



# API for Yealink Device Management Platform

Version 38.10.0.2 | February 2023

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# Summary of Changes

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## Changes of Release 38, Guide Version 38.10.0.2

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The following section is new for this version:

- [14.6. Retrieving the Executed Task Records by Paging](#)

## Changes of Release 38, Guide Version 38.2.0.0

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The following section is new for this version:

- [13.5. Retrieving for Sites](#)

Major updates have occurred to the following section:

- [10.4. Updating the Resource](#)

## Changes of Release 38, Guide Version 38.1.0.0

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The following section is new for this version:

- [2.16 Obtaining the Address for Remote Diagnosis](#)

Major updates have occurred to the following section:

- [13.3. Editing Sites](#)

## Changes of Release 37, Guide Version 3.7.0.30

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Major updates have occurred to the following section:

- [15. Code Sample](#)

## Changes of Release 37, Guide Version 3.7.0.20

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The following section is new for this version:

- [10.1. Adding the Resource](#)
- [10.3. Retrieving the Resource by Paging](#)
- [10.4. Updating the Resource](#)
- [12.1.1 Uploading a MAC Configuration](#)
- [12.1.2. Retrieving the MAC Configuration by Paging](#)

## Changes of Release 37, Guide Version 3.7.0.1

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The following section is new for this version:

- [3.4. Device Type](#)
- [12.1.5 Downloading the MAC Configuration](#)
- [12.2. Managing Site Configuration](#)
- [12.4 Managing Model Configuration](#)
- [12.3.8 Download the Group Configuration](#)
- [15. Code Sample](#)

Major updates have occurred to the following sections:

- [1.1.2. Viewing Devices by Paging](#)
- [8. Managing the Firmware](#)
- [11. Managing Accounts](#)
- [12.2.6 Pushing the Site Configuration](#)
- [12.3.1 Adding a Group Configuration](#)
- [12.3.2. Editing the Group Configuration](#)
- [12.3.3 Viewing the Details of Group Configuration](#)
- [12.3.5. Retrieving Group Configuration by Paging](#)
- [14. Managing Timer Tasks](#)

## Changes of Release 36, Guide Version 3.6.3.32

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The following section is new for this version:

- [12.2. Managing Site Configuration](#)
- [12.4 Managing Model Configuration](#)

Major updates have occurred to the following section:

Added a new parameter `regionId` to [11. Managing Accounts](#). `regionId` is not required. If you do not set its value, it defaults to the root site.

## Changes of Release 36, Guide Version 3.6.0.31

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The following section is new for this version:

- [1.1.19. Searching for Devices by Paging according to the MAC/Extension/Site](#)

## Changes of Release 36, Guide Version 3.6.0.30

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The following section is new for this version:

- [1.2 Managing Room System](#)

Major updates have occurred to the following sections:

- [1.1.2. Viewing Devices by Paging](#)
- [5.3. Editing the Alarm Strategy](#)
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- [12.1.2. Retrieving Configuration Files by Paging](#)

## Changes of Release 36, Guide Version 3.6.0.10

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The following sections are new for this version:

- [1.1.18. Viewing the Information of DECT Handset](#)
- [12.5. Adding Site Configuration](#)
- [12.6. Adding Group Configuration](#)

- [12.7. Editing the Group Configuration](#)
- [12.8. Viewing the Details of Group Configuration](#)
- [12.9. Deleting the Group Configuration](#)
- [12.10. Viewing Group Configuration by Paging](#)
- [12.11. Moving Devices to Other Group Configurations](#)
- [12.12. Updating the Template of Group Configuration](#)

Major updates have occurred to the following sections:

- [2.1.2 Callback Information](#)
- [2.2. Example of the Callback Address](#)
- [1.2. Viewing Devices by Paging](#)
- [1.1.7. Updating a Batch of Configuration Files](#)
- [3.1. Subscribing the Information](#)
- [4.2. Retrieving the Unread Alarm by Paging](#)
- [7.2. Retrieving the Call Statistics by Paging](#)
- [7.3. Retrieving the Call Statistics](#)
- [11. Managing Accounts](#)
- [14.1. Adding Timer Tasks](#)
- [14.5. Updating Timer Tasks](#)



# Part 1. Good to Know before Using This API

## 1. Basic Introduction

### 1.1. The URL for Accessing the Service

The URL of accessing the service depends on the IP address of your Yealink Device Management Platform (YDMP) and the port you use. The default port is 9989, if there is port conflict, contact Yealink technical support engineers. In this document, we use the IP address 10.200.110.166 and the port 9989 as an example.

#### Request URL:

- /api/open/v1/manager/device/add

The complete URL to access the interface is: <https://10.200.110.166:9989/api/open/v1/manager/device/add>. It is also applicable to access other interfaces.

### 1.2. Parameter Introduction

#### 1.2.1. Body and Body Parameter

In this document, Body refers to the HTTP request body and Body Parameter means that **you need to put the request parameters to the Body of HTTP request**.

#### Note:

1. For the Body parameter specified in this document, the **Content-Type** of the HTTP request header should be **application/json;charset=UTF-8** if there are no special notes, that is to say, the data format is JSON.
2. In this document, if the parameter of an interface is Body parameter, you can choose **not to enter the Body parameter, but the Body cannot be null** (that is the request Content-length cannot be 0). Take requesting the device interface by paging as an example, **you are not required to configure all the Body parameters in this interface, and under this circumstance, the Body is {} rather than null**. Following is the example request.

```
{}
```

or

```
{  
  "key": null  
}
```

#### 1.2.2. Query Parameter

For the Query parameter in this document, you need to put the parameter after the request URL. For example, the interface of retrieving the device details:

#### Request URL:

- /api/open/v1/manager/device/getDetail

#### Request parameter:

- **Query parameter:**

Parameter	Data type	Required	Length	Description
id	String	true		ID

**The complete request URL is:**

<https://10.200.110.166:9989/api/open/v1/manager/device/getDetail?id=9ffab325167e479e9fd771746959ea2c>

**Notes:**

- It is highly recommended that you should not put the Query parameter to the Body, because it doesn't make any sense and you need to calculate the Content-MD5 mentioned in the following parts.
- The Query parameter mentioned in the following parts means that you need to add the parameter after the URL of accessing the service and the Body is null (do not add the Query parameter to the Body).
- The signature examples in the following parts are all based on the circumstance of not putting the Query parameter to the Body, that is to say, the Body is null and the Content-Length is 0.

### 1.2.3. Form Parameter

The Form parameter is the parameter submitted by the Form table. If the request parameter contains the file parameter, you should specify the **Content-Type** of the HTTP request header as **multipart/form-data**. Otherwise, the **Content-Type** is **application/x-www-form-urlencoded**.

### 1.2.4. Example Language

If there are no additional notes, the example codes in this document are Java or pseudo codes.

### 1.2.5. Interface Parameters

The table below introduces the parameters in the interface.

Parameter	Data Type	Required	Length	Description
mac	String	true	12/17	The MAC address of the device.
machineld	String	false	1/-	The SN code.
modelld	String	true	1/-	The ID of the model
phone	String	false	0/128	The name of the device
regionld	String	true	1/-	The ID of the site.
stafflds	List	false	0/-	The list of the account IDs that you cannot specify.
stafflds.E	String	false	0/-	The account ID that you cannot specify.
staffs	List	false	0/-	The list of the account information that you can specify.
staffs.E	EmbedStaff	false	0/-	The account information that you can specify.
staffs.E.lineld	int	false	0/-	The line ID, which indicates the display order of the registered account on the phone screen.

Parameter	Data Type	Required	Length	Description
staffs.E.staffId	String	false	0/-	The account ID.

**Notes:**

- If the data type of a parameter is `List`, the parameter with the suffix `.E` belongs to the list. For example, the data type of parameter `staffIds` is `List`, and the parameter `staffId.E` belongs to the list of `staffIds`.
- According to the description of the above parameter whose data type is `List`, the created JSON data is as below:

```
{
  "staffIds": [
    "1",
    "2"
  ],
  "staffs": [
    {
      "lineId": "1",
      "staffId": "fafa464"
    },
    {
      "lineId": "2",
      "staffId": "233213fw"
    }
  ]
}
```

- According to the above table, we can describe the relationship among the parameters `staffs`, `staffs.E`, `staffs.E.lineId`, and `staff.E.staffId` as below:
  - Parameter `staffs` is a list.
  - The data type of the parameters in the list is `EmbedStaff`, that is, the object that you can customize.
  - The elements in the list can be `lineId` and `staffId`.

## 1.3. Signature Rule of REST API

### 1.3.1. Prerequisites

Before calling the API, you need to obtain the AccessKey ID and the AccessKey Secret from YDMP. The AccessKey ID is used as an identity in the request Header of REST API and the AccessKey Secret is used to complete the signature.

Besides, if you want to call the interface of Alarm and Device Diagnosis, you need to provide the address for receiving the alarm and the diagnosis information when applying for the AccessKey, see Section [2. Introduction of the Callback Interface](#).

### 1.3.2. System Header

When sending the HTTP request to call the interface, you need to add the following Header parameters to the HTTP Header.

HTTP Header Key	HTTP Header Value	Description
X-Ca-Key	AccessKey ID	Log into Yealink Device Management Platform and go to <b>System Management-&gt;AccessKey</b> .
X-Ca-Timestamp	Unix timestamp	It is in milliseconds and used for calling the API time. <b>Note that it is in string format when added to the Header.</b> For example, 9:9:9 on September 9, 2019, Beijing time (UTC + 8), the corresponding Unix timestamp is 1567991349000.
X-Ca-Nonce	Random string	Universally Unique Identifier (UUID) is recommended. It can be used together with X-Ca-Timestamp to avoid replaying, see Section <a href="#">1.3.6. Mechanism of Avoiding Replaying</a> for more information.
Content-MD5	The result after Base64 encoding the MD5 digest value of the Body	
X-Ca-Signature	Signature string	See Section <a href="#">1.3.3 Calculating the Signature</a> for more information.

- **Note:**

- **When it is Body parameter, you need to add Content-MD5. However, when it is Query or Form parameter, you do not need to.**
  - When the Body is null (the content-Length is 0), the Content-MD5 is not required in the Header.
  - As we mentioned above, we do not recommend that you put the Query parameter to the Body. If you want, you need to add the Content-MD5.
- The calculation method of Content-MD5 is described as below:
  - First, digest the Body by using MD5 algorithm to get the MD5 digest value. **Note that the MD5 digest value is a 128-bit binary number. Do not convert the MD5 digest value into the string.**
  - Second, encode the MD5 digest value by using Base64 to get Content-MD5. **Note that the MD5 digest value should be 128 bits.**

If you use Java, use the following method to calculate:

- Get bodyBytes, the byte array of the Body.
- Digest the bodyBytes by using MD5 algorithm to get bodyMd5Bytes.
- Encode the bodyMd5Bytes by using Base64 to get the result.

The example code of Java is as below:

```
String contentMD5 =
new String(Base64.encodeBase64(md5(body.getBytes("UTF-8"))), "UTF-8");
//byte[] md5(byte[] bodyBytes)This method is the MD5 digest algorithm
```

### 1.3.3. Calculating the Signature

There are 3 steps to calculate the signature:

1. Splice the signatures to get the string to be signed (**stingToSign**).

Signature	Short Description
HTTPMethod	In capital letters, for example, POST or GET.
Headers	The required system Header, see the detailed description below.
API_URI	Remove the “/” in front of the request URL, for example, api/open/v1/server/add.
FormattedQFStr	The string you get after formatting the Query parameter or the Form parameter (except for file), and the formatting method is described as below.

- The signature and the splicing method are as below:

```
String stingToSign =
HTTPMethod + "\n" +    //"\n" is the line break
Headers + "\n" +
API_URI + "\n" +
FormattedQFStr;
```

- The description of the signature:

- **HTTPMethod**: the HTTP request method is in capital letters, for example, POST, GET, PUT, or DELETE.
- **Headers**: the required system Header. Sequence the Header Key alphabetically and splice them by the following method:

```
//Content-MD5 is required in all interfaces of the Body parameter
String headers =
    "Content-MD5:" + content_md5_value + "\n" +
    "X-Ca-Key:" + x_ca_key_value + "\n" +
    "X-Ca-Nonce:" + x_ca_nonce_value + "\n" +
    "X-Ca-Timestamp:" + x_ca_timestamp_value + "\n";

//Content-MD5 is not required in all interfaces of the Query parameter or Form parameter
String headers =
    "X-Ca-Key:" + x_ca_key_value + "\n" +
    "X-Ca-Nonce:" + x_ca_nonce_value + "\n" +
    "X-Ca-Timestamp:" + x_ca_timestamp_value + "\n";
```

- **API\_URI**: remove the “/” in front of the request URL, for example, api/open/v1/server/add
- **FormattedQFStr**: the string you get after formatting the **Query parameter or the Form parameter (except for file)**, and the formatting method is described as below:
  1. Sequence the Key of the **Query parameter or the Form parameter** alphabetically.
  2. Splice the Key by the method below:

```
String Params =
    key1 + "=" + value1 + "&" +
    key2 + "=" + value2 + "&" +
    ...
    keyN + "=" + valueN; //Note that there is no "&" in this sentence
```

**Note:**

- For the Form parameter that contains the file parameter (that is the Content-Type is multipart/form-data), it is not required to splice.
- For Body parameter, you do not need to splice it.
- When the parameter value is empty, only keep the parameter name and "=" is not participated in splicing. For example, when the key1="" or key1=" ", splice the following:

```
String Params =
    key1 + "&" + //value 1 is empty and "=" is not participated in splicing
    key2 + "=" + value2 + "&" +
    ...
    keyN + "=" + valueN; //Note that there is no "&" in this sentence
```

2. Use HMAC-SHA256 algorithm and take AccessKey Secret as the key to digest stringToSign, and you can get the message digest (**msgDst**).

- **Note:** The message digest is a 256-bit binary number, and do not convert it into a string.
- If you use Java, you can follow the example below:

```
Mac hmacSha256 = Mac.getInstance("HmacSHA256");
//The secret is the AccessKey Secret applied on Yealink Device Management Platform
hmacSha256.init(new SecretKeySpec(secret.getBytes("UTF-8"), "HmacSHA256"));
byte[] msgDgst = hmacSha256.doFinal(stringToSign.getBytes("UTF-8"));
```

3. Encode msgDst by using Base64, and you can get the final signature string.

**Note:** The encoding object is the msgDst of 256 bits rather than the msgDst in string format.

```
String sign = new String(Base64.encodeBase64(msgDgst), "UTF-8");
```

### 1.3.4. Examples of the Signature and Calling the Interface

In this section, we list examples to introduce the process of calling the interface of Body parameter, Query parameter, and Form parameter.

- Body parameter: [1.1. Adding Devices](#)
- Query parameter: [1.3. Viewing Device Details](#)
- Form parameter: [12.1. Uploading Configuration Files](#)

Note that the HTTPRequest used in the example is the HTTPRequest in [Jodd](#).

### 1.3.4.1. Example of Calling the Interface of the Body Parameter: Adding Devices

- Request method: POST
- Request URL: /api/open/v1/manager/device/add
- Request parameter: Body parameter

```
{
  "mac": "001565f460d4",
  "machineId": "8148017051507356",
  "modelId": "740b5620916a4d0a9a45171630076528",
  "phone": "YealinkDevice",
  "regionId": "e10d632b8c6d4624b92cd7af6eadbca9"
}
```

1. Log into YDMP and get the AccessKey ID and AccessKey Secret.

```
Accesskey ID : "2df23f2d9c255e7138dc603b3847b58a"
Accesskey Secret: "d4a4be460a8d43609d8e8a5e7d0d4ad1"
```

2. Create HTTP Request and add the system Header.

```
//Enter the JSON string of the parameter
String input = "{\n" +
    "  \"mac\": \"001565f460d4\", \n" +
    "  \"machineId\": \"8148017051507356\", \n" +
    "  \"modelId\": \"740b5620916a4d0a9a45171630076528\", \n" +
    "  \"phone\": \"YealinkDevice\", \n" +
    "  \"regionId\": \"e10d632b8c6d4624b92cd7af6eadbca9\" \n" +
    "}";

//Create the HTTP Request
HttpRequest request = new HttpRequest()
    .method("POST")
    .set("https://api-
dm.yealink.com:8443/api/open/v1/manager/device/add")
    .body(input.getBytes("UTF-8")), "application/json");

//Calculate the value of the system header
String x_ca_key="2df23f2d9c255e7138dc603b3847b58a";//accessKeyId
String x_ca_nonce = "b681e77450a04d22aaffc914a3379561"; //UUID
String x_ca_timestamp = "1544008291631"; //The unix timestamps (ms) of the current time
//When the request parameter is Body parameter, you need to calculate the Content-MD5, and
the result is as below:
String content_md5 = "KOK7YpXasjJC+Ms1P+MGWw==";

//Set the request Header
request
    .header("X-Ca-Key", x_ca_key)
    .header("X-Ca-Timestamp", x_ca_timestamp)
    .header("X-Ca-Nonce", x_ca_nonce)
    .header("Content-MD5", content_md5);
```

3. Calculate the signature.

- Splice the signature to get the string to be signed.

```
//The value of the calculated Header
String content_md5 = "KOK7YpXasjJC+Ms1P+MGWw==";
String x_ca_key = "2df23f2d9c255e7138dc603b3847b58a";
String x_ca_nonce = "b681e77450a04d22aaffc914a3379561";
String x_ca_timestamp = "1544008291631"

//Pay attention to the order of the Header, it is in alphabetical order
String stringToSign =
    "POST" + "\n" +
    "Content-MD5:" + content_md5 + "\n" +
    "X-Ca-Key:" + x_ca_key + "\n" +
    "X-Ca-Nonce:" + x_ca_nonce + "\n" +
    "X-Ca-Timestamp:" + x_ca_timestamp + "\n" +
    "api/open/v1/manager/device/add"; //Do not have "\n" in the last line
//FormattedQFStr is not required in the interface of the Body parameter
```

The result of splicing the signature is stringToSign, described as below:

```
POST
Content-MD5:KOK7YpXasjJC+Ms1P+MGWw==
X-Ca-Key:2df23f2d9c255e7138dc603b3847b58a
X-Ca-Nonce:b681e77450a04d22aaffc914a3379561
X-Ca-Timestamp:1544008291631
api/open/v1/manager/device/add
```

- Use HMAC-SHA256 algorithm and take AccessKey Secret as the key to digest stringToSign, and you can get the message digest (msgDst).

```
//The secret is the AccessKey Secret applied in Yealink Device Management Platform
String secret = "d4a4be460a8d43609d8e8a5e7d0d4ad1";

Mac hmacSha256 = Mac.getInstance("HmacSHA256");
hmacSha256.init(new SecretKeySpec(secret.getBytes("UTF-8"), "HmacSHA256"));
byte[] msgDgst = hmacSha256.doFinal(stringToSign.getBytes("UTF-8"));
```

- Encode msgDst by using Base64, and you can get the signature.

```
String sign = new String(Base64.encodeBase64(msgDgst), "UTF-8");
```

- Put the signature to the HTTP Request Header.

```
request.header("X-Ca-Signature", sign);
```

After adding at least 5 system Header required by this interface, you can send the request and get the response.

#### 4. Send the request and get the response.



```
HttpResponse response = request.send();
String bodyText = response.bodyText();//The response string
```

### 1.3.4.2. Example of Calling the Interface of the Query Parameter: Viewing the Device Details

- Request method: GET
- Request URL: /api/open/v1/manager/device/getDetail
- Request parameter: Query parameter; enter the parameter ID (id=9ffab325167e479e9fd771746959ea2c) and get the complete request URL :

<https://10.200.110.166:9989/api/open/v1/manager/device/getDetail?id=9ffab325167e479e9fd771746959ea2c>

#### 1. AccessKey

```
AccessKey ID : "2df23f2d9c255e7138dc603b3847b58a"
AccessKey Secret: "d4a4be460a8d43609d8e8a5e7d0d4ad1"
```

#### 2. Create the HTTP Request and add the system Header.

```
//Create HTTP Request
HttpRequest request = new HttpRequest()
    .method("GET")
    .set("https://api-dm.yealink.com:8443/api/open/v1/manager/device/getDetail?
id=9ffab325167e479e9fd771746959ea2c")

//Calculate the value of the system Header. Content-MD5 is not required in the Query
parameter
String x_ca_key="2df23f2d9c255e7138dc603b3847b58a";//accessKeyId
String x_ca_nonce = "9e730a223b48433785494801fb016d39"; //UUID
String x_ca_timestamp = "1544094691000"; //The unix timestamps (ms) of the current time

//Set the request Header
request
    .header("X-Ca-Key", x_ca_key)
    .header("X-Ca-Timestamp", x_ca_timestamp)
    .header("X-Ca-Nonce", x_ca_nonce)
```

#### 3. Calculate the signature.

- Splice the signature and get the string to be signed.

```
//The value of the calculated Header
String x_ca_key = "2df23f2d9c255e7138dc603b3847b58a";
String x_ca_nonce = "9e730a223b48433785494801fb016d39";
String x_ca_timestamp = "1544094691000"

//Pay attention to the order of the Header, it is in alphabetical order
String stringToSign =
    "GET" + "\n" +
    "X-Ca-Key:" + x_ca_key + "\n" +
    "X-Ca-Nonce:" + x_ca_nonce + "\n" +
    "X-Ca-Timestamp:" + x_ca_timestamp + "\n" +
    "api/open/v1/manager/device/getDetail" + "\n" +
    "id=9ffab325167e479e9fd771746959ea2c"; //FormattedQFStr
```

The result of splicing the signature is stringToSign, described as below:

```
GET
X-Ca-Key:2df23f2d9c255e7138dc603b3847b58a
X-Ca-Nonce:9e730a223b48433785494801fb016d39
X-Ca-Timestamp:1544094691000
api/open/v1/manager/device/getDetail
id=9ffab325167e479e9fd771746959ea2c
```

The subsequent process is the same as that of calling the interface of the Body parameter, in Section [1.3.4.1](#).

### 1.3.4.3. Example of Calling the Interface of the Form Parameter: Uploading Configuration Files

- **Request method:** POST
- **Request URL:** /api/open/v1/manager/configFile/upload
- **Parameter type:** Form parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	true	1/-	The file.

