrier. The default value is CMCC .	The value cannot be left blank and can contain a maximum of 20 characters. Only uppercase and lowercase letters are allowed.
ro.hardware.gpurenderer	No	Yes	String	Specifies the GPU model.	This field cannot be left blank and can contain a maximum of 32 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
disable.status.bar	No	Yes	String	Specifies whether to disable the status bar.	<ul style="list-style-type: none"> • 0 (default): to display the status bar • 1: to hide the status bar

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
ro.permission.changed	No	Yes	String	Specifies whether to automatically grant all permissions requested by the app.	<ul style="list-style-type: none"> • 0 (default): indicates that all permissions requested by the app are not automatically granted. • 1: All permissions requested by the app are automatically granted.
ro.horizontal.screen	No	Yes	String	Specifies whether to display in landscape mode.	<ul style="list-style-type: none"> • 0 (default): portrait • 1: landscape
ro.install.auto	No	Yes	String	Specifies whether to automatically confirm the app installation.	<ul style="list-style-type: none"> • 0 (default): indicates that the app installation is not automatically confirmed. • 1: to automatically confirm the app installation
ro.board.platform	No	Yes	String	Specifies the platform model. The default value is hi3660 .	This field cannot be left blank and can contain a maximum of 32 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
ro.build.product	No	Yes	String	Specifies the product model. The default value is STF .	This field cannot be left blank and can contain a maximum of 32 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
ro.product.device	No	Yes	String	Specifies the device model. The default value is HWSTF .	This field cannot be left blank and can contain a maximum of 32 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
ro.com.cph.sfs_enable	No	Yes	String	Specifies whether to disable SFS.	<ul style="list-style-type: none"> ● 0 (default): to disable SFS ● 1: to enable SFS

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
ro.product.manufacturer	No	Yes	String	Specifies the manufacturer. The default value is Huawei .	This field cannot be left blank and can contain a maximum of 32 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
ro.product.name	No	Yes	String	Specifies the product name. The default value is monbox .	This field cannot be left blank and can contain a maximum of 32 characters. Only digits, uppercase letters, lowercase letters, hyphens (-), underscores (_), at signs (@), number signs (#), periods (.), colons (:), slashes (/), backslashes (\), left parentheses ((), right parentheses ()), and spaces are allowed.
ro.com.cph.non_root	No	Yes	String	Specifies whether the user is a non-root user.	<ul style="list-style-type: none"> ● 0 (default): root ● 1: non-root

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
ro.com.cph.audio_format	No	Yes	String	Specifies the audio output format of the audio driver. The default format is opus .	The value cannot be left blank and can contain a maximum of 10 characters. Only uppercase and lowercase letters are allowed. If this parameter is set to pcm , the output format is pcm. Otherwise, the output format is opus.
ro.com.cph.notification_disable	No	Yes	String	Specifies whether to disable message notification.	<ul style="list-style-type: none">• 0 (default): to enable message notification• 1: to disable message notification
ro.com.cph.remote_input_method	No	Yes	String	Specifies whether to enable remoboard.	<ul style="list-style-type: none">• 0 (default): to disable remoboard• 1: to enable remoboard
com.cph.cg.sign_check_url	No	Yes	String	Specifies the signature verification URL of the game cloud phone.	The value starts with http or https and contains a maximum of 256 characters. Only uppercase letters, lowercase letters, digits, and the following special characters are allowed: _,/:-
com.cph.cg.event_notify_url	No	Yes	String	Specifies the callback URL for reporting the game cloud phone events.	The value starts with http or https and contains a maximum of 256 characters. Only uppercase letters, lowercase letters, digits, and the following special characters are allowed: _,/:-

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
com.cph.c g.heartbeat_url	No	Yes	String	Specifies the heartbeat reporting URL of the game cloud phone.	The value starts with http or https and contains a maximum of 256 characters. Only uppercase letters, lowercase letters, digits, and the following special characters are allowed: _.,/:-
com.cph.c g.heartbeat_interval	No	Yes	String	Specifies the heartbeat reporting interval of the game cloud phone, in seconds.	The value must be 1 to 10 characters.
com.cph.c g.app_port	No	Yes	String	Specifies the port accessed by the cloud gaming application.	The value must be an integer ranging from 0 to 65535.
com.cph.c g.h5_port	No	Yes	String	Specifies the H5 access port of cloud gaming.	The value must be an integer ranging from 0 to 65535.
ro.com.cph .cloud_app_engine	No	Yes	String	Specifies whether to enable the engine.	This parameter is valid only for game-hosting cloud phones. <ul style="list-style-type: none">● 0: disable● 1: enable
ro.com.cph .toast_enable	No	Yes	Integer	Specifies whether to enable the Toast message dialog box.	<ul style="list-style-type: none">● 0 (default): disable● 1: enable

Parameter	Mandatory	Can Be Modified	Type	Description	Constraint
com.cph.bandwidth_limit	No	Yes	String	Specifies the rate at which a cloud phone downloads content from the Internet.	<p>The value ranges from 1 to 99999999. The unit is kbit/s. -1 indicates the rate is not limited.</p> <p>Note:</p> <ul style="list-style-type: none"> The cloud phone rate does not exceed the bandwidth upper limit. Cloud phones of the rx1.cp.c60.d32.e1v1.qemu flavor do not support rate limiting.

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
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