#### 1. AccessKey

```
AccessKey ID : "2df23f2d9c255e7138dc603b3847b58a"
AccessKey Secret: "d4a4be460a8d43609d8e8a5e7d0d4ad1"
```

#### 2. Create the HTTP Request and add the system Header.

```
//Create HTTP Request
HttpRequest request = new HttpRequest()
    .method("POST")
    .form("file", new File("filePath/006600660066.cfg"))
    .set("https://api-dm.yealink.com:8443/api/open/v1/manager/configFile/upload")

//Calculate the value of the system Header. Content-MD5 is not required in the Query
parameter
String x_ca_key="2df23f2d9c255e7138dc603b3847b58a";//accessKeyId
```

```
String x_ca_nonce = "9e730a223b48433785494801fb016d39"; //UUID
String x_ca_timestamp = "1544094691000"; //The unix timestamps (ms) of the current time

//Set the request Header
request
.header("X-Ca-Key", x_ca_key)
.header("X-Ca-Timestamp", x_ca_timestamp)
.header("X-Ca-Nonce", x_ca_nonce)
```

3. Calculate the signature.

- Splice the signature and get the string to be signed.

**This is the interface of uploading files. The Form parameter contains files and the signature FormattedQFStr is not required.**

```
//The value of the calculated Header
String x_ca_key = "2df23f2d9c255e7138dc603b3847b58a";
String x_ca_nonce = "9e730a223b48433785494801fb016d39";
String x_ca_timestamp = "1544094691000"

//Pay attention to the order of the Header, it is in alphabetical order
String stringToSign =
    "GET" + "\n" +
    "X-Ca-Key:" + x_ca_key + "\n" +
    "X-Ca-Nonce:" + x_ca_nonce + "\n" +
    "X-Ca-Timestamp:" + x_ca_timestamp + "\n" +
    "api/open/v1/manager/configFile/upload";
```

The result of splicing the signature is stringToSign, described as below:

```
GET
X-Ca-Key:2df23f2d9c255e7138dc603b3847b58a
X-Ca-Nonce:9e730a223b48433785494801fb016d39
X-Ca-Timestamp:1544094691000
api/open/v1/manager/configFile/upload
```

The subsequent process is the same as that of calling the interface of the Body parameter, in Section [1.3.4.1](#).

### 1.3.5. Conclusion about the Signature Rule

The above parts introduce how to calculate the system Header and the signature, it can be concluded as below:

- Call the interface of the Body parameter, and add the following Header to HTTP Request Header.
  - Content-MD5
  - X-Ca-Key
  - X-Ca-Nonce
  - X-Ca-Signature
  - X-Ca-Timestamp

When calculating the signature, FormattedQFStr is not required; for the signature Headers, Content-MD5 is required.

- Call the interface of the Query parameter and add the following Header to HTTP Request Header.

- X-Ca-Key
- X-Ca-Nonce
- X-Ca-Signature
- X-Ca-Timestamp

When calculating the signature, FormattedQFStr is required; for the signature Headers, Content-MD5 is not required.

- Call the interface of the Form parameter and add the following Header to HTTP Request Header.
  - X-Ca-Key
  - X-Ca-Nonce
  - X-Ca-Signature
  - X-Ca-Timestamp

When calculating the signature, if the Form parameter contains the file parameter, FormattedQFStr is not required; for the signature Headers, Content-MD5 is not required.

### 1.3.6. Mechanism of Avoiding Replaying

X-Ca-Nonce and X-Ca-Timestamp are used to prevent replay attack. In the following situations, the request is invalid and the error message (request.replay) will be returned.

1. If the time length from the device sending the request to the server receiving the request is longer than 5 minutes, the request is invalid.
2. If the timestamps (when the server receives the request) are no more than X-Ca-Timestamp, the request is invalid.
  - **Note:** the server provides a range of fault tolerance for the timestamps. However, we recommend that you check the time when you send the request, to avoid exceeding the range when the receiver receives the request.
3. Within 5 minutes, if two requests carry the same X-Ca-Nonce, the request is invalid. For example, if a device accesses the interface A at 12:00 with the X-Ca-Nonce as 123456789, and if the device accesses interface A or other interfaces with the same X-Ca-Nonce before 12:05, the request is invalid. However, if the device accesses any interface after 12:05, the request is valid.

To sum up, we recommend that you use UUID for each X-Ca-Nonce.

The result of replaying is as below:

```
{
  "ret": -1,
  "data": null,
  "errors": {
    "msg": "",
    "errorCode": 401,
    "fieldErrors": [
      {
        "field": [],
        "msg": "request.replay"
      }
    ]
  }
}
```

## 1.4. Returned Data Structure

The form of the returned data uses JSON encoded by UTF-8. The structure of the returned data is unified as follows:

```
{
  "ret": -1,           //-1 means error, otherwise it means correct. For the errors, see
  Error Code
  "data": null,       //The returned data
  "errors": {
    "msg": "",        //The error message
    "errorCode": 400, //The error code
    "fieldErrors": [ //The detailed information of the error message
      {
        "field": "",  //The error field
        "msg": ""     //The error message
      }
    ]
  }
}
```

- ret: the result code. If the value is smaller than 0, it means error response. Otherwise it means a successful response.
- data: the returned message when requesting.
- errors: the returned error object.
- msg: the error message.
- errorCode: the error code.
- fieldErrors: the error message which records the error field and the error message.

### Example of Successful Response:

```
{
  "ret": 1,
  "data": {
    "existed": false,
    "self": null
  },
  "error": null
}
```

### Example of Error Response:

```
{
  "ret": -1,
  "data": null,
  "error": {
    "msg": "server.not.found",
    "errorCode": 404,
    "fieldErrors": []
  }
}
```

## 1.5. Error Codes

code	Description	Example
200	SUCCESS	/
400	BAD_REQUEST	Illegal MAC Address.
401	UNAUTHORIZED	Error user key.
404	NOT_FOUND	Try to modify a deleted object.
405	METHOD_NOT_ALLOWED	/
406	NOT_ACCEPTABLE	/
409	CONFLICT	The email has already been used.
415	UNSUPPORTED_MEDIA_TYPE	/
444	PROTOCOL_NOT_MATCH	A lack of the required parameter in the interface.
500	INTERNAL_ERROR	/
502	GATEWAY_ERROR	/
503	SERVICE_UNAVAILABLE	/
504	GATEWAY_TIMEOUT	/

## 2. Introduction of the Callback Interface

If you need to call the interface of the alarm and the device diagnosis, you need to provide an address for receiving the alarm and the information of device diagnosis when applying for the Accesskey. For example, if the callback address is `https://test.callback.com/data`, POST request will be sent to this address when there is new alarm or new information about the device diagnosis. See the following text for the data content of the request and the whole process.

### 2.1. Process

#### 2.1.1. Process for Getting the Device Diagnosis

- The device sends the request for diagnosis to the server, for example, the ping request `/api/open/v*/manager/diagnosis/ping?command=10.81.18.3&mac=805ec0484b2f&pv=5`
- The server receives the request and sends the ping command to the device. The response data is as below:

```
{
  "data":
  "HaCUJ/bZVsbThxH6CADm5W3NZrw3hp+mWPHFJA49FPIBndICDpr4UGVtr9oC+PghJESSyuLaXrrfps4frLNwtQ==",
  "ret": 1
}
```

The data is the sessionId, which is used for marking this diagnosis. You can use this sessionId to get the result of the ping.

- The device receives the ping command, performs ping, and reports the ping result to the server.
- When the server receives the data, the server will send the following HTTP request to the callback address via POST, and inform the callback address that the ping is finished.

```
{
  "type": "CALLBACK",
  "data": {
    "sessionId":
    "HaCUJ/bZVsbThxH6CADm5W3NZrw3hp+mWPHFJA49fPIBndICDpR4UGVtr9oC+PghJESsyuLaXrrfps4frLNwtQ==",
    "content": "http://10.200.110.172:9989/api/v1/external/diagnosis/ping?
sessionId=HaCUJ/bZVsbThxH6CADm5W3NZrw3hp+mWPHFJA49fPIBndICDpR4UGVtr9oC+PghJESsyuLaXrrfps4frL
NwtQ=="
  }
}
```

The content in data is the data-downloading address corresponded to sessionId.

- Ping is finished when the callback address receives the HTTP request. You can send GET request to the returned address in the content to get the ping result. Note that when sending the GET request, you need to perform URL encoding to the returned address. Take the returned address in the above as an example, to get the ping result you need to access `http://10.200.110.172:9989/api/v1/external/diagnosis/ping?sessionId=HaCUJ/bZVsbThxH6CADm5W3NZrw3hp+mWPHFJA49fPIBndICDpR4UGVtr9oC+PghJESsyuLaXrrfps4frLNwtQ==`.

### 2.1.2. Callback Information

- Send the request to subscribe to the alarm information, see Section [3.1. Subscribing the Information](#) for detailed information.
- After the server receives the request, it will add the corresponding subscription information and return the subscription information to the device.
- After the subscription, the device will report the alarm information and send the following request data to the callback address via `POST`, to inform the callback address that there is alarm information.
- Alarm information

```
{
  "type": "NOTICE",
  "data": {
    "topic": "ALARM",
    "content": "2dfs23f2d9c255e7138dc603b3847b58a"
  }
}
```

**content** is the ID of the newly-added alarm or the ID of the alarm with the updated number of times.

- Account event information

```

{
  "data":{
    "content":"
{\\\"eventType\\\":\\\"update\\\",\\\"id\\\":\\\"83c348a1acd64bef90a8f23e22da456a\\\",\\\"type\\\":\\\"SFB\\\",\\\"username
\\\":\\\"ffff\\\"}\",
    "topic":\"STAFF_ACCOUNT\"
  },
  "type":\"NOTICE\"
}

```

**eventType** can be update, delete, or add.

**id** is the account ID of the current event.

## 2.2. Example of the Callback Address

If the server address which you receive the callback request is <http://test.callback.com:9999>, the callback address is [http://test.callback.com:9999/api/v\\*/address/callback](http://test.callback.com:9999/api/v*/address/callback). What's more, add the following `Controller` to receive data.

```

@RestController
@RequestMapping("/api/v*/address")
public class ApiController {

    @RequestMapping("/callback")
    public void showCallbackData(@RequestBody ReceiveData data) {

        //The callback of the diagnosis interface
        if ("CALLBACK".equals(data.getType())) {
            ApiController apiCallbackData = copy(data.getData(), ApiController.class);
            logger.info("[callback] sessionId:{}, content:{}", apiCallbackData.getSessionId(),
            apiCallbackData.getContent());
            return;
        }

        //The notification, the alarm or the account information
        if ("NOTICE".equals(data.getType())) {
            NoticeData noticeData = copy(data.getData(), NoticeData.class);
            logger.info("[notice] topic:{}, content:{}", noticeData.getTopic(),
            noticeData.getContent());
        }
    }

    //the interface for receiving the alarm notification
    @RequestMapping("/callback/{channel}")
    public String noticeResponse(@RequestBody ReceiveData data,
        @PathVariable("channel") String channel) {

```



```

        NoticeData noticeData = copy(data.getData(), NoticeData.class);
        logger.info("[notice] channel: {}, topic:{}, content:{}",
                channel,
                noticeData.getTopic(),
                noticeData.getContent());
    }
}

```

## Protocol

```

public class ReceiveData {

    /**
     * type: one of CALLBACK and NOTICE
     */
    private String type;

    /**
     * The data
     */
    private Object data;

    //getter setter
}

// the data of the diagnosis interface
public class ApiCallbackData {

    /**
     * sessionId. when sending the diagnosis request, it is the sessionId of the response data
     */
    private String sessionId;

    /**
     * content: the URL for downloading the diagnosis data (perform the URL encoding to the URL
    first)
     */
    private String content;

    //getter setter
}

// the notification data
public class NoticeData {

    //the theme, one of Alarm or STAFF_ACCOUNT
    private String topic;

    //content: the ID of the newly-added alarm or the ID of the alarm with the updated number of
    times.
    private String content;

    //getter setter
}

```

}

## 3. Introduction of the Parameters of Different Types

In this section, we list the parameters in the type of resource and task. When calling the interface, you can refer to the parameters described as below.

### 3.1. Resource Type

key	Description
dstTemplate	DST Template
trustCA	Trusted Certificates
btoe	BToE
license	License
serverCA	Server Certificates
languagePackage	Language Packet
moh	Music on Hold
ime	Input Method
xmlContacts	XML Contact
ringtone	Ringtone
wallpaper	Wallpaper
screensaver	Screensaver
logo	Logo
authority	Web item level template
catalogueTemplate	Catalog Template
replaceRuleTemplate	Replace Rule Template
dialNowTemplate	Dial Now Template
other	Others

In the following situation, select the resource type from the above table:

- When calling the interface of the resource management, you are required to enter the resource type.
- When calling the interfaces of the timer task and of operating a batch of devices, you are required to configure the typeExtra parameter, which has the following attribute:
  - content: the ID of the content or resource. For example, the ID of the wallpaper or the message to be sent.
  - type: the resource type, for example, the wallpaper. type is not required when it is not a resource type.

When content is the ID of the resource, you need to configure type according to the resource type, which you can select from the above table.

Besides, when the content is not the ID of the resource, type is not required to configure, for example, when the type is sending messages, resetting, or DND.

### 3.2. Task Type

key	Description
global_parameter	Push Global Parameters
update_config	Update Config File
update_backup_config	Update the backup configuration
update_configblock	Update the configuration module
update_resource	Update Resource File
update_firmware	Upgrade Firmware
reboot	Reboot
enable_dnd	DND
cancel_dnd	Cancel DND
restore	Reset to Factory
message	Send Message

When adding or updating the timer task, you are required to enter the task type, which you can select from the above table and the other value not in the table is invalid.

### 3.3. Repetition Type of the Task

key	Description
immed	Immediately
once	One-time Task
day	Daily
week	Weekly
month	Monthly

## 3.4. Device Type

key	Description
phone	It refers to SIP phones and some Sfb, Teams, Zoom, and DECT phones.
usb	It refers to the USB devices.
meeting	It refers to the VCS, Zoom, and MVC room systems.
worksapce	It refers to the workspace devices.

# Part 2. Interface Introduction

## 1. Managing Devices

### 1.1 Managing SIP Devices

#### 1.1.1 Adding Devices

##### Request Method

- POST

##### Request URL

- /api/open/v1/manager/device/add

##### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
mac	String	true	12/17	The MAC address of the device.
machineld	String	false	1/-	The SN code.
modelld	String	true	1/-	The model ID.
phone	String	false	0/128	The device name.
regionld	String	true	1/-	The site ID.
stafflds	List	false	0/-	The list of the account IDs that you cannot specify.
stafflds.E	String	false	0/-	The account ID that you cannot specify.
staffs	List	false	0/-	The list of the account information that you can specify.
staffs.E	EmbedStaff	false	0/-	The account information that you can specify.
staffs.E.lineld	int	false	0/-	The line ID, which indicates the display order of the registered account on the phone screen.

Parameter	Data Type	Required	Length	Description
staffs.E.staffId	String	false	0/-	The account ID.

### Example Request

```
{
  "mac": "0015654bfa9c",
  "machineId": "1109013071201997",
  "modelId": "740b5620916a4d0a9a45171630076528",
  "phone": "device1",
  "regionId": "e89adb4d568c4c4fb474832953d57904"
}
```

### Example of Successful Response

```
{
  "data": {
    "_id": "7447d5abe0ab4ae89e779f6e36e1d0e5",
    "btoeUpdateStatus": true,
    "clientType": "sip",
    "createTime": 1561985669235,
    "currentTime": 0,
    "deleted": false,
    "dstOffset": 0,
    "embedstaffList": [],
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "enterpriseName": "ccy",
    "id": "7447d5abe0ab4ae89e779f6e36e1d0e5",
    "invalidLastTime": false,
    "mac": "0015654bfa9c",
    "machineId": "1109013071201997",
    "model": {
      "id": "740b5620916a4d0a9a45171630076528",
      "name": "SIP-T52S",
      "type": "audio"
    },
    "modifyTime": 1561985669972,
    "phone": "device1",
    "regionId": "e89adb4d568c4c4fb474832953d57904",
    "regionName": "ccy",
    "reportTime": 0,
    "reseller": "ccyChannel",
    "resellerId": "8ea92377ff9e422e9be746002e937558",
    "snException": false,
    "timezoneOffset": 0,
    "userStatus": "offline"
  },
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
embedStaffList	List	The list of the account information.
embedStaffList.E	EmbedStaff	
embedStaffList.E.lineld	int	The line ID, which indicates the display order of the registered account on the phone screen.
embedStaffList.E.staffld	String	The account ID.
embedStaffList.E.type	String	The account type.
embedStaffList.E.username	String	The account name.
enterpriseld	String	
firmware	String	The firmware version.
firmwareld	String	The firmware ID.
id	String	
ip	String	
mac	String	
machineld	String	The SN code.
model	EmbedModel	The model information.
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
phone	String	The device name.
regionld	String	
regionName	String	
reportTime	long	The time when the device is reported.
userStatus	String	The status, one of offline, online, or invalid.

### 1.1.2. Viewing Devices by Paging

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/getComplexList

#### Request Parameter

## Body parameter

- Basic Search

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
searchKey	String	false	0/-	The keywords (MAC, IP address, the device name, or the account information) used for searching.
modelIds	String	false	0/-	The model ID used for confining the model.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
regionIds	List	false	0/-	The list of the site IDs (confining the searching scope).
regionIds.E	String	false	0/-	The site ID (confining the searching scope).
skip	Integer	false	0/-	

- Advanced Search

If you are not satisfied with the search result provided by the searchkey above, you can just leave the searchkey blank and use the following search method:

Parameter	Data Type	Required	Length	Description
startCreateTime	Long	false	0/-	The start date when you created the device.
endCreateTime	Long	false	0/-	The end date when you created the device.
startReportTime	Long	false	0/-	The start date when you reported the device.
endReportTime	Long	false	0/-	The end date when you reported the device.
firmwares	List	false	0/-	The firmware version of the device.
firmwares.E	String	false	0/-	
ip	String	false	0/-	The IP address.
mac	String	false	0/-	The device MAC.
phoneStatusList	List	false	0/-	The account status, one of unregistered, registered, offline, or dnd.

Parameter	Data Type	Required	Length	Description
phoneStatusList.E	String	false	0/-	
userStatusList	List	false	0/-	The list of device status, one of online, offline, or invalid.
userStatusList.E	String	false	0/-	
agentConnect	String	false	0/-	Enter yes or no.

### Example Request

- Basic Search

```
{
  "autoCount": true,
  "skip": 0,
  "limit": 10,
  "key": "A20-52",
  "searchKey": "A20-52",
  "firmwares": null,
  "modelIds": null,
  "phoneStatusList": null,
  "regionIds": null,
  "type": null,
  "userStatusList": null,
  "resellerIds": null,
  "startReportTime": null,
  "endReportTime": null,
  "startCreateTime": null,
  "endCreateTime": null,
  "agentKey": null
}
```

- Advanced Search

```
{
  "autoCount": true,
  "skip": 0,
  "limit": 10,
  "key": null,
  "searchKey": null,
  "firmwares": [
    "103.83.0.89"
  ],
  "modelIds": [
    "0e044f03c2634c049c0e8a634ff9b788"
  ],
}
```



```

"phoneStatusList": [
  "unregistered",
  "registered"
],
"regionIds": null,
"type": null,
"userStatusList": null,
"resellerIds": null,
"startReportTime": null,
"endReportTime": null,
"startCreateTime": 1604592000000,
"endCreateTime": 1606406399000,
"agentKey": null,
"mac": null,
"phone": null,
"ip": null,
"agentConnect": null
}

```

### Example of Successful Response

```

{
  "ret": 1,
  "data": {
    "autoCount": true,
    "data": [
      {
        "agentKey": null,
        "clientType": "sip",
        "createTime": 1606103339535,
        "embedStaffList": [
          {
            "lineId": 1,
            "status": "registered",
            "type": null,
            "username": ""
          }
        ],
        "firmware": "133.15.255.98",
        "id": "85b75e0ba63948a2b76f7d846c732ab2",
        "ip": "10.81.25.110",
        "listenAddr": null,
        "mac": "805ec0da527a",
        "machineId": null,
        "model": {
          "id": "dc6195d68aea42eb8ecfdfae0a3f662f",
          "name": "MeetingBar A20(Teams)",
          "type": "video"
        },
        "pathName": "kiwi/site01/kiki",
        "phone": "A20-52",
        "publicIp": "10.81.25.110",

```

```

        "regionId": null,
        "regionName": "kiki",
        "reportTime": 1606300806057,
        "reseller": null,
        "resellerId": null,
        "source": null,
        "userStatus": "online",
        "platformType": "phone"
    }
],
"limit": 10,
"orderbys": [
    {
        "field": "reportTime",
        "order": -1
    },
    {
        "field": "createTime",
        "order": -1
    }
],
"skip": 0,
"total": 1
},
"error": null
}

```

## Response Description

The information returned by the interface is SIP devices, including phone devices and VCS devices.

Parameter	Data Type	Description
embedStaffList	List	The list of the account information.
embedStaffList.E	EmbedStaff	
embedStaffList.E.lineId	int	The line ID, which indicates the display order of the registered account on the phone screen.
embedStaffList.E.staffId	String	The account ID.
embedStaffList.E.type	String	The account type.
embedStaffList.E.username	String	The account name.
embedStaffList.E.status	String	The account status, unregistered, registered, offline, or dnd.
enterpriseld	String	
firmware	String	The firmware version.
firmwareId	String	The firmware ID.

Parameter	Data Type	Description
id	String	
ip	String	
mac	String	
machineId	String	The SN code.
model	EmbedModel	The model information.
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
phone	String	The device name.
regionId	String	
regionName	String	
reportTime	long	The time when the device is reported.
userStatus	String	The device status, one of offline, online, or invalid.
clientType	String	The device type, mainly used to interact with the device. For example, select the type of device to which you want to push firmware or configuration file. Its value can be sip, mvc, usb, and rpd.
platformType	String	<a href="#">The device type.</a>

### 1.1.3. Viewing Device Details

#### Request Method

- GET

#### Request URL

- /api/open/v1/manager/device/getDetail

#### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	

#### Example Request

- /api/open/v1/manager/device/getDetail?id=7447d5abe0ab4ae89e779f6e36e1d0e5

## Example of Successful Response

```
{
  "data": "[{\"label\":\"DeviceDetail\",\"children\": [{\"label\":\"deviceInfo\",\"children\":
  [\"mac: 0015654bfa9c\"], {\"label\":\"model: SIP-T52S\"}, {\"label\":\"currentTime:
  0\"}, {\"label\":\"timezoneOffset: 0\"}, {\"label\":\"dstOffset: 0\"}]}],
  {\"label\":\"StatusHistory\"}]",
  "ret": 1
}
```

## Response Description

- The device information in JSON string

### 1.1.4. Editing the Device Information

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/edit

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	
phone	String	false	0/128	The device name.
regionId	String	true	1/-	The site ID.
staffIds	List	false	0/-	The list of the account IDs that you cannot specify.
staffIds.E	String	false	0/-	The account ID that you cannot specify.
staffs	List	false	0/-	The list of the account information that you can specify.
staffs.E	EmbedStaff	false	0/-	The account information that you can specify.
staffs.E.lineId	int	false	0/-	The line ID, which indicates the display order of the registered account on the phone screen.
staffs.E.staffId	String	false	0/-	The account ID.

## Example Request

```
{
  "id": "623e96f890184628926d860a75226eda",
  "phone": "2396",
  "regionId": "8d9b233b05524d7cbcc09f959dc38c92",
}
```

```

"staffs": [
  {
    "lineId": 1,
    "staffId": "1b40a510d0244fd494cbdd7db42d1e06"
  },
  {
    "lineId": 2,
    "staffId": "1b40a510d0244fd494cbdd7db42d1e06"
  }
]
}

```

### Example of Successful Response

```

{
  "data": {
    "_id": "623e96f890184628926d860a75226eda",
    "btoeUpdateStatus": true,
    "capacity": {
      "accounts": [
        {
          "maxLine": 16,
          "types": [
            {
              "maxNum": 16,
              "type": "SIP"
            }
          ]
        }
      ]
    },
    "bluetooth": false,
    "callRecord": true,
    "colorScreen": false,
    "customDnd": false,
    "expansionKey": true,
    "ipv6": false,
    "packetCapDevice": "wan",
    "video": false,
    "vpn": true,
    "wifi": false
  },
  "channelId": "59ea9d0b",
  "clientType": "sip",
  "createTime": 1561710505986,
  "currentTime": 1561710505,
  "deleted": false,
  "dstOffset": 0,
  "embedStaffList": [
    {
      "dndStatus": false,
      "lineId": 1,
      "registerStatus": "registered",
      "staffId": "1b40a510d0244fd494cbdd7db42d1e06",

```

```

    "status": "online",
    "type": "SIP",
    "unbindCfg": "#!version:1.0.0.1\r\naccount.1.password = %NULL%\r\naccount.1.display_name
= %NULL%\r\naccount.1.enable = 0\r\naccount.1.label = %NULL%\r\naccount.1.sip_server.2.address =
%NULL%\r\naccount.1.sip_server.1.port = %NULL%\r\naccount.1.sip_server.2.port =
%NULL%\r\naccount.1.auth_name = %NULL%\r\naccount.1.user_name =
%NULL%\r\naccount.1.sip_server.1.address = %NULL%\r\n",
    "username": "2396"
  },
  {
    "dndStatus": false,
    "lineId": 2,
    "registerStatus": "registered",
    "staffId": "1b40a510d0244fd494cbdd7db42d1e06",
    "status": "online",
    "type": "SIP",
    "unbindCfg": "#!version:1.0.0.1\r\naccount.2.password = %NULL%\r\naccount.2.display_name
= %NULL%\r\naccount.2.enable = 0\r\naccount.2.label = %NULL%\r\naccount.2.sip_server.2.address =
%NULL%\r\naccount.2.sip_server.1.port = %NULL%\r\naccount.2.sip_server.2.port =
%NULL%\r\naccount.2.auth_name = %NULL%\r\naccount.2.user_name =
%NULL%\r\naccount.2.sip_server.1.address = %NULL%\r\n",
    "username": "2396"
  }
],
"enterpriseId": "1905552ddb284c24a174e9dd1293b314",
"enterpriseName": "SeakeerDM",
"firmware": "58.84.255.19",
"id": "623e96f890184628926d860a75226eda",
"invalidLastTime": false,
"ip": "10.81.18.13",
"logLevel": 3,
"mac": "001565c2d763",
"model": {
  "id": "353279e66f244fb5bbae405d77e3ecfa",
  "name": "SIP-T56A",
  "type": "audio"
},
"modifyTime": 1562030018048,
"phone": "2396",
"recordAutoUpload": true,
"regionId": "8d9b233b05524d7cbcc09f959dc38c92",
"regionName": "test-site&22",
"reportTime": 1561710505987,
"reseller": "SeakeerReseller",
"resellerId": "400ed821a4774900aa4ee0e7d1931465",
"snException": false,
"subnet": "255.255.255.0",
"timezone": "+8",
"timezoneName": "China(Beijing)",
"timezoneOffset": 28800,
"userStatus": "online"
},
"ret": 1
}

```

**Response Description**

Parameter	Data Type	Description
embedStaffList	List	The list of the account information.
embedStaffList.E	EmbedStaff	
embedStaffList.E.lineld	int	The line ID, which indicates the display order of the registered account on the phone screen.
embedStaffList.E.staffld	String	The account ID.
embedStaffList.E.type	String	The account type.
embedStaffList.E.username	String	The account name
enterpriseld	String	
firmware	String	The firmware version.
firmwareld	String	The firmware ID.
id	String	
ip	String	
mac	String	
machineld	String	The SN code.
model	EmbedModel	The model information.
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
phone	String	The device name.
regionld	String	
regionName	String	
reportTime	long	The time when the device is reported.
userStatus	String	The status, one of offline, online, or invalid.

**1.1.5. Deleting a Batch of Devices****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/device/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	false	1/-	The list of the device IDs.
deviceIds.E	String	false	1/-	The device ID.
macs	List	false	1/-	The list of the MAC addresses.
macs.E	String	false	1/-	The MAC address.

Note:

For deviceIds or macs, one of them is required (when both parameters exist, it is subject to the deviceIds).

### Example Request

```
{
  "deviceIds": [
    "0cab872b31b54e82bd9a37e8ece5658d"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 1.1.6. Logging out of the Account Registered in the Device

### Request Method

- POST

### Request URL

- /api/open/v1/manager/device/logout

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceId	String	true	1/-	The device ID.
lineId	Integer	true	1/-	The line ID, which indicates the display order of the registered account on the phone screen.



**Example Request**

```
{
  "deviceId": "0cab872b31b54e82bd9a37e8ece5658d",
  "lineId": 1
}
```

**Example of Successful Response**

```
{
  "data": [],
  "ret": 0
}
```

**1.1.7. Updating a Batch of Configuration Files****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/device/batchUpdateConfig

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	false	1/-	The resource ID. This parameter is required only when typeExtra.type is group_template.
typeExtra.type	String	true	1/-	The configuration type, one of template, region_template, group_template, or default_template.

**Example Request**

```
{
  "contentType": "default_template",
  "deviceIds": [
    "a9fdd1a7809d4829a1dd8630277fe49f",
    "857c851170004a64b42859a339323c7d"
  ],
  "typeExtra": {
    "type": "default_template"
  }
}
```

### Example of Successful Response

```
{
  "data": [],
  "ret": 0
}
```

## 1.1.8. Updating a Batch of Firmware

### Request Method

- POST

### Request URL

- /api/open/v1/manager/device/batchUpdateFirmware

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	true	1/-	The firmware ID.

### Example Request

```
{
  "deviceIds": [
    "a9fdd1a7809d4829a1dd8630277fe49f",
    "857c851170004a64b42859a339323c7d"
  ],
  "typeExtra": {
    "content": "24e779fda2474b76b2e68a6a92f1845c"
  }
}
```

**Example of Successful Response**

```
{
  "ret": 0
}
```

**1.1.9. Rebooting a Batch of Devices****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/device/batchReboot

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.

**Example Request**

```
{
  "deviceIds": [
    "a9fdd1a7809d4829a1dd8630277fe49f",
    "857c851170004a64b42859a339323c7d"
  ]
}
```

**Example of Successful Response**

```
{
  "ret": 0
}
```

**1.1.10. Enabling DND for a Batch of Devices****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/device/batchDnd

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.

### Example Request

```
{
  "deviceIds": [
    "0cab872b31b54e82bd9a37e8ece5658d"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 1.1.11. Disabling DND for a Batch of Devices

### Request Method

- POST

### Request URL

- /api/open/v1/manager/device/batchNotDnd

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.

### Example Request

```
{
  "deviceIds": [
    "0cab872b31b54e82bd9a37e8ece5658d"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

### 1.1.12. Sending Messages to a Batch of Devices

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/batchSendMessage

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	true	1/-	The message content.
typeExtra.duration	Long	true	1/-	The display duration (seconds) of the messages.

#### Example Request

```
{
  "deviceIds": [
    "0cab872b31b54e82bd9a37e8ece5658d"
  ],
  "typeExtra": {
    "content": "233",
    "duration": 5
  }
}
```

#### Example of Successful Response

```
{
  "ret": 0
}
```

### 1.1.13. Resetting a Batch of Devices to Factory

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/batchResetFactory

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.

#### Example Request

```
{
  "deviceIds": [
    "0cab872b31b54e82bd9a37e8ece5658d"
  ]
}
```

#### Example of Successful Response

```
{
  "ret": 0
}
```

### 1.1.14. Updating a Batch of Resource

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/batchUpdateResource

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.

Parameter	Data Type	Required	Length	Description
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	true	1/-	The resource ID.
typeExtra.type	String	true	1/-	<a href="#">The resource type.</a>

### Example Request

```
{
  "contentType": "languagePackage",
  "deviceIds": [
    "a9fdd1a7809d4829a1dd8630277fe49f",
    "857c851170004a64b42859a339323c7d"
  ],
  "typeExtra": {
    "content": "39400f0465e842e7a6ae7fca67bb3583",
    "type": "languagePackage"
  }
}
```

### Example of Successful Response

```
{
  "data": [],
  "ret": 0
}
```

## 1.1.15. Setting a Batch of Sites

### Request Method

- POST

### Request URL

- /api/open/v1/manager/device/batchSetRegion

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
regionId	String	true	1/-	The site ID.

### Example Request

```
{
  "deviceIds": [
    "a9fdd1a7809d4829a1dd8630277fe49f",
    "857c851170004a64b42859a339323c7d"
  ],
  "regionId": "7deaa0a52a52432da5711b1f5c9d8f5b"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 1.1.16. Obtaining the Edited Information

### Request Method

- GET

### Request URL

- /api/open/v1/manager/device/getEdit

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/device/getEdit?id=7894259993b342fca693e182571d4ce9

### Example of Successful Response

```
{
  "data": {
    "authName": "ttt",
    "embedStaffList": [
      {
        "bindDevice": true,
        "lineId": 1,
        "server": "ume.yealink.com",
        "staffId": "c554844856724427972fae652b512572",
        "type": "SIP",
        "username": "2411"
      }
    ]
  },
  "id": "7894259993b342fca693e182571d4ce9",
  "mac": "805ec040eec6",
  "machineId": "2121118080d11103",
}
```



```

"model": {
  "id": "c1682601de7848d1bc2fc7b3dc0783a2",
  "name": "SIP-T21(P) E2",
  "type": "audio"
},
"password": "***#***",
"phone": "2411",
"regionId": "4edf19c4c067486389c9ae469193c02f",
},
"ret": 1
}

```

## Response Description

Parameter	Data Type	Description
authName	String	
embedStaffList	List	
embedStaffList.E	StaffInfo	
embedStaffList.E.bindDevice	boolean	
embedStaffList.E.extension	String	
embedStaffList.E.lineld	int	
embedStaffList.E.server	String	
embedStaffList.E.staffId	String	
embedStaffList.E.type	String	
embedStaffList.E.username	String	
id	String	
mac	String	
machineld	String	
model	EmbedModel	
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
password	String	
phone	String	
regionId	String	

Parameter	Data Type	Description
remark	String	

### 1.1.17. Adding a Batch of Devices

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/batchAdd

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
authName	String	false	0/256	The account for authentication.
mac	String	true	12/17	The MAC address.
machineId	String	true	1/-	The SN code.
modelId	String	true	1/-	The model ID.
password	String	false	0/32	The password for authentication.
phone	String	false	0/128	The device name.
regionId	String	true	1/-	The site ID.
remark	String	false	0/256	The notes.
serverId	String	false	0/32	The server ID.
staffIds	List	false	0/-	The list of the account IDs that you cannot specify.
staffIds.E	String	false	0/-	The account ID that you cannot specify.
staffs	List	false	0/-	The list of the account information that you can specify.
staffs.E	EmbedStaff	false	0/-	The account information that you can specify.
staffs.E.lineId	int	false	0/-	The line ID, which indicates the display order of the registered account on the phone screen.
staffs.E.staffId	String	false	0/-	The account ID.

#### Note:

The request parameter is the same as the one in [1.1.1. Adding Devices](#) but the parameter you pass is in array format. See the example request below.

#### Example Request

```
[
  {
    "mac": "000078974561",
    "modelId": "263cd3abd0a1493b8620ba831ccba695",
    "regionId": "65fbe3e14f9f4aa88b0f8143482bc0a1"
  }
]
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "success": 1,
    "failed": 0,
    "failedData": null
  },
  "error": null
}
```

### Example of Partial Error Response

```
{
  "ret": 1,
  "data": {
    "success": 19,
    "failed": 1,
    "failedData": [{
      "mac": "0000222345321212",
      "msg": "mac_is_invalid"
    }]
  },
  "error": null
}
```

### Example of Whole Error Response

```
{
  "ret": -1,
  "data": {
    "success": 0,
    "failed": 1,
    "failedData": [{
      "mac": "0000222345321212",
      "msg": "mac_is_invalid"
    }]
  },
  "error": {
    "errorCode": 400,
    "msg": "",
    "fieldErrors": [{

```

```

    "field": "data",
    "msg": "batch_add_data_invalid"
  }
}

```

### 1.1.18. Viewing the Information of DECT Handset

#### Request Method

- GET

#### Request URL

- /api/open/v1/manager/device/getHandsets

#### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	The device ID.

#### Example Request

- /api/open/v1/manager/device/getHandsets?id=7894259993b342fca693e182571d4ce9

#### Example of Successful Response

```

{
  "ret":1,
  "data": [
    {
      "number": 1,
      "name": "test",
      "modelName": "W59R",
      "firmware": "11.83.254.25",
      "hardware": "0.0.0.0"
    }
  ],
  "error":null
}

```

### 1.1.19. Searching for Devices by Paging according to the MAC/Extension/Site

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/device/getSearchList

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	The number of the returned search results per page. When you use regionIds to search for devices, this parameter(limit) is required to ensure the interface performance.
mac	String	true	0/-	The device MAC.
username	String	true	0/-	The account information.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
regionIds	List	true	0/-	The list of the site ID.
regionIds.E	String	true	0/-	The site ID.
skip	Integer	false	0/-	The number of skipped search results. This allows you to directly view the desired item by skipping some items. When you use regionIds to search for devices, this parameter(skip) is required to ensure the interface performance.

- Precise search

You need to specify one item from username, regionID, or mac.

#### Example Request

```
{
  "autoCount": true,
  "skip": 0,
  "limit": 10,
  "mac": "001565f1234",
  "type": null
}
```

#### Example of Successful Response

```
{
  "ret": 1,
  "data": {
```

```

"autoCount": true,
"data": [
  {
    "agentKey": null,
    "clientType": "sip",
    "createTime": 1606103339535,
    "embedStaffList": [
      {
        "lineId": 1,
        "status": "registered",
        "type": null,
        "username": ""
      }
    ],
    "firmware": "133.15.255.98",
    "id": "85b75e0ba63948a2b76f7d846c732ab2",
    "ip": "10.81.25.110",
    "listenAddr": null,
    "mac": "001565f1234",
    "machineId": null,
    "model": {
      "id": "dc6195d68aea42eb8ecfdfae0a3f662f",
      "name": "MeetingBar A20(Teams)",
      "type": "video"
    },
    "pathName": "kiwi/site01/kiki",
    "phone": "A20-52",
    "publicIp": "10.81.25.110",
    "regionId": null,
    "regionName": "kiki",
    "reportTime": 1606300806057,
    "reseller": null,
    "resellerId": null,
    "source": null,
    "userStatus": "online",
    "platformType": "phone",
  }
],
"limit": 10,
"orderbys": [
  {
    "field": "reportTime",
    "order": -1
  },
  {
    "field": "createTime",
    "order": -1
  }
],
"skip": 0,
"total": 1
},
"error": null
}

```

**Response Description**

Parameter	Data Type	Description
embedStaffList	List	The list of the account information.
embedStaffList.E	EmbedStaff	
embedStaffList.E.lineld	int	The line ID, which indicates the display order of the registered account on the phone screen.
embedStaffList.E.staffld	String	The account ID.
embedStaffList.E.type	String	The account type.
embedStaffList.E.username	String	The account name.
embedStaffList.E.status	String	The account status, unregistered, registered, offline, or dnd.
enterpriseld	String	
firmware	String	The firmware version.
firmwareld	String	The firmware ID.
id	String	
ip	String	
mac	String	
machineld	String	The SN code.
model	EmbedModel	The model information.
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
phone	String	The device name.
regionld	String	
regionName	String	
reportTime	long	The time when the device is reported.
userStatus	String	The device status, one of offline, online, or invalid.

Parameter	Data Type	Description
clientType	String	The device type, mainly used to interact with the device. For example, select the type of device to which you want to push firmware or configuration file. Its value can be sip, mvc, usb, and rpd.
platformType	String	<a href="#">The device type.</a>

## 1.2 Managing Room System

### 1.2.1. Deleting a Batch of Room Systems

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/mvc/MVCInfo/batchDelete

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

#### Example Request

```
{
  "ids": [
    "84a607e27b844c238434ea82c8d35878"
  ]
}
```

#### Example of Successful Response

```
{
  "ret": 0
}
```

### 1.2.2. Updating Devices

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/mvc/MVCInfo/edit



**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	
phone	String	true	1/-	The name of the room system.
regionId	String	true	1/-	The site ID.

**Example Request**

```
{
  "id": "84a607e27b844c238434ea82c8d35878",
  "phone": "meeting room 3",
  "regionId": "82ca2d55f3d44973826413a220f5c149"
}
```

**Example of Successful Response**

```
{
  "ret": 0
}
```

**1.2.3. Viewing List of the Room System by Paging****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/mvc/MVCInfo/getPagedList

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
key	String	false	0/-	The keywords (MAC, IP address, or the name of the room system) used for searching.
modelId	String	false	0/-	The model ID.
regionIds	List	false	0/-	The list of site IDs (limited search scope).
regionIds.E	String	false	0/-	The site ID (limited search scope).
userStatus	String	false	0/-	The status, one of online, offline, or invalid.

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
skip	Integer	false	0/-	

### Example Request

```
{
  "autoCount": true,
  "key": "54",
  "limit": 10,
  "orderbys": [
    {
      "field": "reportTime",
      "order": -1
    }
  ],
  "skip": 0
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "84a607e27b844c238434ea82c8d35878",
        "btoeUpdateStatus": true,
        "clientType": "mvc",
        "createTime": 1565695008246,
        "currentTime": 0,
        "deleted": false,
        "dstOffset": 0,
        "embedStaffList": [],
        "enterpriseId": "7738b85cfbf44d19ba8450b6db96dc70",
        "enterpriseName": "enterprise 1",
        "id": "84a607e27b844c238434ea82c8d35878",
        "invalidLastTime": false,
        "ip": "10.83.2.75",
        "mac": "54b203184ee5",

```

```

"model": {
  "id": "12",
  "name": "MVC500",
  "type": "video"
},
"modifyTime": 1566264655704,
"mvcLinkDevices": [
  {
    "firmware": "1.0.1.1",
    "hardware": "",
    "id": "",
    "model": "MTouch",
    "parentid": "54b203184ee5",
    "realStatus": "offline",
    "reportTime": 1565807594000,
    "status": "offline",
    "type": "other",
    "uid": "d67df9260f8846a3931ed55c28cf32d2"
  },
  {
    "firmware": "92.11.254.59",
    "hardware": "93.0.0.0.0.1",
    "id": "5704518080000026",
    "model": "UVC50",
    "realStatus": "offline",
    "reportTime": 1565807594000,
    "status": "offline",
    "type": "video",
    "uid": "5704518080000026UVC50"
  }
],
"os": "Windows 10 Enterprise (1803)",
"phone": "meeting room 2",
"realStatus": "offline",
"regionId": "82ca2d55f3d44973826413a220f5c149",
"regionName": "enterprise 1",
"reportTime": 1565807591000,
"reseller": "reseller 1",
"resellerId": "5499feeff2834a43a1f47dba958c2aae",
"snException": false,
"timezoneOffset": 0,
"userStatus": "offline",
"platformType": "meeting"
}
],
"limit": 10,
"orderbys": [
  {
    "field": "reportTime",
    "order": -1
  }
],
"skip": 0,
"total": 1

```

```

},
"ret": 1
}

```

## Response Description

Parameter	Data Type	Description
embedStaffList	List	The list of the account information.
embedStaffList.E	EmbedStaff	
embedStaffList.E.lineld	int	The line ID, which indicates the display order of the registered account on the phone screen.
embedStaffList.E.staffld	String	The account ID.
embedStaffList.E.type	String	The account type.
embedStaffList.E.username	String	The account name.
enterpriseld	String	
firmware	String	The firmware version.
firmwareld	String	The firmware ID.
id	String	
ip	String	
mac	String	
machineld	String	The SN code.
model	EmbedModel	The model information.
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
phone	String	The device name.
regionld	String	
regionName	String	
reportTime	long	The time when the device is reported.
userStatus	String	The status, one of offline, online, or invalid.

Parameter	Data Type	Description
clientType	String	The device type, mainly used to interact with the device. For example, select the type of device to which you want to push firmware or configuration file. Its value can be sip, mvc, usb, and rpd.
platformType	String	<a href="#">The device type.</a>

## 1.2.4. Viewing the Details of Room System

### Request Method

- GET

### Request URL

- /api/open/v1/manager/mvc/MVCInfo/get

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/mvc/MVCInfo/get?id=84a607e27b844c238434ea82c8d35878

### Example of Successful Response

```
{
  "data": {
    "_id": "84a607e27b844c238434ea82c8d35878",
    "btoeUpdateStatus": true,
    "clientType": "mvc",
    "createTime": 1565695008246,
    "currentTime": 0,
    "deleted": false,
    "dstOffset": 0,
    "embedStaffList": [],
    "enterpriseId": "7738b85cfbf44d19ba8450b6db96dc70",
    "enterpriseName": "enterprise 1",
    "id": "84a607e27b844c238434ea82c8d35878",
    "invalidLastTime": false,
    "ip": "10.83.2.75",
    "mac": "54b203184ee5",
    "model": {
      "id": "12",
      "name": "MVC500",
      "type": "video"
    }
  },
}
```

```

"modifyTime": 1566263816397,
"mvcLinkDevices": [
  {
    "firmware": "1.0.1.1",
    "hardware": "",
    "id": "",
    "model": "MTouch",
    "parentid": "54b203184ee5",
    "realStatus": "offline",
    "reportTime": 1565807594000,
    "status": "offline",
    "type": "other",
    "uid": "d67df9260f8846a3931ed55c28cf32d2"
  },
  {
    "firmware": "92.11.254.59",
    "hardware": "93.0.0.0.0.1",
    "id": "5704518080000026",
    "model": "UVC50",
    "realStatus": "offline",
    "reportTime": 1565807594000,
    "status": "offline",
    "type": "video",
    "uid": "5704518080000026UVC50"
  }
],
"os": "windows 10 Enterprise (1803)",
"phone": "phone test name",
"realStatus": "offline",
"regionId": "82ca2d55f3d44973826413a220f5c149",
"regionName": "enterprise 1",
"reportTime": 1565807591000,
"reseller": "reseller1",
"resellerId": "5499feeff2834a43a1f47dba958c2aae",
"snException": false,
"timezoneOffset": 0,
"userStatus": "offline"
},
"ret": 1
}

```

## Response Description

Parameter	Data Type	Description
embedStaffList	List	The list of the account information.
embedStaffList.E	EmbedStaff	
embedStaffList.E.lineld	int	The line ID, which indicates the display order of the registered account on the phone screen.
embedStaffList.E.staffld	String	The account ID.

Parameter	Data Type	Description
embedStaffList.E.type	String	The account type.
embedStaffList.E.username	String	The account name.
enterpriseld	String	
firmware	String	The firmware version.
firmwareld	String	The firmware ID.
id	String	
ip	String	
mac	String	
machineld	String	The SN code.
model	EmbedModel	The model information.
model.id	String	
model.name	String	
model.type	String	The model type, one of video or audio.
phone	String	The device name.
regionld	String	
regionName	String	
reportTime	long	The time when the device is reported.
userStatus	String	The status, one of offline, online, or invalid.

### 1.2.5. Viewing the List of Room System Model

#### Request Method

- GET

#### Request URL

- /api/open/v1/manager/mvc/MVCInfo/getModelList

#### Request Parameter

- Query parameter

#### Example Request

- /api/open/v1/manager/mvc/MVCInfo/getModelList

#### Example of Successful Response

```

{
  "data": [
    {
      "_id": "1",
      "createTime": 1560409539338,
      "deleted": false,
      "id": "1",
      "modifyTime": 1560409590021,
      "name": "MVC800",
      "type": "video"
    },
    {
      "_id": "12",
      "createTime": 1560409539338,
      "deleted": false,
      "id": "12",
      "modifyTime": 1560409590021,
      "name": "MVC500",
      "type": "video"
    },
    {
      "_id": "13",
      "createTime": 1560409539338,
      "deleted": false,
      "id": "13",
      "modifyTime": 1560409590021,
      "name": "MVC900",
      "type": "video"
    },
    {
      "_id": "14",
      "createTime": 1560409539338,
      "deleted": false,
      "id": "14",
      "modifyTime": 1560409590021,
      "name": "MVC300",
      "type": "video"
    }
  ],
  "ret": 4
}

```

### 1.2.6. Setting a Batch of Sites

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/mvc/MVCInfo/setBatchRegion

#### Request Parameter

- Body parameter



Parameter	Data Type	Required	Length	Description
regionId	String	false	0/-	The site ID.

**Example Request**

```
{
  "ids": [
    "84a607e27b844c238434ea82c8d35878"
  ],
  "regionId": "82ca2d55f3d44973826413a220f5c149"
}
```

**Example of Successful Response**

```
{
  "ret": 0
}
```

**1.2.7. Viewing the Model List of Room System that Can Be Manually Added****Request Method**

- GET

**Request URL**

- /api/open/v1/manager/mvc/MVCInfo/getSupportManualModelList

**Request Parameter**

- Query parameter

**Example Request**

- /api/open/v1/manager/mvc/MVCInfo/getSupportManualModelList

**Example of Successful Response**

```
{
  "data": [
    {
      "_id": "1",
      "createTime": 1560409539338,
      "deleted": false,
      "id": "1",
      "modifyTime": 1560409590021,
      "name": "MVC800",
      "type": "video"
    },
    {
      "_id": "12",
      "createTime": 1560409539338,
      "deleted": false,

```

```

    "id": "12",
    "modifyTime": 1560409590021,
    "name": "MVC500",
    "type": "video"
  },
  {
    "_id": "13",
    "createTime": 1560409539338,
    "deleted": false,
    "id": "13",
    "modifyTime": 1560409590021,
    "name": "MVC900",
    "type": "video"
  },
  {
    "_id": "14",
    "createTime": 1560409539338,
    "deleted": false,
    "id": "14",
    "modifyTime": 1560409590021,
    "name": "MVC300",
    "type": "video"
  }
],
"ret": 4
}

```

## 1.2.8. Deleting the Associated Device of the Room System in Batch

### Request Method

- POST

### Request URL

- /api/open/v1/manager/mvc/embedDevice/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	false	0/-	The SN code (the UID) of the device connected to Intel NUC PC.
ids	List	true	1/-	The list of the associated devices.
ids.E	String	true	1/-	The ID of the associated devices.

### Example Request

```
{
  "id": "84a607e27b844c238434ea82c8d35878",
  "ids": [
    "570451808000026UVC50"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 1.2.9. Viewing the List of the Associated Device of the Room System

### Request Method

- POST

### Request URL

- /api/open/v1/manager/mvc/embedDevice/getRelevanceDevice

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	
model	String	false	0/-	
connectType	String	false	0/-	
type	String	false	0/-	
status	String	false	0/-	

### Example Request

```
{
  "id": "84a607e27b844c238434ea82c8d35878"
}
```

### Example of Successful Response

```
{
  "data": {
    "_id": "84a607e27b844c238434ea82c8d35878",
    "btoeUpdateStatus": true,
    "clientType": "mvc",
    "createTime": 1565695008246,
  }
}
```

```

"currentTime": 0,
"deleted": false,
"dstOffset": 0,
"embedStaffList": [],
"enterpriseId": "7738b85cfbf44d19ba8450b6db96dc70",
"enterpriseName": "enterprise 1",
"id": "84a607e27b844c238434ea82c8d35878",
"invalidLastTime": false,
"ip": "10.83.2.75",
"mac": "54b203184ee5",
"model": {
  "id": "12",
  "name": "MVC500",
  "type": "video"
},
"modifyTime": 1566263875595,
"mvcLinkDevices": [
  {
    "firmware": "1.0.1.1",
    "hardware": "",
    "id": "",
    "model": "MTouch",
    "parentid": "54b203184ee5",
    "realStatus": "offline",
    "reportTime": 1565807594000,
    "status": "offline",
    "type": "other",
    "uid": "d67df9260f8846a3931ed55c28cf32d2"
  },
  {
    "firmware": "92.11.254.59",
    "hardware": "93.0.0.0.0.0.1",
    "id": "5704518080000026",
    "model": "UVC50",
    "realStatus": "offline",
    "reportTime": 1565807594000,
    "status": "offline",
    "type": "video",
    "uid": "5704518080000026uvc50"
  }
],
"os": "Windows 10 Enterprise (1803)",
"phone": "meeting room 1",
"realStatus": "offline",
"regionId": "82ca2d55f3d44973826413a220f5c149",
"regionName": "enterprise 1",
"reportTime": 1565807591000,
"reseller": "reseller 1",
"resellerId": "5499feeff2834a43a1f47dba958c2aae",
"snException": false,
"timezoneOffset": 0,
"userStatus": "offline"
},
"ret": 1

```

```
}
```

## 1.2.10. Viewing the Model List of the Associated of the Room System

### Request Method

- GET

### Request URL

- /api/open/v1/manager/mvc/embedDevice/getModelList

### Request Parameter

- Query parameter

### Example Request

- /api/open/v1/manager/mvc/embedDevice/getModelList

### Example of Successful Response

```
{
  "data": [
    "VCM34",
    "CPW90",
    "CP900",
    "CP960",
    "Soundbar",
    "UVC90",
    "UVC80",
    "UVC50",
    "UVC30",
    "MShare",
    "MTouch"
  ],
  "ret": 1
}
```

## 1.2.11. Restarting All Room Systems

### Request Method

- POST

### Request URL

- /api/open/v1/manager/mvc/MVCInfo/restartForAll

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
initTime	Long	true	1/-	The Unix timestamps (milliseconds) of the time when you initiate the task.
name	String	true	1/64	The task name.
offset	Integer	true	1/-	The time offset of the UTC (GMT). For example, if the time zone is UTC+8, the time offset is 28800 (8 X 60 X 60).
repeatType	String	true	1/-	<a href="#">Repetition Type of the Task</a>
subDeviceIds	List	Required when restarting the associated devices.	1/-	The list of the associated device IDs.
repeatExtra	String	true	1/-	The extra information of the repeated task (the same as the parameter "typeExtra").

### Example Request

```
{
  "deviceIds": [
    "84a607e27b844c238434ea82c8d35878"
  ],
  "repeatType": "immed",
}
```

```
{
  "deviceIds": [
    "5b57830f6d0e4a2aacc8c2b74d084dc6"
  ],
  "name": "Timed tasks at a time",
  "repeatType": "once",
  "initTime": 1566379844000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "name": "Timed tasks at certain times of the day",
  "repeatType": "day",
  "repeatExtra": null,
  "initTime": 1566379399000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "name": "Timed tasks on 1, 3, 4 every week",
  "repeatType": "week",
  "repeatExtra": "1;3;4",
  "initTime": 1566379744000,
  "offset": 28800
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 1.2.12. Resetting the Room System

### Request Method

- POST

### Request URL

- /api/open/v1/manager/mvc/MVCInfo/factoryResetForALL

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
initTime	Long	true	1/-	The Unix timestamps (milliseconds) of the time when you initiate the task.
name	String	true	1/64	The task name.
offset	Integer	true	1/-	The time offset of the UTC (GMT). For example, if the time zone is UTC+8, the time offset is 28800 (8 X 60 X 60).

Parameter	Data Type	Required	Length	Description
repeatType	String	true	1/-	<a href="#">Repetition Type of the Task</a>
subDeviceIds	List	Required when resetting the associated devices.	1/-	The list of the associated device IDs.
repeatExtra	String	true	1/-	The extra information of the repeated task (the same as the parameter "typeExtra").

### Example Request

```
{
  "deviceIds": [
    "84a607e27b844c238434ea82c8d35878"
  ],
  "repeatType": "immed",
}
```

```
{
  "deviceIds": [
    "5b57830f6d0e4a2aacc8c2b74d084dc6"
  ],
  "name": "Timed tasks at a time",
  "repeatType": "once",
  "initTime": 1566379844000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "name": "Timed tasks at certain times of the day",
  "repeatType": "day",
  "repeatExtra": null,
  "initTime": 1566379399000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "name": "Timed tasks on 1, 3, 4 every week",
  "repeatType": "week",
  "repeatExtra": "1;3;4",
  "initTime": 1566379744000,
  "offset": 28800
}
```



**Example of Successful Response**

```
{
  "ret": 0
}
```

**1.2.13. Restarting Associated Devices****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/mvc/embedDevice/batchRestart

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
initTime	Long	true	1/-	The Unix timestamps (milliseconds) of the time when you initiate the task.
name	String	true	1/64	The task name.
offset	Integer	true	1/-	The time offset of the UTC (GMT). For example, if the time zone is UTC+8, the time offset is 28800 (8 X 60 X 60).
repeatType	String	true	1/-	<a href="#">Repetition Type of the Task</a>
subDeviceIds	List	Required when restarting the associated devices.	1/-	The UID of the associated device.
repeatExtra	String	true	1/-	The extra information of the repeated task (the same as the parameter "typeExtra").

**Example Request**

```
{
  "deviceIds": [
    "84a607e27b844c238434ea82c8d35878"
  ],
  "subDeviceIds": [
    "570451808000026uvc50"
  ],
  "repeatType": "immed"
}
```

```
{
  "deviceIds": [
    "5b57830f6d0e4a2aacc8c2b74d084dc6"
  ],
  "subDeviceIds": [
    "570451808000026uvc50"
  ],
  "name": "Timed tasks at a time",
  "repeatType": "once",
  "initTime": 1566379844000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "subDeviceIds": [
    "570451808000026uvc50"
  ],
  "name": "Timed tasks at certain times of the day",
  "repeatType": "day",
  "repeatExtra": null,
  "initTime": 1566379399000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "subDeviceIds": [
    "570451808000026uvc50"
  ],
  "name": "Timed tasks on 1, 3, 4 every week",
  "repeatType": "week",
  "repeatExtra": "1;3;4",
  "initTime": 1566379744000,
  "offset": 28800
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 1.2.14. Resetting Associated Devices

### Request Method

- POST

### Request URL

- /api/open/v1/manager/mvc/embedDevice/batchFactoryReset

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
initTime	Long	true	1/-	The Unix timestamps (milliseconds) of the time when you initiate the task.
name	String	true	1/64	The task name.
offset	Integer	true	1/-	The time offset of the UTC (GMT). For example, if the time zone is UTC+8, the time offset is 28800 (8 X 60 X 60).
repeatType	String	true	1/-	<a href="#">Repetition Type of the Task</a>
subDeviceIds	List	Required when resetting the associated devices.	1/-	The list of the associated device IDs.
repeatExtra	String	true	1/-	The extra information of the repeated task (the same as the parameter "typeExtra").

### Example Request

```
{
  "deviceIds": [
    "84a607e27b844c238434ea82c8d35878"
  ],
  "repeatType": "immed",
  "subDeviceIds": [
    "5704518080000026UVC50"
  ],
}
```

```
{
  "deviceIds": [
    "5b57830f6d0e4a2aacc8c2b74d084dc6"
  ],
  "subDeviceIds": [
    "570451808000026UVC50"
  ],
  "name": "Timed tasks at a time",
  "repeatType": "once",
  "initTime": 1566379844000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "subDeviceIds": [
    "570451808000026UVC50"
  ],
  "name": "Timed tasks at certain times of the day",
  "repeatType": "day",
  "repeatExtra": null,
  "initTime": 1566379399000,
  "offset": 28800
}
```

```
{
  "deviceIds": ["5b57830f6d0e4a2aacc8c2b74d084dc6"],
  "subDeviceIds": [
    "570451808000026UVC50"
  ],
  "name": "Timed tasks on 1, 3, 4 every week",
  "repeatType": "week",
  "repeatExtra": "1;3;4",
  "initTime": 1566379744000,
  "offset": 28800
}
```

#### Example of Successful Response

```
{
  "ret": 0
}
```

## 2. Diagnosing Devices

To obtain the diagnosis result, see Section [2. Introduction of the Callback Interface](#) in part 1.

## 2.1. Checking Whether the Device Is Capturing Packet

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/isCapturing

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
mac	String	true	12/17	

### Example Request

- /api/open/v1/manager/diagnosis/isCapturing?mac=805ec0484b2f

### Example of Successful Response

```
{
  "data": true,
  "ret": 1
}
```

### Response Description

- If the returned data is true, the device is capturing packets, if it is false, the device is not capturing packets.

## 2.2. Viewing the Log List by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/diagnosis/getSyslogs

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
mac	String	true	0/-	
orderbys	List	false	0/-	

Parameter	Data Type	Required	Length	Description
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
skip	Integer	false	0/-	
total	int	false	0/-	

### Example Request

```
{
  "autoCount": true,
  "limit": 10,
  "mac": "54b2030bc506",
  "orderbys": [
    {
      "field": "createTime",
      "order": -1
    }
  ],
  "skip": 0
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [],
    "limit": 10,
    "mac": "54b2030bc506",
    "orderbys": [
      {
        "field": "createTime",
        "order": -1
      }
    ],
    "skip": 0,
    "total": 0
  },
  "ret": 0
}
```

## 2.3. Obtaining the Gateway Type Supported by the Packet Capturing

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/getInterfaces

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
mac	String	false	0/-	

### Example Request

- /api/open/v1/manager/diagnosis/getInterfaces?mac=805ec0484b2f

### Example of Successful Response

```
{
  "data": [
    "wan"
  ],
  "ret": 1
}
```

## 2.4. Capturing Packets

### Request Method

- POST

### Request URL

- /api/open/v1/manager/diagnosis/packetCapture

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
command	String	true	1/-	The command, one of start, or stop.
lo	String	true	1/-	The network port, one of wan, ext0, or wlan0.
mac	String	true	12/17	
selfDef	String	false	0/512	The customized string.

Parameter	Data Type	Required	Length	Description
type	String	true	1/-	The type. There are four values: 0 refers to custom 1 refers to SIP, H425, or H225 2 refers to RTP 3 refers to non-RTP.

#### Example Request

```
{
  "command": "stop",
  "lo": "wan",
  "mac": "805ec0484b2f",
  "type": "1"
}
```

#### Example of Successful Response

```
{
  "ret": 0,
  "data": "DIzc+bC3Cgpgd/RvvXPTNCLRitno8EKGNY3Z1k0PxqPwJ+QQVz65GZpYC5B01R/iaIc7jhy/VkspSouAmJTQ="
}
```

#### Response Description

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.5. Checking Whether Packet Capturing Is Finished

#### Request Method

- GET

#### Request URL

- /api/open/v1/manager/diagnosis/isPcapFileReady

#### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
sessionId	String	false	0/-	

#### Example Request

- /api/open/v1/manager/diagnosis/isPcapFileReady?sessionId=None

#### Example of Successful Response



```
{
  "ret": 0
}
```

### Response Description

- If the returned data is 1, the packet capturing is finished; if it is 0, the packet capturing is unfinished; if it is smaller than 0, there is an abnormal issue.

## 2.6. Exporting the Syslog

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/getSyslogAddress

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
mac	String	false	0/-	

### Example Request

- /api/open/v1/manager/diagnosis/getSyslogAddress?mac=54b2030bc506

### Example of Successful Response

```
{
  "data":
  "DIzc+bC3Cgpgd/RvVXPTNCLRitno8EKGNY3Z1k0PxqPwJ+QQVz65GZpYC5B01R/iaIc7jhy/VkspSouAmJTQ==",
  "ret": 1
}
```

### Response Description

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.7. Ping

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/ping

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
command	String	true	1/-	The IP address or the domain name.
mac	String	true	1/-	
pv	int	true	1/-	The number of the request.

### Example Request

- /api/open/v1/manager/diagnosis/ping?command=10.81.18.2&mac=805ec0484b2f&pv=5

### Example of Successful Response

```
{
  "data":
  "8rnwmyLV0fk+dhyFMej1o2pPGW4MDFdkt3Tg6UKTPy+Ux9hQ+oX2An+0J1kPX2F5MHjPjQbifIatAYF/Wa0+oA==",
  "ret": 1
}
```

### Response Description

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.8. Checking Whether the Data Is Ready

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/isDataReady

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
sessionId	String	false	0/-	
<b>Response Description</b>				

- If the returned data is 1, the data is ready; if it is 0, the data is unfinished; if it is smaller than 0, there is abnormal issue.

## 2.9. TraceRoute

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/traceRoute

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
command	String	false	0/-	The IP address or the domain name.
mac	String	false	0/-	
pv	int	false	0/-	The number of the request.

### Example Request

- /api/open/v1/manager/diagnosis/traceRoute?command=10.81.18.2&mac=805ec0484b2f&pv=5

### Example of Successful Response

```
{
  "data":
  "4CEOLKXtxvfhpvu01I6JIemo4cI7dhXXtSoLD2SiQHuur0Vzn39KhXNPaLSuLakHw0f1bsex1kfkAhsPG1M9XA==" ,
  "ret": 1
}
```

### Response Description

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.10. Telnet

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/telnet

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
command	String	false	0/-	
firstReq	boolean	false	0/-	
mac	String	false	0/-	

### Example Request

- /api/open/v1/manager/diagnosis/telnet?command=10.81.18.2&mac=805ec0484b2f&firstReq=true

## Example of Successful Response

```
{
  "data":
  "7DIw9tfnHj84jZzB0onD2JtRbIwxYqvDSZ0/ebT/+RGvs7+AbXYVvxYgE6AH+qAQSIm6GzK4JrPrOyD0K23BLg==",
  "ret": 1
}
```

## Response Description

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.11. Obtaining the CPU information

### Request Method

- POST

### Request URL

- /api/open/v1/manager/diagnosis/getStatuses

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
endTime	long	true	1/-	The timestamps of the end time (milliseconds).
mac	String	true	1/-	MAC
startTime	long	true	1/-	The timestamps of the start time (milliseconds).

### Example Request

```
{
  "endTime": 1562083140000,
  "mac": "54b2030bc506",
  "startTime": 1561996860000
}
```

### Example of Successful Response

```
{
  "data": [],
  "ret": 0
}
```

## Response Description

Parameter	Data Type	Description
-----------	-----------	-------------

Parameter	Data Type	Description
cpuDetail	String	
cpuName	String	
cpuUsage	double	The usage of CPU.
createTime	Long	
deleted	Boolean	
id	String	
ip	String	
mac	String	
memoryDetail	String	
memoryName	String	
memoryUsage	double	The usage of the memory.
modifyTime	Long	
time	long	

## 2.12. Setting the Level of the Device Log

### Request Method

- POST

### Request URL

- /api/open/v1/manager/diagnosis/setLogLevel

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
level	int	true	1/-	The log level.
mac	String	true	1/-	
<b>Example Request</b>				

```
{
  "level": 6,
  "mac": "805ec0484b2f"
}
```

**Example of Successful Response**

```
{
  "ret": 0
}
```

**2.13. Retrieving the Information of the Recording File by Paging****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/diagnosis/getRecordPagedList

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
mac	String	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
skip	Integer	false	0/-	

**Example Request**

```
{
  "autoCount": true,
  "limit": 10,
  "mac": "805ec0484b2f",
  "orderbys": [
    {
      "field": "createTime",
      "order": -1
    }
  ],
  "skip": 0
}
```

**Example of Successful Response**

```

{
  "data": {
    "autoCount": true,
    "data": [],
    "limit": 10,
    "mac": "805ec0484b2f",
    "orderbys": [
      {
        "field": "createTime",
        "order": -1
      }
    ],
    "skip": 0,
    "total": 0
  },
  "ret": 0
}

```

### Response Description

Parameter	Data Type	Description
_id	String	
address	String	
createTime	Long	
deleted	Boolean	
fileName	String	
mac	String	
modifyTime	Long	
size	Long	
url	String	

## 2.14. Screen Capturing

### Request Method

- GET

### Request URL

- /api/open/v1/manager/diagnosis/captureScreen

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
mac	String	false	0/-	

**Example Request**

- /api/open/v1/manager/diagnosis/captureScreen?mac=805ec0484b2f

**Example of Successful Response**

```
{
  "data":
  "jVwduYWHDavBA/Bg4X9lYeI8ZMQlVghMSzzaYha8BTGn6LqUdb/lXwlxzZmNxjvkFSgnKv+j1eCij3A17aHz7Q==",
  "ret": 1
}
```

**Response Description**

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.15. Exporting the Configuring Files

**Request Method**

- GET

**Request URL**

- /api/open/v1/manager/diagnosis/exportConfigFileCommand

**Request Parameter**

- Query parameter

Parameter	Data Type	Required	Length	Description
mac	String	true	-/-	
type	String	false	0/-	The type of the configuration file, one of static, non_static, or all.

**Example Request**

- /api/open/v1/manager/diagnosis/exportConfigFileCommand?mac=805ec0484b2f&type=static

**Example of Successful Response**

```
{
  "data":
  "UrqzRWgTXBMMgup7DSopXF3IxOK21upP6Pk/mNr1NUozG7vMwMksVYSRSJ1qVntK0TRAp58ePDGnrVuyLQvZ5Q==",
  "ret": 1
}
```



## Response Description

- The returned data is the sessionId for uniquely marking this request, valid within 12 hours.

## 2.16 Obtaining the Address for Remote Diagnosis

### Request Method

- POST

### Request URL

- /api/open/v1/manager/diagnosis/getRemoteAddress

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
mac	String	true	0/-	
clientType	String	false	0/-	

### Example Request

```
{
  "mac": "805ec0484b2f"
}
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": "https://dm138.yealinkops.com/oauth/authorizeForOauth?
authorize=D928429510ECF5B3C06236F7C891D48E5C9CE0BD342F9D0F1DA5D1E0ED1F004EB1EBAD21F727BBB7&mac=80
5ec04bdb93&clientType=sip",
  "error": null
}
```

## Response Description

You can perform remote diagnosis via the address returned in `data`.

## 3. Subscribing

### 3.1. Subscribing the Information

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/subscribeInfo/subscribe

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
channel	String	false	0/-	To receive the subscription information, you need to specify the channel first and the subscription will be sent to the address that is spliced by the callback address and the channel together.
endTime	Long	false	0/-	The timestamps of the end time, after you specify this parameter, no more notification will be sent to the spliced address when the timestamps are out of date.
topic	String	true	1/-	The theme, one of ALARM or STAFF_ACCOUNT.

### Example Request

```
{
  "topic": "ALARM"
}
```

### Example of Successful Response

```
{
  "data": {
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "id": "1822972ed52f4112a2f1249224c5cd73",
    "topic": "ALARM"
  },
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
channel	String	
endTime	Long	
enterpriseId	String	
id	String	
topic	String	

## 3.2. Retrieving the Subscription Information by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/subscribeInfo/getPagedList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
key	String	false	0/-	The keywords for searching.

### Example Request

```
{
  "key": "ALARM"
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": false,
    "data": [
      {
        "_id": "1822972ed52f4112a2f1249224c5cd73",
        "createTime": 1562031123314,
        "deleted": false,
        "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
        "id": "1822972ed52f4112a2f1249224c5cd73",
        "modifyTime": 1562031123546,
        "topic": "ALARM"
      }
    ],
    "total": 0
  },
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
channel	String	
endTime	Long	

Parameter	Data Type	Description
enterpriseld	String	
id	String	
topic	String	

### 3.3. Cancelling the Subscription

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/subscribeInfo/unSubscribe

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

#### Example Request

```
{
  "ids": [
    "1822972ed52f4112a2f1249224c5cd73"
  ]
}
```

#### Example of Successful Response

```
{
  "data": 1,
  "ret": 1
}
```

#### Response Description

- The returned data is the number of the canceled subscriptions.

### 3.4. Obtaining the Subscription Information

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/subscribeInfo/getList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

### Example Request

```
{
  "ids": [
    "1822972ed52f4112a2f1249224c5cd73"
  ]
}
```

### Example of Successful Response

```
{
  "data": [
    {
      "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
      "id": "1822972ed52f4112a2f1249224c5cd73",
      "topic": "ALARM"
    }
  ],
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
channel	String	
endTime	Long	
enterpriseld	String	
id	String	
topic	String	

## 3.5. Editing

### Request Method

- POST

### Request URL

- /api/open/v1/manager/subscribeInfo/edit

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
channel	String	false	0/-	To receive the subscription information, you need to specify the channel first and the subscription will be sent to the address that is spliced by the callback address and the channel together.
endTime	Long	false	0/-	The timestamps of the end time, after you specify this parameter, no more notification will be sent to the spliced address when the timestamps are out of date.
id	String	true	1/-	
topic	String	true	1/-	

### Example Request

```
{
  "id": "1822972ed52f4112a2f1249224c5cd73",
  "topic": "ALARM"
}
```

### Example of Successful Response

```
{
  "data": {
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "id": "1822972ed52f4112a2f1249224c5cd73",
    "topic": "ALARM"
  },
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
channel	String	

Parameter	Data Type	Description
endTime	Long	
enterpriseld	String	
id	String	
topic	String	

## 4. Managing the Alarm

To receive the alarm, see Section [2. Introduction of the Callback Interface](#) in part 1.

### 4.1. Retrieving the Alarm by Paging

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/alarm/getList

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
searchKey	String	false	0/-	The keywords (MAC, IP address, the device name, or the enterprise name) used for searching.
autoCount	boolean	false	0/-	Count the amount of alarm automatically or not. It defaults to false.
limit	Integer	false	0/-	The maximum number of obtained alarm. It defaults to 1000.
module	String	false	0/-	The module that the alarm belongs to.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
regionIds	List	false	0/-	The list of the site IDs.
regionIds.E	String	false	0/-	
severities	List	false	0/-	The alarm level.

Parameter	Data Type	Required	Length	Description
severities.E	String	false	0/-	
severity	String	false	0/-	
skip	Integer	false	0/-	The number of skipped records. It defaults to 0.

### Example Request

```
{
  "autoCount": true,
  "limit": 2,
  "regionIds": ["65fbe3e14f9f4aa88b0f8143482bc0a1"],
  "orderbys": [
    {
      "field": "actionTime",
      "order": -1
    }
  ],
  "severities": [
    "Major",
    "Critical",
    "Minor"
  ],
  "skip": 0
}
```

### Example of Successful Response

```
{
  "ret": 10,
  "data": {
    "skip": 0,
    "limit": 10,
    "total": 0,
    "autoCount": false,
    "orderbys": [
      {
        "field": "content.actionTime",
        "order": -1
      }
    ],
    "data": [
      {
        "enterpriseName": null,
        "_id": "11685391d94b478e901c00ed6230e08d",
        "enterpriseId": "3e8e172739824e41ad12bf54fe0b9911",
        "deviceId": "86acfe4833d5478b833c76c29b2f0c3f",
        "name": "Offline",
        "severity": "Critical",

```



```

"reason": "This alarm occurs when the connection status of the device changes
from online to offline for 15 minutes.",
"actionTime": 1595832742000,
"description": "This alarm occurs when the connection status of the device
changes from online to offline for 15 minutes.",
"module": "Connectivity",
"mac": "001565f00086",
"ip": "10.81.46.35",
"time": null,
"count": 1,
"model": "SIP-T58",
"regionName": "liujj-DM",
"regionId": "65fbe3e14f9f4aa88b0f8143482bc0a1",
"phone": "2315",
"licenseId": null,
"level": 3,
"sessionId": null,
"opCode": null,
"filename": null,
"logUploadFinished": false,
"cause": null,
"solution": null,
"createTime": 1595832743770,
"modifyTime": 1595832743772,
"deleted": false,
"clientType": "sip",
"machineId": null,
"status": 1,
"statusStr": null,
"staff": null,
"deviceStatusRecordVOList": [
  {
    "status": "online",
    "timestamp": 1595320310247,
    "offlineReason": null
  },
  {
    "status": "offline",
    "timestamp": 1595320216011,
    "offlineReason": "The device close the connection"
  },
  {
    "status": "offline",
    "timestamp": 1589433846632,
    "offlineReason": "The device close the connection"
  },
  {
    "status": "online",
    "timestamp": 1589397213401,
    "offlineReason": null
  },
  {
    "status": "online",
    "timestamp": 1589373361926,

```

```

        "offlineReason": null
    },
    {
        "status": "offline",
        "timestamp": 1589373353083,
        "offlineReason": "The device close the connection"
    },
    {
        "status": "online",
        "timestamp": 1589373291216,
        "offlineReason": null
    },
    {
        "status": "offline",
        "timestamp": 1589373170083,
        "offlineReason": "The device close the connection"
    },
    {
        "status": "online",
        "timestamp": 1589373092046,
        "offlineReason": null
    },
    {
        "status": "offline",
        "timestamp": 1586765308512,
        "offlineReason": "The device close the connection"
    },
    {
        "status": "online",
        "timestamp": 1586765276199,
        "offlineReason": null
    },
    {
        "status": "offline",
        "timestamp": 1583817589404,
        "offlineReason": "The device close the connection"
    },
    {
        "status": "online",
        "timestamp": 1583817556222,
        "offlineReason": null
    },
    {
        "status": "offline",
        "timestamp": 1583817524862,
        "offlineReason": "The device close the connection"
    }
],
"qoeId": null,
"callId": null,
"id": "11685391d94b478e901c00ed6230e08d",
"read": false
},
{}

```

```

    ],
    "enterpriseId": "3e8e172739824e41ad12bf54fe0b9911",
    "searchKey": null,
    "macSearchKey": null,
    "regionIds": [
        "65fbe3e14f9f4aa88b0f8143482bc0a1"
    ],
    "name": null,
    "severity": null,
    "severities": null,
    "language": null,
    "alarmIds": null,
    "module": null,
    "pmsEnterpriseIds": null,
    "status": null,
    "alarmTime": 0,
    "alarmContents": null,
    "deviceIds": null
  },
  "error": null
}

```

## 4.2. Retrieving the Unread Alarm by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/alarm/getAlarms

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
alarmIds	List	false	0/-	
alarmIds.E	String	false	0/-	
autoCount	boolean	false	0/-	
language	String	false	0/-	
limit	Integer	false	0/-	
macSearchKey	String	false	0/-	
module	String	false	0/-	
name	String	false	0/-	

Parameter	Data Type	Required	Length	Description
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
regionIds	List	false	0/-	
regionIds.E	String	false	0/-	
searchKey	String	false	0/-	
severities	List	false	0/-	
severities.E	String	false	0/-	
severity	String	false	0/-	
skip	Integer	false	0/-	
total	int	false	0/-	

### Example Request

```
{
  "autoCount": true,
  "limit": 20,
  "orderbys": [
    {
      "field": "actionTime",
      "order": -1
    }
  ],
  "severities": [
    "Major",
    "Critical",
    "Minor"
  ],
  "skip": 0
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "89ede4a2715c4ec18824dd7cba9cccf",
        "actionTime": 1561985484000,

```

```

"count": 6,
"createTime": 1561944558920,
"deleted": false,
"description": "This Alarm is activated when failing to update configuration.",
"deviceId": "0cab872b31b54e82bd9a37e8ece5658d",
"enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
"id": "89ede4a2715c4ec18824dd7cba9cccf",
"ip": "10.81.18.2",
"logUploadFinished": false,
"mac": "805ec0484b2f",
"model": "SIP-T52S",
"modifyTime": 1561985483664,
"module": "",
"name": "Update Configuration failure",
"phone": "device1",
"read": false,
"reason": "Other download fail",
"regionId": "e89adb4d568c4c4fb474832953d57904",
"regionName": "ccy",
"severity": "Critical"
},
{
  "_id": "77aa95c0adab436c959f8b05f0aa9a68",
  "actionTime": 1561963772000,
  "count": 1,
  "createTime": 1561963772653,
  "deleted": false,
  "description": "This Alarm is activated when call failed.",
  "deviceId": "0cab872b31b54e82bd9a37e8ece5658d",
  "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
  "id": "77aa95c0adab436c959f8b05f0aa9a68",
  "ip": "10.81.18.2",
  "logUploadFinished": false,
  "mac": "805ec0484b2f",
  "model": "SIP-T52S",
  "modifyTime": 1561963772664,
  "module": "",
  "name": "Call fail",
  "phone": "device1",
  "read": false,
  "reason": "Temporarily not available",
  "regionId": "e89adb4d568c4c4fb474832953d57904",
  "regionName": "ccy",
  "severity": "Minor"
},
{
  "_id": "c59bc05203ec4fa9bfe83722de6e9800",
  "actionTime": 1561944633000,
  "count": 1,
  "createTime": 1561944633429,
  "deleted": false,
  "description": "This Alarm is activated when a registration failure occurs.",
  "deviceId": "0cab872b31b54e82bd9a37e8ece5658d",
  "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",

```

```

    "id": "c59bc05203ec4fa9bfe83722de6e9800",
    "ip": "10.81.18.2",
    "logUploadFinished": false,
    "mac": "805ec0484b2f",
    "model": "SIP-T52S",
    "modifyTime": 1561944633431,
    "module": "",
    "name": "Register failure",
    "phone": "device1",
    "read": false,
    "reason": "SIP line: 1, code: -1, message: Line config is unavaiiable!",
    "regionId": "e89adb4d568c4c4fb474832953d57904",
    "regionName": "ccy",
    "severity": "Critical"
  },
  {
    "_id": "41681f441e6443099a878fba47b4f735",
    "actionTime": 1560163956000,
    "count": 2,
    "createTime": 1560163956413,
    "deleted": false,
    "description": "This Alarm is activated when call failed.",
    "deviceId": "7dc4ba4bdaf94db38ae862d6b31c0de5",
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "id": "41681f441e6443099a878fba47b4f735",
    "ip": "10.81.18.3",
    "logUploadFinished": false,
    "mac": "805ec0484b2f",
    "modifyTime": 1560164823566,
    "module": "",
    "name": "Call fail",
    "phone": "805ec0484b2f",
    "read": false,
    "reason": "Invite request no response",
    "regionId": "e89adb4d568c4c4fb474832953d57904",
    "regionName": "ccy",
    "severity": "Minor"
  },
  {
    "_id": "49b02e2463884b5992693b67acc9325d",
    "actionTime": 1559913380000,
    "count": 3,
    "createTime": 1559908641372,
    "deleted": false,
    "description": "This Alarm is activated when call failed.",
    "deviceId": "7dc4ba4bdaf94db38ae862d6b31c0de5",
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "id": "49b02e2463884b5992693b67acc9325d",
    "ip": "10.81.18.3",
    "logUploadFinished": false,
    "mac": "805ec0484b2f",
    "modifyTime": 1559913380934,
    "module": "",
    "name": "Call fail",

```

```

    "phone": "805ec0484b2f",
    "read": false,
    "reason": "Invite request no response",
    "regionId": "e89adb4d568c4c4fb474832953d57904",
    "regionName": "ccy",
    "severity": "Minor"
  },
  {
    "_id": "1b88e99757c448788cced892321f1c20",
    "actionTime": 1559811547000,
    "count": 1,
    "createTime": 1559811547300,
    "deleted": false,
    "description": "This Alarm is activated when failing to update configuration.",
    "deviceId": "7dc4ba4bdaf94db38ae862d6b31c0de5",
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "id": "1b88e99757c448788cced892321f1c20",
    "ip": "10.81.18.3",
    "logUploadFinished": false,
    "mac": "805ec0484b2f",
    "modifyTime": 1559811547373,
    "module": "",
    "name": "Update Configuration failure",
    "phone": "805ec0484b2f",
    "read": false,
    "reason": "Can't connect to server",
    "regionId": "e89adb4d568c4c4fb474832953d57904",
    "regionName": "ccy",
    "severity": "Critical"
  }
],
"enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
"limit": 20,
"orderbys": [
  {
    "field": "actionTime",
    "order": -1
  }
],
"severities": [
  "Major",
  "Critical",
  "Minor"
],
"skip": 0,
"total": 6
},
"ret": 6
}

```

## 5. Managing the Alarm Strategy

## 5.1. Adding the Alarm Strategy

### Request Method

- POST

### Request URL

- /api/open/v1/manager/pushstrategy/add

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
name	String	true	1/-	The name of the strategy.
alarmMode	List	true	1/-	The receiving strategy, one of inside or email.
receivers	List	true	1/-	The list of the receivers (the username of the administrator account or the sub-administrator account).
alarmContent	Object	true	1/-	The alarm details.
alarmContent.normalList	List			The minor alarm.
alarmContent.seriousList	List			The major alarm.
alarmContent.fatalList	List			The critical alarm.
enable	Boolean	false	0/-	The strategy status, defaults to enabled.
cycle	int	true		The frequency that the system reminds you when an alarm occurs. One of 0 (the alarm is reminded immediately), 1 (the alarm is reminded every day), or 2 (the alarm is reminded every week).
deviceRange	Object	true		The range of devices that this strategy applies to.
deviceRange.all	boolean			Apply this strategy to all devices or not.
deviceRange.regionIds	List			The site ID.
deviceRange.groupIds	List			The group ID.
deviceRange.deviceIds	List			The device ID.

### Example Request

```
{
```



```

"alarmContent": {
  "fatalList": [
    "Bad quality call",
    "Register failure",
    "Update Firmware failure",
    "Update Configuration failure",
    "Program exit"
  ],
  "seriousList": null,
  "normalList": null
},
"alarmModes": [
  "inside",
  "email"
],
"cycle": 0,
"deviceRange": {
  "all": false,
  "deviceIds": [
    "d1240ab174e3401097c0a9f2799792ea",
    "bae7d08054f44866b12be1b26f64f3de"
  ],
  "groupIds": null,
  "regionIds": null
},
"name": "system_default",
"receivers": [
  "zhangms@yealink.com"
],
"enable": true
}

```

### Example of Successful Response

```

{
  "data": "386b48411bde4783affcc8d7b1be5910",
  "ret": 1
}

```

### Response Description

- The returned data is the strategy ID.

## 5.2. Retrieving the Strategy by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/pushstrategy/getList

## Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
key	String	false	0/-	The keywords for searching.
limit	Integer	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
skip	Integer	false	0/-	

## Example Request

```
{
  "autoCount": true,
  "limit": 10000,
  "orderbys": [
    {
      "field": "createTime",
      "order": -1
    }
  ],
  "skip": 0,
  "total": 2
}
```

## Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "skip": null,
    "limit": 1,
    "total": 3,
    "autoCount": true,
    "orderbys": [{
      "field": "createTime",
      "order": -1
    }],
    "data": [{
      "createTime": 1596008035629,
      "modifyTime": 1596008035641,
      "deleted": false,

```

```

    "_id": "801f13277b314375819971757a769779",
    "enterpriseId": "3e8e172739824e41ad12bf54fe0b9911",
    "name": "2",
    "alarmModes": [
      "email"
    ],
    "enable": false,
    "receivers": [
      "zhangms@yealink.com"
    ],
    "cycle": 0,
    "alarmContent": {
      "normalList": null,
      "seriousList": null,
      "fatalList": [
        "Register failure"
      ]
    },
    "deviceRange": {
      "all": true,
      "regionIds": null,
      "groupIds": null,
      "deviceIds": null
    },
    "triggerMode": null,
    "defaultStrategy": false,
    "source": "dm",
    "resellerId": null,
    "id": "801f13277b314375819971757a769779"
  }],
  "enterpriseId": "3e8e172739824e41ad12bf54fe0b9911",
  "key": null
},
"error": null
}

```

### 5.3. Editing the Alarm Strategy

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/pushstrategy/edit

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
-----------	-----------	----------	--------	-------------

Parameter	Data Type	Required	Length	Description
id	String	true		The name of the strategy you want to edit.
name	String	true	1/-	The name of the strategy.
alarmMode	List	false	1/-	The receiving strategy, one of inside or email.
receivers	List	false	1/-	The list of the receivers (the username of the administrator account or the sub-administrator account).
alarmContent	Object	false	1/-	The alarm details.
alarmContent.normalList	List	false		The minor alarm.
alarmContent.seriousList	List	false		The major alarm.
alarmContent.fatalList	List	false		The critical alarm.
enable	Boolean	false	0/-	The strategy status, defaults to enabled.
cycle	int	true	false	The frequency that the system reminds you when an alarm occurs. One of 0 (the alarm is reminded immediately), 1 (the alarm is reminded every day), or 2 (the alarm is reminded every week).
deviceRange	Object	true	false	The range of devices that this strategy applies to.
deviceRange.all	boolean		false	Apply this strategy to all devices or not.
deviceRange.regionIds	List	false		The site ID.
deviceRange.groupIds	List	false		The group ID.
deviceRange.deviceIds	List	false		The device ID.
receivers	List	true	false	The alarm receiver.

### Example Request

```
{
  "alarmModes": [
    "email",
    "inside"
  ],
  "id": "488b3e3b80884fc7958bf189a4af4b7c",
  "name": "test",
  "receivers": [
    "huangxb-sub-9@yealink.com",
    "huangxb-sub-25@yealink.com",
  ]
}
```

```

    "fsdfsfsdfsdsd@qq.com"
  ],
  "enable": true
}

```

### Example of Successful Response

```

{
  "data": "488b3e3b80884fc7958bf189a4af4b7c",
  "ret": 1
}

```

### Response Description

- The returned data is the strategy ID.

## 5.4. Deleting a Batch of Alarm Strategies

### Request Method

- POST

### Request URL

- /api/open/v1/manager/pushstrategy/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
strategyIds	List	true	1/-	The list of the strategy IDs.
strategyIds.E	String	true	1/-	The strategy ID.

### Example Request

```

{
  "strategyIds": [
    "88b3exbn80884fc7958bf189a4af4b3es"
  ]
}

```

### Example of Successful Response

```

{
  "data": 1,
  "ret": 1
}

```

## 6. Uploading Files

When accessing the interfaces related to file, for example, adding the firmware or adding the resource files, you need to upload the related files to the server first.

### 6.1. Uploading the Firmware

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/firmware/uploadFile

#### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	true	1/-	

#### Example of Successful Response

```
{
  "data": {
    "path": "/usr/local/...",
    "fileName": "test-dmfile.rom",
  },
  "ret": 1
}
```

#### Response Description

The path in the returned data is the path for saving the files. **When you add the firmware, the address parameter is path.**

### 6.2. Uploading the Resource Files

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/resource/uploadFile

#### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	true	1/-	

## Example of Successful Response

```
{
  "data": {
    "path": "/usr/local/...",
    "fileName": "test-dmfile.png",
  },
  "ret": 1
}
```

### Response Description

The path in the returned data is the path for saving the files. **When you add the resource file, the address parameter is path.**

## 7. Managing the Call Statistics

### 7.1. Retrieving the Details of A Call

#### Request Method

- GET

#### Request URL

- /api/open/v1/manager/qoe/get

#### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	

#### Example Request

- /api/open/v1/manager/qoe/get?id=c5a56e74bab546c8bc3cccf2e82aeb0c

#### Example of Successful Response

```
{
  "data": {
    "callId": "0_3782102861@10.81.18.55",
    "callType": "p2p",
    "calleeURI": "\u003csip:225555555@uc77.yealink.com:5061\u003e",
    "caller": true,
    "callerURI": "\u003csip:0002@uc77.yealink.com:5061\u003e",
    "deviceName": "0002",
    "deviceType": "audio",
    "displayName": "",
    "duration": 8000,
    "endTime": 1560434910000,
    "enterpriseId": "6ab57e492e054d56a82cbabe8cabd0e3",
  }
}
```

```

"event": "0",
"firmwareVersion": "58.83.0.25",
"id": "c5a56e74bab546c8bc3cccf2e82aeb0c",
"inConversationalMosAvg": 4.3,
"inConversationalMosCur": 0.0,
"inConversationalMosMin": 4.3,
"inDelayAvg": 0,
"inDelayCur": 0,
"inDelayMax": 0,
"inJitterAvg": 3,
"inJitterCur": 0,
"inJitterMax": 3,
"inListenMosAvg": 4.3,
"inListenMosCur": 0.0,
"inListenMosMin": 4.3,
"inLossRateAvg": 0.0,
"inLossRateCur": 0.0,
"inLossRateMax": 0.0,
"inLossTotal": 0,
"inNoiseLevel": 0,
"inPayloadName": "G7221",
"inReceivePacketCur": 0,
"inReceivePacketTotal": 300,
"inSignalLevel": 0,
"ip": "10.81.18.55",
"mac": "805ec038e4a7",
"modelName": "SIP-T56A",
"outConversationalMosAvg": 0.0,
"outConversationalMosCur": 0.0,
"outConversationalMosMin": 0.0,
"outDelayAvg": 0,
"outDelayCur": 0,
"outDelayMax": 0,
"outJitterAvg": 0,
"outJitterCur": 0,
"outJitterMax": 0,
"outListenMosAvg": 0.0,
"outListenMosCur": 0.0,
"outListenMosMin": 0.0,
"outLossRateAvg": 0.0,
"outLossRateCur": 0.0,
"outLossRateMax": 0.0,
"outLossTotal": 0,
"outNoiseLevel": 0,
"outPayloadName": "G7221",
"outReceivePacketCur": 0,
"outReceivePacketTotal": 409,
"outSignalLevel": 0,
"quality": "Good",
"regionId": "9c09406cd299429eab698b67daad203e",
"regionName": "level2",
"reportTime": 1560434892640,
"serverType": "SIP",
"sessionId": "805ec038e4a7-0_3782102861@10.81.18.55",

```



```

    "startTime": 1560434902000,
    "time": 1560434910000,
    "username": "0002"
  },
  "ret": 1
}

```

## Response Description

Parameter	Data Type	Description
callId	String	The call ID.
callType	String	The call type.
calleeURI	String	The URL of the callee.
callerURI	String	The URL of the caller.
confURI	String	The configuration URL.
deviceName	String	The device name.
deviceType	String	The device type, one of video or audio.
displayName	String	The display name.
duration	Long	The call duration (ms).
endTime	Long	The timestamps of the end time.
enterpriseld	String	The enterprise ID.
event	String	The event.
firmwareVersion	String	The firmware version.
id	String	The main key.
ip	String	The device IP.
isCaller	Boolean	It is the caller or not.
mac	String	The MAC address.
modelName	String	The device model.
quality	String	The call quality, one of Good, Poor, or Bad.
regionId	String	The site ID that this call belongs to.
regionName	String	The name of the site that this call belongs to.
remoteIP	String	The IP of the remote party.
reportTime	Long	The time when the call statistics are reported.

Parameter	Data Type	Description
serverType	String	The name of the server.
sessionId	String	The session ID.
startTime	Long	The timestamps of the start time.
time	Long	The current time.
username	String	The username.

## 7.2. Retrieving the Call Statistics by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/qoe/getPagedList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
callId	String	false	0/-	
callType	String	false	0/-	
caller	Boolean	false	0/-	
endTime	Long	false	0/-	
firmwareVersion	String	false	0/-	
key	String	false	0/64	
limit	Integer	true	0/-	
macKey	String	false	0/-	
modelName	String	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
quality	String	false	0/-	

Parameter	Data Type	Required	Length	Description
regionIds	List	false	0/-	
regionIds.E	String	false	0/-	
skip	Integer	true	0/-	
staffType	String	false	0/-	
startTime	Long	false	0/-	

### Example Request

```
{
  "autoCount": true,
  "endTime": 1562083199059,
  "limit": 50,
  "orderbys": [
    {
      "field": "startTime",
      "order": -1
    }
  ],
  "skip": 0,
  "startTime": 1561996800000
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [],
    "endTime": 1562083199059,
    "enterpriseId": "b3f6fbeb4363418995ad7bafea3790d2",
    "limit": 50,
    "orderbys": [
      {
        "field": "startTime",
        "order": -1
      }
    ],
    "skip": 0,
    "startTime": 1561996800000,
    "total": 0
  },
  "ret": 0
}
```

## 7.3. Retrieving the Call Statistics

### Request Method

- POST

### Request URL

- /api/open/v1/manager/qoe/getStatistics

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
endTime	Long	false	0/-	The timestamps of the end time (milliseconds).
startTime	Long	false	0/-	The timestamps of the start time (milliseconds).

### Example Request

```
{
  "endTime": 1562083199059,
  "startTime": 1561996800000
}
```

### Example of Successful Response

```
{
  "data": {
    "badPercentage": 0.0,
    "badTotal": 0,
    "goodPercentage": 0.0,
    "goodTotal": 0,
    "meetingPercentage": 0.0,
    "meetingTotal": 0,
    "p2pPercentage": 0.0,
    "p2pTotal": 0,
    "poorPercentage": 0.0,
    "poorTotal": 0,
    "voiceMailPercentage": 0.0,
    "voiceMailTotal": 0
  },
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
badPercentage	double	The proportion of the bad call quality.

Parameter	Data Type	Description
badTotal	long	Bad call quality.
goodPercentage	double	The proportion of the good call quality.
goodTotal	long	Good call quality.
meetingPercentage	double	The proportion of conferences.
meetingTotal	long	The total number of conferences.
p2pPercentage	double	The proportion of P2P calls.
p2pTotal	long	The total number of P2P calls.
poorPercentage	double	The proportion of the poor call quality.
poorTotal	long	Poor call quality.
voiceMailPercentage	double	The proportion of voice mails.
voiceMailTotal	long	The total number of voice mails.

## 8. Managing the Firmware

For more information about uploading files, see Section [6.1. Uploading the Firmware](#).

### 8.1. Adding the Firmware

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/firmware/add

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
address	String	true	1/-	The firmware address that you specify when uploading firmware file.
description	String	false	0/1024	
filename	String	true	1/-	The file name.
modelIds	List	true	1/-	The list of the supported model IDs.
modelIds.E	String	true	1/-	The ID of the supported model.

Parameter	Data Type	Required	Length	Description
name	String	true	1/128	The firmware name.
version	String	true	1/64	The version number.
avUnit	String	false	1/-	The device firmware (MAIN_UNIT) or the firmware its accessories (PART_UNIT).
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone.

### Example Request

```
{
  "address": "firmware/2680cc3128bb4eab92c57bb1f54432c3/T54S(T52S)-factory-70.84.0.15.rom",
  "description": "",
  "filename": "T54S(T52S)-factory-70.84.0.15",
  "modelIds": [
    "740b5620916a4d0a9a45171630076528"
  ],
  "name": "test openapi name",
  "version": "70.84.0.15",
  "avUnit": "MAIN_UNIT",
  "platformType": "phone"
}
```

### Example of Successful Response

```
{
  "data": "9555429999974f838cf5124029b31fc5",
  "ret": 1
}
```

### Response Description

- The returned data is the firmware ID.

## 8.2. Retrieving the Firmware Details

### Request Method

- GET

### Request URL

- /api/open/v1/manager/firmware/get

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/firmware/get?id=af0a8c45176d4492afde3c67de03b5d6

### Example of Successful Response

```
{
  "data": {
    "_id": "af0a8c45176d4492afde3c67de03b5d6",
    "address": "firmware/2680cc3128bb4eab92c57bb1f54432c3/T54S(T52S)-factory-70.84.0.15.rom",
    "createTime": 1561985671969,
    "deleted": false,
    "description": " test openapi name",
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "filename": "T54S(T52S)-factory-70.84.0.15",
    "id": "af0a8c45176d4492afde3c67de03b5d6",
    "models": [
      {
        "id": "740b5620916a4d0a9a45171630076528",
        "name": "SIP-T52S",
        "type": "audio"
      }
    ],
    "modifyTime": 1561985671972,
    "name": "test openapi name",
    "url": "https://test-dmfile.yealinkops.com/",
    "version": "YHC20-1.410.0.30",
    "platformType": "phone"
  },
  "ret": 1
}
```

## 8.3. Retrieving the Firmware Details by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/firmware/getPagedList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
key	String	false	0/-	The keywords for searching.

Parameter	Data Type	Required	Length	Description
modelId	String	false	0/-	The model ID.
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
skip	Integer	false	0/-	

### Example Request

```
{
  "key": "628",
  "autoCount": true,
  "limit": 10,
  "modelId": "0e044f03c2634c049c0e8a634ff9b788",
  "skip": 0
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "eeca670403184e02815fae987bd75c30",
        "address": "https://test-dmfile.yealinkops.com/firmware/339ba58d910944b8ad2bf6a85032a0e2/YHC20-1.410.0.30.rom",
        "avlUnit": "MAIN_UNIT",
        "clientType": "sip",
        "createTime": 1606266320441,
        "description": null,
        "enterpriseId": "339ba58d910944b8ad2bf6a85032a0e2",
        "filename": "YHC20-1.410.0.30",
        "id": "eeca670403184e02815fae987bd75c30",
        "latest": false,
        "mainUnitModels": [],
        "models": [
          {
            "id": "1627792eeabe4651a6adf2c0dd2aff39",
            "name": "SIP-T58(SFB)",
            "type": "audio"
          }
        ]
      }
    ]
  }
}
```



```

    },
    {
      "id": "3c9e7f4b287f47a49c6a6b3c79bb1c01",
      "name": "SIP-T58",
      "type": "video"
    }
  ],
  "modifyTime": 1606268003438,
  "name": "testtt",
  "ownRegion": true,
  "path": null,
  "pathName": "kiwi/region1Acee",
  "pushMode": null,
  "pushRules": null,
  "regionId": "ee8f5ac6adc840cab83a4e2f9d0149a5",
  "regionName": "region1Acee",
  "source": "MANAGER",
  "specialNum": null,
  "syncStatus": "success",
  "updateTime": 1606266320442,
  "url": "https://test-dmfile.yealinkops.com/",
  "version": "YHC20-1.410.0.30",
  "platformType": "phone"
}
],
"limit": 20,
"orderbys": [
  {
    "field": "createTime",
    "order": -1
  }
],
"skip": 0,
"total": 10
},
"ret": 10
}

```

## 8.4. Editing the Firmware

### Request Method

- POST

### Request URL

- /api/open/v1/manager/firmware/edit

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
address	String	true	1/-	The file address that you specify when uploading the file.
description	String	false	0/1024	The description.
filename	String	true	1/-	The file name.
id	String	true	1/-	
modelIds	List	true	1/-	The list of the supported model IDs.
modelIds.E	String	true	1/-	The ID of the supported model.
name	String	true	1/128	The firmware name.
version	String	true	1/64	The version number.
avlUnit	String	false	1/-	The device firmware (MAIN_UNIT) or the firmware its accessories (PART_UNIT).
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone.

### Example Request

```
{
  "address": "firmware/2680cc3128bb4eab92c57bb1f54432c3/T54S(T52S)-factory-70.84.0.15.rom",
  "description": "question",
  "filename": "T54S(T52S)-factory-70.84.0.15",
  "id": "af0a8c45176d4492afde3c67de03b5d6",
  "modelIds": [
    "740b5620916a4d0a9a45171630076528"
  ],
  "name": "firmware1",
  "version": "70.84.0.15"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 8.5. Deleting the Firmware

### Request Method

- POST

### Request URL

- /api/open/v1/manager/firmware/delete

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

**Example Request**

```
{
  "ids": [
    "9555429999974f838cf5124029b31fc5"
  ]
}
```

**Example of Successful Response**

```
{
  "ret": 0
}
```

**8.6. Pushing the Firmware****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/firmware/provision

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	true	1/-	The firmware ID.
updateInfo	List	false	1/-	This parameter is required for mvc device.
updateInfo.modelName	String	true	1/-	The device model.
updateInfo.versionId	String	true	1/-	The firmware ID.

Parameter	Data Type	Required	Length	Description
platformType	String	false	1/-	<a href="#">The device type.</a>

### Example Request

```
{
  "deviceIds": [
    "a9fdd1a7809d4829a1dd8630277fe49f"
  ],
  "typeExtra": {
    "content": "c2526453bfcc44ada182648c86b67cfe"
  }
  "updateInfo": [
    {
      modelName: "CP900"
      versionId: "3d2b8a6965574e5897e63ef61d6e0546"
    }
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 9. Managing the Model

### 9.1. Obtaining the List of the Models

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/model/getList

#### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
filter	Boolean	false	0/-	If this value is false, obtain all the models of non-accessories; if it is true, obtain all the models of added devices. It defaults to false.

### Example Request

- /api/open/v1/manager/model/getList

### Example of Successful Response

```
{
  "data": [
    {
      "id": "7c37f5cd868a4c65ba18028c1eebb5de",
      "name": "CP920",
      "type": "audio"
    },
    {}
  ],
  "ret": 51
}
```

### Response Description

Parameter	Data Type	Description
id	String	
name	String	
type	String	The model type of the device, one of video or audio

## 10. Managing the Resource

For more information about uploading files, see Section [6.2. Uploading the Resource Files](#).

### 10.1. Adding the Resource

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/resource/add

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	true	1/128	The resource file.
description	String	false	0/128	The resource description.
name	String	true	1/64	The resource name.

Parameter	Data Type	Required	Length	Description
type	String	true	1/-	The resource type: 1.dstTemplate 2.trustCA 3.btoe 4.license 5.serverCA 6.languagePackage 7.moh 8.ime 9.xmlContacts 10.csvContacts 11.ringtone 12.setting_ring 13.wallpaper 14.screensaver 15.logo 16.authority 17.catalogueTemplate 18.keyLayoutTemplate 19.replaceRuleTemplate 20.dialNowTemplate 21.other 22.software
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone.

### Example of Successful Response

```
{
  "data": {
    "_id": "35e2038467074849985729e555b0cfac",
    "address": "/usr/local/yealink/dm_data/cfg/resource/1563865367499/wsX.jpg",
    "createTime": 1562121255731,
    "deleted": false,
    "description": "thewallpaper",
    "enterpriseId": "190552ddb284c24a174e9dd1293b314",
    "filename": "wsX.jpg",
    "id": "35e2038467074849985729e555b0cfac",
    "modifyTime": 1562121255731,
    "name": "wsTest",
    "type": "wallpaper",
    "url": "https://test-dmfile.yealinkops.com/"
  },
  "ret": 1
}
```

## 10.2. Obtaining the Resource Details

### Request Method

- GET

### Request URL

- /api/open/v1/manager/resource/get

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/resource/get?id=35e2038467074849985729e555b0cfac

## Example of Successful Response

```
{
  "data": {
    "_id": "35e2038467074849985729e555b0cfac",
    "address": "resource/test/wsX.jpg",
    "createTime": 1562121255731,
    "deleted": false,
    "description": "thewallpaper",
    "enterpriseId": "1905552ddb284c24a174e9dd1293b314",
    "filename": "wsX.jpg",
    "id": "35e2038467074849985729e555b0cfac",
    "modifyTime": 1562121255731,
    "name": "wsTest",
    "type": "wallpaper",
    "url": "https://test-dmfile.yealinkops.com/"
  },
  "ret": 1
}
```

## Response Description

Parameter	Data Type	Description
address	String	The address of the uploaded file.
createTime	Long	
deleted	Boolean	
description	String	The file description.
enterpriseId	String	
filename	String	
id	String	
modifyTime	Long	
name	String	
type	String	<a href="#">The resource type.</a>
url	String	The domain name of the uploaded file.

## 10.3. Retrieving the Resource by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/resource/getPagedList

## Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
key	String	false	0/-	The keywords for searching.
type	String	false	0/-	<a href="#">The resource type.</a>

## Example Request

```
{
  "key": null,
  "type": "wallpaper"
}
```

## Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "4b1cbbbc10dd4ef1b409727017a9490a",
        "address": "https://test-dmfile.yealinkops.com/resource/339ba58d910944b8ad2bf6a85032a0e2/1606266678996/contact.xml",
        "description": null,
        "enterpriseId": "339ba58d910944b8ad2bf6a85032a0e2",
        "filename": "contact.xml",
        "id": "4b1cbbbc10dd4ef1b409727017a9490a",
        "name": "x1tes",
        "ownRegion": true,
        "path": null,
        "pathName": kiwi,
        "regionId": "e2a66b15dfdf4b6cae2d0dbb8f4e8783",
        "regionName": kiwi,
        "syncStatus": "success",
        "type": "xmlContacts",
        "updateTime": 1606266685759,
        "url": "https://test-dmfile.yealinkops.com/"
        "platformType": "phone"
      }
    ],
    "limit": 20,
    "orderbys": [
      {
        "field": "createTime",
        "order": -1
      }
    ],
    "skip": 0,
  }
}
```



```

    "total": 30
  },
  "ret": 20
}

```

## 10.4. Updating the Resource

### Request Method

- POST

### Request URL

- /api/open/v1/manager/resource/update

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
address	String	true	1/128	The address of the resource file.
description	String	false	0/128	The description of the resource.
filename	String	true	1/64	The file name of the resource.
id	String	true	1/-	
name	String	true	1/64	The name of the resource.
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone.
type	String	true	1/-	<a href="#">The resource type</a> .

### Example Request

```

{
  "address": "resource/2680cc3128bb4eab92c57bb1f54432c3/1559634180942/001.GUI.Chinese_S.lang",
  "description": "testing1",
  "filename": "001.GUI.Chinese_S.lang",
  "id": "43ab22bde1d14ffabcb14a99a8e9dccb",
  "name": "233",
  "platformType": "phone",
  "type": "xmlContacts"
}

```

### Example of Successful Response

```

{
  "data": {
    "_id": "43ab22bde1d14ffabcb14a99a8e9dccb",
    "address": "resource/2680cc3128bb4eab92c57bb1f54432c3/1559634180942/001.GUI.Chinese_S.lang",

```

```

    "createTime": 1561985673530,
    "deleted": false,
    "description": "testing1",
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "filename": "001.GUI.Chinese_S.lang",
    "id": "43ab22bde1d14ffabcb14a99a8e9dccb",
    "modifyTime": 1561985674169,
    "name": "233",
    "type": "languagePackage",
    "url": "https://test-dmfile.yealinkops.com/"
  },
  "ret": 1
}

```

## 10.5. Deleting a Batch of Resource

### Request Method

- POST

### Request URL

- /api/open/v1/manager/resource/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

### Example Request

```

{
  "ids": [
    "904bec66128946f384849b6101e333c7"
  ]
}

```

### Example of Successful Response

```

{
  "ret": 0
}

```

## 10.6. Pushing the Resource

### Request Method

- POST

### Request URL

- /api/open/v1/manager/resource/provision

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs.
deviceIds.E	String	true	1/-	The device ID.
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	true	1/-	The ID of the content or the resource, for example, the ID of the wallpaper or the message to be sent.
typeExtra.type	String	true	1/-	<a href="#">The resource type</a> , for example, the wallpaper. If it is not the resource task (for example, resetting), this parameter is not required.

### Example Request

```
{
  "contentType": "wallpaper",
  "deviceIds": [
    "623e96f890184628926d860a75226eda"
  ],
  "typeExtra": {
    "content": "bfdb260a302e463095d3f0e3340cf09b",
    "type": "wallpaper"
  }
}
```

### Example of Successful Response

```
{
  "data": [],
  "ret": 0
}
```

## 11. Managing Accounts

## 11.1. Adding SfB Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/addSfb

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
extension	String	false	0/128	The extension.
password	String	true	0/128	The password.
pin	String	--	0/128	The PIN code.
pinEdited	Boolean	true	0/-	The PIN code is edited or not.
pwdEdited	Boolean	true	0/-	The password is edited or not.
sfbServer	String	false	0/256	The login address (the SfB server address).
type	String	false	0/-	The type.
username	String	--	0/128	Configure either the username or the PIN code.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

#### Note:

You should at least provide one item of the account information or the PIN information: PIN information: extension, PIN Account information: username, password, sfbServer.

### Example Request

```
{
  "password": "20200504",
  "sfbServer": "y154@yealinksfb.com",
  "type": "SFB",
  "username": "y154@yealinksfb.com",
  "pinEdited": false,
  "pwdEdited": true
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.2. Editing SfB Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/editSfb

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
extension	String	false	0/128	The extension.
id	String	true	1/-	The main key , it is required when editing the account.
password	String	true	0/128	The password.
pin	String	--	0/128	The PIN code.
pinEdited	Boolean	true	0/-	The PIN code is edited or not.
pwdEdited	Boolean	true	0/-	The password is edited or not.
sfbServer	String	false	0/256	The login address (the SfB server address).
type	String	false	0/-	The type.
username	String	--	0/128	Configure either the username or the PIN code.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

#### Note:

You should at least provide one item of the account information or the PIN information: PIN information: extension, PIN Account information: username, password, sfbSerber.

### Example Request

```
{
  "id": "d11155ec96634b069a65e792f321b934",
  "password": "Yealink54",
  "pinEdited": false,
  "pwdEdited": false,
  "sfbServer": "y154@yealinksfb.com",
  "type": "SFB",
  "username": "y155@yealinksfb.comedited"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.3. Adding SIP Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/addSip

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
sipRegisterName	String	true	1/128	The registration name.
username	String	true	1/128	The username.
password	String	true	1/128	The password.
sipDisplayName	String	false	0/128	The display name.
sipLabel	String	false	0/128	The label.
sipServer1	String	true	1/256	The address of the SIP server 1.
sipPort1	String	true	1/-	The port of the SIP server 1.
sipServer2	String	false	0/256	The address of the SIP server 2.
sipPort2	String	false	0/-	The port of the SIP server 2.
type	String	false	0/-	The type.
remark	String	false	1/512	The remark.

Parameter	Data Type	Required	Length	Description
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "sipRegisterName": "2552",
  "username": "2552",
  "password": "*****",
  "sipLabel": "2552",
  "sipDisplayName": "2552",
  "sipServer1": "ume.yealink.com",
  "sipPort1": "5061",
  "sipServer2": "ume.yealink.com",
  "sipPort2": "5060",
  "type": "SIP"
}
```

### Example of Successful Response

```
{ "data": null,
  "error": null,
  "ret": 0
}
```

## 11.4. Editing SIP Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/editSip

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
sipRegisterName	String	true	1/128	The registration name.
username	String	true	1/128	The username.
password	String	true	1/128	The password.
sipDisplayName	String	false	0/128	The display name.

Parameter	Data Type	Required	Length	Description
sipLabel	String	false	0/128	The label.
sipServer1	String	true	1/256	The address of the SIP server 1.
sipPort1	String	true	1/-	The port of the SIP server 1.
sipServer2	String	false	0/256	The address of the SIP server 2.
sipPort2	String	false	0/-	The port of the SIP server 2.
type	String	false	0/-	The type.
id	String	true	1/-	The main key , it is required when editing the account.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "sipRegisterName": "2552edited",
  "username": "2552edited",
  "password": "***#***",
  "sipLabel": null,
  "sipDisplayName": null,
  "sipServer1": "ume.yealink.com",
  "sipPort1": "5061",
  "sipServer2": null,
  "sipPort2": "5060",
  "id": "2ae5c1a471dc477ebc82837948fbbe93",
  "type": "SIP"
}
```

### Example of Successful Response

```
{
  "ret": 0,
  "data": null,
  "error": null
}
```

## 11.5. Adding Cloud Accounts

### Request Method

- POST

### Request URL



- /api/open/v1/manager/staff/addCloud

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
cloudServer	String	true	1/256	The server address.
password	String	true	1/128	The password.
username	String	true	1/128	The username.
type	String	true	0/-	The account type.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "cloudServer": "cloud.yealinkops.com",
  "password": "1001",
  "type": "CLOUD",
  "username": "1001"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.6. Editing Cloud Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/editCloud

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
-----------	-----------	----------	--------	-------------

Parameter	Data Type	Required	Length	Description
cloudServer	String	true	1/256	The server address.
id	String	true	1/-	The main key, it is required when editing the account.
password	String	true	1/128	The password.
username	String	true	1/128	The username.
type	String	true	0/-	The account type.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "cloudServer": "cloud.yealinkops.com",
  "id": "851d51577e044368b30d4656f14093bc",
  "password": "1001",
  "type": "CLOUD",
  "username": "1001edited"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.7. Adding YMS Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/addYms

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
password	String	true	0/128	The password.

Parameter	Data Type	Required	Length	Description
type	String	true	0/-	The type.
username	String	true	0/128	The username.
ymsPort	String	true	1/-	The server port.
ymsServer	String	true	1/256	The server address.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "password": "123456",
  "type": "YMS",
  "username": "2553",
  "ymsPort": "5061",
  "ymsServer": "10.200.110.230"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.8. Editing YMS Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/editYms

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	The main key, it is required when editing the account.
password	String	true	0/128	The password.

Parameter	Data Type	Required	Length	Description
username	String	true	0/128	The username.
ymsPort	String	true	1/-	The server port.
ymsServer	String	true	1/256	The server address.
type	String	true	0/-	The account type.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "id": "a7d3516d579a4d5387f8b0254908e219",
  "password": "123456",
  "pinEdited": false,
  "pwdEdited": false,
  "type": "YMS",
  "username": "2553edited",
  "ymsPort": "5061",
  "ymsServer": "10.200.110.230"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.9. Adding H.323 Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/addH323

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
extension	String	true	1/128	The extension.

Parameter	Data Type	Required	Length	Description
h323GatekeeperPort1	String	true	-/-	The port of the GK server 1.
h323GatekeeperPort2	String	true	-/-	The port of the GK server 2.
h323GatekeeperServer1	String	false	0/256	GK server 1.
h323GatekeeperServer2	String	false	0/256	GK server 2.
h323GatekeeperType	String	true	1/-	The GK type, one of 0 (disabled), 1 (automatic), or 2 (manual).
password	String	true	1/128	The password.
type	String	false	0/-	The type.
username	String	true	1/128	The username.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "extension": "2002",
  "h323GatekeeperPort1": "1719",
  "h323GatekeeperPort2": "1719",
  "h323GatekeeperServer1": "10.200.112.72",
  "h323GatekeeperType": "0",
  "type": "H323",
  "username": "2002"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.10. Editing H.323 Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/editH323

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
extension	String	true	1/128	The extension.
h323GatekeeperPort1	String	true	-/-	The port of the GK server 1.
h323GatekeeperPort2	String	true	-/-	The port of the GK server 2.
h323GatekeeperServer1	String	false	0/256	GK server 1.
h323GatekeeperServer2	String	false	0/256	GK server 2.
h323GatekeeperType	String	true	1/-	The GK type, one of 0 (disabled), 1 (automatic), or 2 (manual).
password	String	true	1/128	The password.
type	String	false	0/-	The type.
username	String	true	1/128	The username.
remark	String	false	1/512	The remark.
regionId	String	false	1/-	The site ID. If you do not set the value of this parameter, it defaults to the root site.

### Example Request

```
{
  "extension": "2002",
  "h323GatekeeperPort1": "1719",
  "h323GatekeeperPort2": "1719",
  "h323GatekeeperServer1": "10.200.112.72",
  "h323GatekeeperType": "0",
  "id": "dee98a1b5cdb401792d995ab0b671768",
  "type": "H323",
  "username": "2002edited"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.11. Retrieving Accounts by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/findPagedList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
searchKey	String	false	0/-	The keywords for searching.
skip	Integer	false	0/-	
type	String	false	0/-	The account type.

### Example Request

```
{
  "autoCount": false
}
```

### Example of Successful Response

```
{
  "autoCount": false,
  "data": [
    {
      "bindDevice": true,
      "extension": null,
      "id": "9b0fda593bdc43a883db2a3a993ebef9",
      "ownRegion": true,
      "pathName": "kiwi",
      "regionId": "0a75883069c149b5932054188ff44995",
    }
  ]
}
```

```

    "regionName": "kiwi",
    "remark": null,
    "server": "10.200.108.48",
    "sipRegisterName": "40408",
    "type": "SIP",
    "username": "40408"
  },
  {
    "bindDevice": false,
    "extension": null,
    "id": "d8cd6a2c5a344021a3e5be5ad29afa16",
    "ownRegion": true,
    "pathName": "kiwi",
    "regionId": "0a75883069c149b5932054188ff44995",
    "regionName": "kiwi",
    "remark": null,
    "server": "10.200.112.184",
    "sipRegisterName": "tess",
    "type": "SIP",
    "username": "sss"
  }
],
"limit": null,
"orderbys": null,
"skip": null,
"total": 2
}

```

## Response Description

- The returned result

Parameter	Type	Description
id	String	
username	String	The username.
extension	String	The extension number.
bindDevice	String	This account is associated with a device or not.
type	String	The account type.
sipRegisterName	String	The registered name.
server	String	The server address. When there is two addresses, only one will be used.
remark	String	The remark.



## 11.12. Deleting a Batch of Accounts

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	0/-	The list of the account IDs.

### Example Request

```
{
  "ids": [
    "904bec66128946f384849b6101e333c7"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 11.13. Obtaining the Password According to the Account Information

### Request Method

- POST

### Request URL

- /api/open/v1/manager/staff/getPassword

### Request Parameter

Only support SIP account.

- Body parameter

Parameter	Data Type	Required	Length	Description
type	String	true	1/-	The account type.
username	String	true	1/-	The username.

### Example Request

```
{
  "type": "SIP",
  "username": "200012"
}
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "password": "Oo9T33XCVCU2wLEaa1CnGA==",
    "type": "SIP",
    "username": "200012"
  },
  "error": null
}
```

### Notes

- Decode the password with Base64 and get the returned value.
- Decrypt the decoded password with accessKeyId and AES/ECB/PKCS5Padding algorithm.
- Following is the related implementation code of java.

```
import javax.crypto.*;

/**
 * @param: content is the encrypted password and key is the accessKeyId
 */
public static String decryptAes(String content, String key) {
    if (content == null || content.isEmpty() || key == null || key.isEmpty()) {
        return "";
    }

    try {
        SecretKeySpec keySpec = new SecretKeySpec(key.getBytes(), "AES");
        Cipher cipher = Cipher.getInstance("AES/ECB/PKCS5Padding");
        cipher.init(Cipher.DECRYPT_MODE, keySpec);
        byte[] original = cipher.doFinal(decodeBase64(content));
        return new String(original);
    } catch (NoSuchAlgorithmException | NoSuchPaddingException | InvalidKeyException |
BadPaddingException | IllegalBlockSizeException e) {
        return content;
    }
}
```

## 12. Managing Configuration Files

## 12.1. Managing Mac Configuration

### 12.1.1 Uploading a MAC Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/configFile/upload

#### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	true	1/-	Name the file with the device mac or sn, for example, xxxxx.cfg.
<b>Example of Successful Response</b>				

```
{
  "ret": 0
}
```

### 12.1.2. Retrieving the MAC Configuration by Paging

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/configFile/getList

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
macSearchKey	String	false	0/-	The keywords (MAC) used for searching.
modelId	String	false	0/-	The model ID.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	

Parameter	Data Type	Required	Length	Description
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
searchKey	String	false	0/-	The keywords used for searching.
skip	Integer	false	0/-	

### Example Request

```
{
  "autoCount": true,
  "limit": 20,
  "orderbys": [
    {
      "field": "modifyTime",
      "order": -1
    }
  ],
  "skip": 0
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "4dac9edcffc04ae089207502c15f5c6d",
        "content": "#!version:1.0.0.1\n\n### This file is the exported MAC-all.cfg.\n\n###  
For security, the following parameters with password haven't been display in this  
file.\n###static.account.1.password = \n###",
        "createTime": 1606120607208,
        "deleted": false,
        "devices": [
          {
            "firmware": "122.9.255.55",
            "mac": "000000002d23",
            "model": {
              "id": "994623e496254154acf5da5fa6f2bfa3",
              "name": "MP58(SFB)",
              "type": null
            }
          }
        ]
      },
      {
        "enterpriseId": "339ba58d910944b8ad2bf6a85032a0e2",
        "fileName": "000000002D23.cfg",
        "firmware": "122.9.255.55",
        "id": "4dac9edcffc04ae089207502c15f5c6d",

```

```

    "localUpload": false,
    "mac": "000000002d23",
    "modifyTime": 1606287723387,
    "name": "000000002d23.cfg",
    "pathName": "kiwi",
    "regionId": "e2a66b15dfdf4b6cae2d0dbb8f4e8783",
    "regionName": "kiwi",
    "sessionId":
"k39A8hPDuPZv6eIcLJn6QeAf3k6s20j1YEgK0yeVFAY+ZK6T6bYndNVComLbs3w1mu+svrVQZwbUMCu/y9w9J6CQIDbrAHFr
xTWumBEONKM=",
    "size": 2623,
    "platformType": "phone",
    "uploader": null
  },
  {}
],
"enterpriseId": "339ba58d910944b8ad2bf6a85032a0e2",
"limit": 10,
"macSearchKey": null,
"modelId": null,
"orderbys": [
  {
    "field": "modifyTime",
    "order": -1
  }
],
"regionIds": [
  "e2a66b15dfdf4b6cae2d0dbb8f4e8783"
],
"searchKey": null,
"skip": 0,
"total": 1,
"uploader": "455a702cd5c24af0a0957f3b48e05a12"
},
"ret": 19
}

```

### 12.1.3. Deleting a Batch of MAC Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/configFile/batchDelete

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	false	0/-	The list of the main keys.

Parameter	Data Type	Required	Length	Description
ids.E	String	false	0/-	The ID of the main key.

#### Example Request

```
{
  "ids": [
    "1c864e96ac844bcfbfa5663a7835c174",
    "c2a3cbaed7ac46b28361940f58e88c79"
  ]
}
```

#### Example of Successful Response

```
{
  "data": 2,
  "ret": 1
}
```

#### Response Description

- The returned data is the number of records being deleted.

### 12.1.4. Pushing the MAC Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/configFile/sendToDevice

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	The ID of the MAC configuration.

#### Example Request

```
{
  "id": "bd5d9da523aa44019392176b6ceab69c"
}
```

#### Example of Successful Response

```
{
  "ret": 0
}
```

### 12.1.5 Downloading the MAC Configuration

#### Request Method

- GET

#### Request URL

- /api/open/v1/manager/configFile/download

#### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

#### Example Request

- /api/open/v1/manager/configFile/download?id=35e2038467074849985729e555b0cfac

## 12.2. Managing Site Configuration

### 12.2.1 Adding a Site Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/regionConfig/upload

#### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgtext</code> .	1/-	The configuration file.
cfgText	String	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgtext</code> .	1/-	The text containing configuration lines.
regionId	String	true	1/-	The site ID.

Parameter	Data Type	Required	Length	Description
description	String	false	1/-	The description.

### Example Request

- Configuration file

Parameter	Value
file	E://001565test.cfg
regionId	2a6fca1e273c4fde920e9b956a4d8e73

- The text containing configuration lines (Note: "\n" is the line feed character generated by the text)

Parameter	Value
cfgText	static.syslog.enable=0\nstatic.syslog.level=3\nccall_waiting.tone=0\nfeatures.key_tone=0
regionId	2a6fca1e273c4fde920e9b956a4d8e73

### Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "id": null,
    "regionId": "cd205e1812bb4d75a3f2cf7fbbbb2689",
    "regionName": "Kiwi/kiwiApi",
    "description": "test-API",
    "modifyTime": 1610625408149,
    "content": "#!version:1.0.0.1\n\n### This file is the exported MAC-
all.cfg.\n\nphone_setting.custom_headset_mode_status = 1\nvoice.ring_vol = 9\n### Static
Configuration ###\nstatic.network.wifi.internet_port.type =
0\nstatic.network.wifi.ip_address_mode = 0\nstatic.network.wifi.ipv6_icmp_v6.enable =
1\nstatic.network.wifi.ipv6_internet_port.type = 0\nstatic.network.wifi.ipv6_prefix =
64\nstatic.network.wifi.ipv6_static_dns_enable = 0\nstatic.network.wifi.preference =
0\nstatic.network.wifi.static_dns_enable = 0\n"
  },
  "error": null
}
```

## 12.2.2 Editing the Site Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/regionConfig/edit



## Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	The ID of the site configuration.
file	MultipartFile	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgtext</code> .	1/-	The configuration file.
cfgText	String	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgtext</code> .	1/-	The text containing configuration lines.
description	String	false	1/-	The description.

## Example Request

- Configuration file

Parameter	Value
file	E://001565test.cfg
id	3220497cde524dcaba3fc53aa5e919be

- The text containing configuration lines (Note: "\n" is the line feed character generated by the text)

Parameter	Value
cfgText	static.syslog.enable=0\nstatic.syslog.level=3\ncall_waiting.tone=0\nfeatures.key_tone=0
id	3220497cde524dcaba3fc53aa5e919be

## Example of Successful Response

```
{
  "ret": 1,
  "data": "3220497cde524dcaba3fc53aa5e919be",
  "error": null
}
```

## Response Description

`data` is the ID of the returned `regionConfig`.

## 12.2.3 Viewing the Details of Site Configuration

### Request Method

- GET

### Request URL

- /api/open/v1/manager/regionConfig/getById

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/regionConfig/getById?id=35e2038467074849985729e555b0cfac

### Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "createTime": 1610626414097,
    "modifyTime": 1610627679209,
    "deleted": false,
    "_id": "3220497cde524dcaba3fc53aa5e919be",
    "enterpriseId": "3bdb96ca5fe143e7be877670ca50166c",
    "regionName": "kiwiApi",
    "regionId": "2a6fca1e273c4fde920e9b956a4d8e73",
    "content":
    "#!version:1.0.0.1\r\nstatic.network.wifi.ipv6_internet_port.ip=0\r\nstatic.network.wifi.ipv6_internet_port.type=0\r\nstatic.network.wifi.ipv6_prefix=64\r\nstatic.network.wifi.ipv6_static_dns_enable=0\r\nstatic.network.wifi.preference=0\r\nstatic.network.wifi.static_dns_enable=0\r\nstatic.syslog.enable=0\r\nstatic.syslog.level=3\r\nstatic.syslog.log_level=3\r\nstatic.watch_dog.enable=1\r\nncall_waiting.tone=0\r\nfeatures.key_tone=0\r\nfeatures.send_key_tone=0\r\n",
    "description": "test-api",
    "id": "3220497cde524dcaba3fc53aa5e919be"
  },
  "error": null
}
```

### Response Description

Parameter	Type	Description
id	String	The ID of the site configuration.
regionName	String	The site name.

Parameter	Type	Description
description	String	The description.
regionId	List	The site ID.
id	String	The ID of the site configuration.

## 12.2.4 Retrieving Site Configuration by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/regionConfig/getList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
modelId	String	false	0/-	The model ID.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
searchKey	String	false	0/-	The keywords for searching.
skip	Integer	false	0/-	
regionIds	List	false	0/-	
regionIds.E	String	false	0/-	

### Example Request

```
{
  "autoCount": true,
}
```

### Example of Successful Response

```

{
  "ret": 2,
  "data": {
    "skip": null,
    "limit": null,
    "total": 2,
    "autoCount": true,
    "orderbys": [
      {
        "field": "modifyTime",
        "order": -1
      }
    ],
    "data": [
      {
        "createTime": 1610626414097,
        "modifyTime": 1610627679209,
        "deleted": false,
        "_id": "3220497cde524dcaba3fc53aa5e919be",
        "enterpriseId": "3bdb96ca5fe143e7be877670ca50166c",
        "regionName": "kiwi/kiwiApi",
        "regionId": "2a6fca1e273c4fde920e9b956a4d8e73",
        "content":
        "#!version:1.0.0.1\r\nstatic.network.wifi.ipv6_internet_port.ip=0\r\nstatic.network.wifi.ipv6_internet_port.type=0\r\nstatic.network.wifi.ipv6_prefix=64\r\nstatic.network.wifi.ipv6_static_dns_enable=0\r\nstatic.network.wifi.preference=0\r\nstatic.network.wifi.static_dns_enable=0\r\nstatic.syslog.enable=0\r\nstatic.syslog.level=3\r\nstatic.syslog.log_level=3\r\nstatic.watch_dog.enable=1\r\nncall_waiting.tone=0\r\nnfeatures.key_tone=0\r\nnfeatures.send_key_tone=0\r\n",
        "description": "test-api",
        "id": "3220497cde524dcaba3fc53aa5e919be"
      },
      {
        "createTime": 1610627639039,
        "modifyTime": 1610627639040,
        "deleted": false,
        "_id": "470791249bf247f789e71ecf39678afb",
        "enterpriseId": "3bdb96ca5fe143e7be877670ca50166c",
        "regionName": "kiwi/kiwiApi-1",
        "regionId": "c2d5a03245384dcb8f47e53d0da1fa63",
        "content":
        "#!version:1.0.0.1\r\nstatic.network.wifi.ipv6_internet_port.ip=0\r\nstatic.network.wifi.ipv6_internet_port.type=0\r\nstatic.network.wifi.ipv6_prefix=64\r\nstatic.network.wifi.ipv6_static_dns_enable=0\r\nstatic.network.wifi.preference=0\r\nstatic.network.wifi.static_dns_enable=0\r\nstatic.syslog.enable=0\r\nstatic.syslog.level=3\r\nstatic.syslog.log_level=3\r\nstatic.watch_dog.enable=1\r\nncall_waiting.tone=0\r\nnfeatures.key_tone=0\r\nnfeatures.send_key_tone=0\r\n",
        "description": "test-api",
        "id": "470791249bf247f789e71ecf39678afb"
      }
    ]
  },
  "error": null
}

```

## 12.2.5 Deleting the Site Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/regionConfig/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

### Example Request

```
{
  "ids": [
    "955542999974f838cf5124029b31fc5"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": 1,
  "error": null
}
```

## 12.2.6 Pushing the Site Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/regionConfig/pushConfig

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
-----------	-----------	----------	--------	-------------

Parameter	Data Type	Required	Length	Description
configBlockId	String	true	0/-	The ID of the site configuration.
offset	Integer	true	0/-	The time offset of the UTC (GMT). For example, if the time zone is UTC-5, the time offset is -18800 (-5 X 60 X 60).
platformType	String	false	0/-	<a href="#">The device type</a> . It defaults to phone.

**Example Request**

```
{
  "configBlockId": "eee5f828fe7f4ec0a1b063418a969ec5",
  "offset": "28800"
}
```

**Example of Successful Response**

```
{
  "ret": 0,
  "data": null,
  "error": null
}
```

**12.2.7 Downloading the Site Configuration****Request Method**

- GET

**Request URL**

- /api/open/v1/manager/regionConfig/download

**Request Parameter**

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

**Example Request**

- /api/open/v1/manager/regionConfig/download?id=35e2038467074849985729e555b0cfac

**12.3. Managing Group Configuration**

### 12.3.1 Adding a Group Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/groupConfig/add

#### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
file	MultipartFile	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The text containing configuration lines.
cfgText	String	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The text containing configuration lines.
deviceIds	String	false	1/-	The device ID. Use commas to separate device IDs.
description	String	false	1/-	The description.
name	String	true	1/64	The name.
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone.

#### Example Request

- Configuration file

Parameter	Value
file	E://001565test.cfg
name	api-Group-01

- The text containing configuration lines (Note: "\n" is the line feed character generated by the text)

Parameter	Value
-----------	-------

Parameter	Value
cfgText	static.syslog.enable=0\nstatic.syslog.level=3\nncall_waiting.tone=0\nfeatures.key_tone=0
name	api-Group-01

### Example of Successful Response

```
{
  "ret": 1,
  "data": "05940ab17e9f4a50bf6b619062d154f4",
  "error": null
}
```

## 12.3.2. Editing the Group Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/groupConfig/edit

### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	The ID of the group configuration.
file	MultipartFile	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The text containing configuration lines.
cfgText	String	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The text containing configuration lines.
deviceIds	String	false	1/-	The device ID. Use commas to separate device IDs.
description	String	false	1/-	The description.
name	String	true	1/64	The name.



### Example Request

- Configuration file

Parameter	Value
file	E://001565test.cfg
name	api-Group-01
id	2cf2d2b812454754871be9e98de4d67b

- The text containing configuration lines (Note: "\n" is the line feed character generated by the text)

Parameter	Value
cfgText	static.syslog.enable=0\nstatic.syslog.level=3\ncall_waiting.tone=0\nfeatures.key_tone=1
name	being-edit-1
id	2cf2d2b812454754871be9e98de4d67b
<b>Example of Successful Response</b>	

```
{
  "ret": 1,
  "data": "2dc2340d3aa74d82bddc1d9f0f72815b",
  "error": null
}
```

### Response Description

`data` is the ID of returned `groupConfig`.

## 12.3.3 Viewing the Details of Group Configuration

### Request Method

- GET

### Request URL

- `/api/open/v1/manager/groupConfig/getById`

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
configBlockId	String	true	0/-	

### Example Request

- `/api/open/v1/manager/groupConfig/getById?configBlockId=35e2038467074849985729e555b0cfac`

**Example of Successful Response**

```

{
  "ret": 1,
  "data": {
    "id": "63b530c005454f6fa4c56691c6a9d151",
    "name": "test1ffffggggggg",
    "description": null,
    "platformType": "phone",
    "bindDevices": [
      {
        "id": "c761a6656dda4e13bf28226143d3d837",
        "phone": "2643",
        "model": "w80B",
        "region": null,
        "mac": "805ec03e7204",
        "staffs": []
      },
      {
        "id": "fb5a6af57da04bb095f34f4644f58367",
        "phone": "2387",
        "model": "SIP-T54S",
        "region": null,
        "mac": "001565bbb1a9",
        "staffs": []
      }
    ]
  },
  "error": null
}

```

**Response Description**

Parameter	Type	Description
id	String	The ID of the group configuration.
name	String	The name.
description	String	The description.
platformType	String	<a href="#">The device type.</a>
bindDevices	List	The devices associated with the group configuration.
id	String	The device ID.
phone	String	The device name.
model	String	The model.
region	String	The site which the device belongs to.
mac	String	The device MAC.

Parameter	Type	Description
staffs	List	The information of accounts associated with the devices.

### 12.3.4. Deleting the Group Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/groupConfig/batchDelete

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	
ids.E	String	true	1/-	

#### Example Request

```
{
  "ids": [
    "955542999974f838cf5124029b31fc5"
  ]
}
```

#### Example of Successful Response

```
{
  "ret": 1,
  "data": 1,
  "error": null
}
```

### 12.3.5. Retrieving Group Configuration by Paging

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/groupConfig/getAllList

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
modelId	String	false	0/-	The model ID.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
searchKey	String	false	0/-	The keywords for searching.
skip	Integer	false	0/-	

#### Example Request

```
{
  "autoCount": true,
}
```

#### Example of Successful Response

```
{
  "ret": 2,
  "data": {
    "skip": null,
    "limit": null,
    "total": 2,
    "autoCount": false,
    "orderbys": [
      {
        "field": "createTime",
        "order": -1
      }
    ],
    "data": [
      {
        "id": "eee5f828fe7f4ec0a1b063418a969ec5",
        "name": "iiiiiiiiiiiiiiiiiiii",
        "status": null,
        "modifyTime": 1598429534231,
        "description": "idsa",
        "hasTimedTask": false,
        "deviceCount": 1,
      }
    ]
  }
}
```

```

    "platformType": "phone",
    "bindDevices": [
      {
        "id": "896fd6262e3f4ae7b1304809745025cc",
        "phone": "059381",
        "model": "w60B",
        "region": null,
        "mac": "805ec00e78ef",
        "staffs": []
      }
    ]
  },
  {
    "id": "bd6abe9914464cb8a9ebdb6db2c601dc",
    "name": "asfdasfasfdasfas",
    "status": null,
    "modifyTime": 1598429502600,
    "description": "asdf",
    "hasTimedTask": false,
    "deviceCount": 1,
    "platformType": "phone",
    "bindDevices": [
      {
        "id": "c761a6656dda4e13bf28226143d3d837",
        "phone": "2643",
        "model": "w80B",
        "region": null,
        "mac": "805ec03e7204",
        "staffs": []
      }
    ]
  }
]
},
"error": null
}

```

### 12.3.6. Moving Devices to Other Group Configurations

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/groupConfig/editDeviceGroup

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
-----------	-----------	----------	--------	-------------

Parameter	Data Type	Required	Length	Description
oldGroupConfigId	String	false	0/-	The ID of the old group configuration.
macs	List	true	0/-	The MAC list.
newGroupConfigId	String	true	0/-	The ID of the new group configuration.

### Notes

If the ID of the old group configuration is empty, you can add devices to the new group configuration. Otherwise, you need to delete the devices in the old group configuration first and then add the devices to the new group configuration.

### Example Request

```
{
  "oldGroupConfigId": "585b49f8c3c14a7b33f8460421a40285",
  "macs": ["805ec04bdb93", "805ec03e7204"],
  "newGroupConfigId": "585b49f8c3c14a7baaf8460621a40286"
}
```

### Example of Successful Response

```
{
  "ret": 0,
  "data": null,
  "error": null
}
```

## 12.3.7. Updating the Template of Group Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/groupConfig/pushConfig

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
configBlockId	String	true	0/-	The ID of the group configuration.
offset	Integer	true	0/-	The time offset of the UTC (GMT). For example, if the time zone is UTC+8, the time offset is 28800 (8 X 60 X 60).

### Example Request

```
{
  "configBlockId": "eee5f828fe7f4ec0a1b063418a969ec5",
  "offset": "28800"
}
```

### Example of Successful Response

```
{
  "ret": 0,
  "data": null,
  "error": null
}
```

## 12.3.8 Download the Group Configuration

### Request Method

- GET

### Request URL

- /api/open/v1/manager/groupConfig/download

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/groupConfig/download?id=35e2038467074849985729e555b0cfac

## 12.4 Managing Model Configuration

### 12.4.1 Adding a Model Configuration

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/modelConfig/add

#### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
-----------	-----------	----------	--------	-------------

Parameter	Data Type	Required	Length	Description
file	MultipartFile	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The configuration file.
cfgText	String	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The text containing configuration lines.
modelId	String	true	1/-	The model ID. You can select only one model for each site.
description	String	false	1/-	The description.
name	String	true	1/64	The name.
regionId	String	true	1/-	The site ID.

### Example Request

- Configuration file

Parameter	Value
file	E://001565test.cfg
name	api-Group-01
regionId	c2d5a03245384dcb8f47e53d0da1fa63
modelId	c39522dcfd1e4ec78d5c44d23b2825c9
description	modelConfig-test

- The text containing configuration lines (Note: "\n" is the line feed character generated by the text)

Parameter	Value
cfgText	static.syslog.enable=0\nstatic.syslog.level=3\ncall_waiting.tone=0\nfeatures.key_tone=0
name	api-Group-01
regionId	c2d5a03245384dcb8f47e53d0da1fa63
modelId	c39522dcfd1e4ec78d5c44d23b2825c9
description	modelConfig-test

### Example of Successful Response



```
{
  "ret": 1,
  "data": "05940ab17e9f4a50bf6b619062d154f4",
  "error": null
}
```

## 12.4.2 Editing the Model Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/modelConfig/edit

### Request Parameter

- Form parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	The ID of the model configuration.
file	MultipartFile	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The configuration file.
cfgText	String	One of <code>cfgText</code> and <code>file</code> is required. If both of them exist, the <code>file</code> parameter takes precedence over <code>cfgText</code> .	1/-	The text containing configuration lines.
description	String	false	1/-	The description.
name	String	true	1/64	The name.
regionId	String	false	1/-	The site ID.

### Example Request

- Configuration file

Parameter	Value
file	E://001565test.cfg
name	api-Group-01
regionId	c2d5a03245384dcb8f47e53d0da1fa63

Parameter	Value
description	test-API1211
id	b3837709538a4c56be887518d9f092de

- The text containing configuration lines (Note: "\n" is the line feed character generated by the text)

Parameter	Value
cfgText	static.syslog.enable=0\nstatic.syslog.level=3\ncall_waiting.tone=0\nfeatures.key_tone=0
name	api-Group-01
regionId	c2d5a03245384dcb8f47e53d0da1fa63
description	test-API1211
id	b3837709538a4c56be887518d9f092de

### Example of Successful Response

```
{
  "ret": 1,
  "data": "2dc2340d3aa74d82bddc1d9f0f72815b",
  "error": null
}
```

### Response Description

data is the ID of the returned `modelConfig`.

## 12.4.3 Viewing the Details of Model Configuration

### Request Method

- GET

### Request URL

- `/api/open/v1/manager/modelConfig/getById`

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- `/api/open/v1/manager/modelConfig/getById?id=35e2038467074849985729e555b0cfac`

### Example of Successful Response

--

```

{
  "ret": 1,
  "data": {
    "createTime": 1610675537621,
    "modifyTime": 1610680685191,
    "deleted": false,
    "_id": "b3837709538a4c56be887518d9f092de",
    "name": "modelConfig-test",
    "content": "
{\\\"static.network.wifi.ipv6_internet_port.ip\\\":\\\"0\\\",\\\"static.network.wifi.ipv6_internet_port.type\\\":\\\"0\\\",\\\"static.network.wifi.ipv6_prefix\\\":\\\"64\\\",\\\"static.network.wifi.ipv6_static_dns_enable\\\":\\\"0\\\",\\\"static.network.wifi.preference\\\":\\\"0\\\",\\\"static.network.wifi.static_dns_enable\\\":\\\"0\\\",\\\"static.syslog.enable\\\":\\\"0\\\",\\\"static.syslog.level\\\":\\\"3\\\",\\\"static.syslog.log_level\\\":\\\"3\\\",\\\"static.watch_dog.enable\\\":\\\"1\\\",\\\"call_waiting.tone\\\":\\\"0\\\",\\\"features.key_tone\\\":\\\"0\\\",\\\"features.send_key_tone\\\":\\\"0\\\"}\",
    "cfgContent":
    \"#!version:1.0.0.1\\r\\nstatic.network.wifi.ipv6_internet_port.ip=0\\r\\nstatic.network.wifi.ipv6_internet_port.type=0\\r\\nstatic.network.wifi.ipv6_prefix=64\\r\\nstatic.network.wifi.ipv6_static_dns_enable=0\\r\\nstatic.network.wifi.preference=0\\r\\nstatic.network.wifi.static_dns_enable=0\\r\\nstatic.syslog.enable=0\\r\\nstatic.syslog.level=3\\r\\nstatic.syslog.log_level=3\\r\\nstatic.watch_dog.enable=1\\r\\ncall_waiting.tone=0\\r\\nfeatures.key_tone=0\\r\\nfeatures.send_key_tone=0\\r\\n\",
    "description": "test-API1",
    "modelId": "4f17f6d3e4df41558a38b86342e64719",
    "enterpriseId": "3bdb96ca5fe143e7be877670ca50166c",
    "regionId": "c2d5a03245384dcb8f47e53d0da1fa63",
    "regionName": "kiwiApi-1",
    "pathName": "kiwi/kiwiApi-1",
    "id": "b3837709538a4c56be887518d9f092de"
  },
  "error": null
}

```

## Response Description

Parameter	Type	Description
id	String	The ID of the model configuration.
name	String	The name.
description	String	The description.
content	String	Set configuration lines in JSON format.
cfgContent	String	Set configuration lines in text format.
modelId	String	The model ID.
regionId	String	The site ID.
regionName	String	The site name.
pathName	String	The site path.

## 12.4.4 Retrieving Model Configuration by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/modelConfig/getList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
modelId	String	false	0/-	The model ID.
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
searchKey	String	false	0/-	The keywords for searching.
skip	Integer	false	0/-	

### Example Request

```
{
  "autoCount": true,
}
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "skip": null,
    "limit": null,
    "total": 1,
    "autoCount": true,
    "orderbys": [
      {
        "field": "createTime",
        "order": -1
      }
    ]
  }
}
```

```

    ],
    "data": [
      {
        "id": "f27a56d2690b4020bd3633b022779657",
        "name": "modelConfig-test",
        "content": "
{\\static.network.wifi.ipv6_internet_port.ip\\":\\\"0\\\",\\static.network.wifi.ipv6_internet_port.type\\":\\\"0\\\",\\static.network.wifi.ipv6_prefix\\":\\\"64\\\",\\static.network.wifi.ipv6_static_dns_enable\\":\\\"0\\\",\\static.network.wifi.preference\\":\\\"0\\\",\\static.network.wifi.static_dns_enable\\":\\\"0\\\",\\static.syslog.enable\\":\\\"0\\\",\\static.syslog.level\\":\\\"3\\\",\\static.syslog.log_level\\":\\\"3\\\",\\static.watch_dog.enable\\":\\\"1\\\",\\call_waiting.tone\\":\\\"0\\\",\\features.key_tone\\":\\\"0\\\",\\features.send_key_tone\\":\\\"0\\\"}",
        "cfgContent": "
#!/version:1.0.0.1\\r\\nstatic.network.wifi.ipv6_internet_port.ip=0\\r\\nstatic.network.wifi.ipv6_internet_port.type=0\\r\\nstatic.network.wifi.ipv6_prefix=64\\r\\nstatic.network.wifi.ipv6_static_dns_enable=0\\r\\nstatic.network.wifi.preference=0\\r\\nstatic.network.wifi.static_dns_enable=0\\r\\nstatic.syslog.enable=0\\r\\nstatic.syslog.level=3\\r\\nstatic.syslog.log_level=3\\r\\nstatic.watch_dog.enable=1\\r\\ncall_waiting.tone=0\\r\\nfeatures.key_tone=0\\r\\nfeatures.send_key_tone=0\\r\\n",
        "description": "test-API1",
        "modelId": "c39522dcfd1e4ec78d5c44d23b2825c9",
        "enterpriseId": "3bdb96ca5fe143e7be877670ca50166c",
        "modelName": "SIP-T54S",
        "regionId": "c2d5a03245384dcb8f47e53d0da1fa63",
        "regionName": "kiwiApi-1",
        "path": null,
        "pathName": "kiwi/kiwiApi-1",
        "ownRegion": true
      }
    ],
    "searchKey": null,
    "enterpriseId": "3bdb96ca5fe143e7be877670ca50166c",
    "pmsResModelConfigIds": null,
    "regionIds": null
  },
  "error": null
}

```

## 12.4.5 Deleting the Model Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/modelConfig/batchDelete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
ids	List	true	1/-	

Parameter	Data Type	Required	Length	Description
ids.E	String	true	1/-	

### Example Request

```
{
  "ids": [
    "955542999974f838cf5124029b31fc5"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": 1,
  "error": null
}
```

## 12.4.6 Pushing the Model Configuration

### Request Method

- POST

### Request URL

- /api/open/v1/manager/modelConfig/pushConfig

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
configBlockId	String	true	0/-	The ID of the model configuration.
offset	Integer	true	0/-	The time offset of the UTC (GMT). For example, if the time zone is UTC-5, the time offset is -18800 (-5 X 60 X 60).
deviceIds	List	true	1/-	The list of the device IDs. The model of these devices should be compliant with the model of the selected model configuration.
deviceIds.E	String	true	1/-	

### Example Request

```
{
  "configBlockId": "eee5f828fe7f4ec0a1b063418a969ec5",
  "offset": "28800",
  "deviceIds": [
    "1f5529999974f838cf5124029b31fc5",
    "2g55129999974f838cf5124029b31fc5"
  ]
}
```

### Example of Successful Response

```
{
  "ret": 0,
  "data": null,
  "error": null
}
```

## 12.4.7 Downloading the Model Configuration

### Request Method

- GET

### Request URL

- /api/open/v1/manager/modelConfig/download

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	0/-	

### Example Request

- /api/open/v1/manager/modelConfig/download?id=35e2038467074849985729e555b0cfac

## 13. Managing Sites

### 13.1. Adding Sites

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/region/add

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
description	String	false	0/1024	The site description.
name	String	true	1/64	The site name.
parentId	String	true	0/-	The ID of the parent site.

### Example Request

```
{
  "name": "site1",
  "parentId": "e89adb4d568c4c4fb474832953d57904"
}
```

### Example of Successful Response

```
{
  "data": {
    "_id": "f7820280d7d14342a4df3c9626f30898",
    "createTime": 1561985783546,
    "defaultRegion": false,
    "deleted": false,
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "id": "f7820280d7d14342a4df3c9626f30898",
    "level": 2,
    "modifyTime": 1561985783547,
    "name": "site1",
    "parentId": "e89adb4d568c4c4fb474832953d57904",
    "path": "e89adb4d568c4c4fb474832953d57904:f7820280d7d14342a4df3c9626f30898",
    "sequence": 7
  },
  "ret": 1
}
```

### Response Description

Parameter	Data Type	Description
_id	String	The main key.
createTime	Long	
defaultRegion	Boolean	
deleted	Boolean	
description	String	
enterpriseId	String	
id	String	



Parameter	Data Type	Description
level	Integer	The site level.
modifyTime	Long	
name	String	
parentId	String	
path	String	
sequence	Long	The sequence of the site.

## 13.2. Obtaining All Sites

### Request Method

- GET

### Request URL

- /api/open/v1/manager/region/getAll

### Request Parameter

- Query parameter

### Example Request

- /api/open/v1/manager/region/getAll

### Example of Successful Response

```
{
  "data": [
    {
      "_id": "4b57e5f9a43c4ddda463ad2e751e456d",
      "createTime": 1548754689480,
      "defaultRegion": false,
      "deleted": false,
      "enterpriseId": "b3f6fbef4363418995ad7bafef3790d2",
      "id": "4b57e5f9a43c4ddda463ad2e751e456d",
      "level": 4,
      "modifyTime": 1548754689512,
      "name": "3456",
      "parentId": "d57b7a76541c4dd5ad830ed2983ef2e6",
      "path":
      "4edf19c4c067486389c9ae469193c02f:c1637604f0b44f679ba54fd705e6d14b:d57b7a76541c4dd5ad830ed2983ef2e6:4b57e5f9a43c4ddda463ad2e751e456d",
      "sequence": 1
    },
    {}
  ],
  "ret": 198
}
```

## 13.3. Editing Sites

### Request Method

- POST

### Request URL

- /api/open/v1/manager/region/edit

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
description	String	false	0/1024	The site description.
id	String	true	1/-	
name	String	true	1/64	The site name.
parentId	String	true	0/-	The ID of the parent site. When you edit the root site, this parameter is not required.

### Example Request

```
{
  "id": "e7f142b57b684963b89a31fdd2e075f6",
  "name": "hhhhhhhhhhhhhhhhhh",
  "parentId": "4edf19c4c067486389c9ae469193c02f"
}
```

### Example of Successful Response

```
{
  "ret": 0
}
```

## 13.4. Deleting Sites

### Request Method

- POST

### Request URL

- /api/open/v1/manager/region/delete

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	

**Example Request**

```
{
  "id": "f7820280d7d14342a4df3c9626f30898"
}
```

**Example of Successful Response**

```
{
  "data": 1,
  "ret": 1
}
```

**Response Description**

- The returned data is the number of records being deleted.

## 13.5. Retrieving for Sites

**Request Method**

- POST

**Request URL**

- /api/open/v1/manager/region/getSiteList

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
searchKey	boolean	false	0/-	The keywords (the site name or the site ID) for searching.
autoCount	boolean	false	0/-	
limit	Integer	false	0/-	
skip	Integer	false	0/-	

**Example Request**

```
{
  "limit": 1
}
```

**Example of Successful Response**

```

{
  "ret": 1,
  "data": [
    {
      "id": "0a75883069c149b5932054188ff44995",
      "name": "Yealink",
      "number": "uhcq5dve"
    }
  ],
  "error": null
}

```

## 14. Managing Timer Tasks

### 14.1. Adding Timer Tasks

#### Request Method

- POST

#### Request URL

- /api/open/v1/manager/task/add

#### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	true	1/-	The list of the device IDs. You are required to enter this value only when you set the deviceScope as custom.
deviceIds.E	String	true	1/-	The device ID.
initTime	Long	true	1/-	The Unix timestamps (milliseconds) of the time when you initiate the task.
initTimeStr	String	true	1/-	The date and time format string (milliseconds). It indicates the time and date when you initiate the task.
executeTime	String	true	1/-	The date and time format string (milliseconds). It indicates the time and date when the first time you execute the task.
deviceScope	String	true	1/-	The device type you can select when adding timer tasks, one of all, region, group, or custom.
deviceScopelds	List	false	1/-	Enter this value according to the deviceScope value you select.
zoneld	String	true	1/-	The time zone.

Parameter	Data Type	Required	Length	Description
name	String	true	1/64	The task name.
offset	Integer	true	1/-	The time offset of the UTC (GMT). For example, if the time zone is UTC+8, the time offset is 28800 (8 X 60 X 60).
repeatType	String	true	1/-	<a href="#">The repetition type of the task.</a>
type	String	true	1/-	<a href="#">The task type.</a>
typeExtra	TypeExtraVo	true	1/-	The parameter of the task content.
typeExtra.content	String	true	1/-	The ID of the content or the resource. For example, the ID of the wallpaper or the message to be sent
typeExtra.type	String	true	1/-	<a href="#">The resource type</a> , for example, the wallpaper. If it is not the resource task (for example, resetting), this parameter is not required.
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone.

### Example Request

```
{
  "deviceIds": [
    "1bb56c67bf2949b398cab50c3baff7dc"
  ],
  "initTime": 1656560851000,
  "initTimeStr" : "2020/07/03 19:00:00",
  "executeTime": "2020/07/03 19:10:00",
  "zoneId": "China_Standard_Time" ,
  "deviceScope": "custom",
  "name": "1562128570098",
  "offset": 28800,
  "repeatType": "once",
  "type": "message",
  "typeExtra": {
    "content": "timertask",
    "duration": 5
  }
}
```

### Example of Successful Response

```
{
  "data": [],
  "ret": 0
}
```

## Response Description

- The returned data is the list of the unsupported devices.

Parameter	Data Type	Description
key	String	The reason why the device is not supported.
mac	String	
name	String	

## 14.2. Obtaining the Details of Timer Tasks

### Request Method

- GET

### Request URL

- /api/open/v1/manager/task/get

### Request Parameter

- Query parameter

Parameter	Data Type	Required	Length	Description
id	String	true	1/-	

### Example Request

- /api/open/v1/manager/task/get?id=1bb56c67bf2949b398cab50c3baff7dc

### Example of Successful Response

```
{
  "data": {
    "_id": "1bb56c67bf2949b398cab50c3baff7dc",
    "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
    "executeTime": "2022/06/30 11:47:31",
    "id": "1bb56c67bf2949b398cab50c3baff7dc",
    "initTime": 1656560851000,
    "name": "1562128570098",
    "nextExecTime": 1656560851000,
    "repeatType": "once",
    "status": "0",
    "type": "message",
    "typeExtra": {
      "content": "add timetask",
      "duration": 5
    },
    "platformType": "phone"
  },
  "ret": 1
}
```

}

**Response Description**

Parameter	Data Type	Description
enterpriseld	String	
id	String	
initTime	Long	
name	String	
repeatType	String	
status	String	
type	String	
typeExtra	TypeExtra	
typeExtra.content	String	The ID of the content or the resource, for example, the ID of the wallpaper or the message to be sent.
typeExtra.type	String	<a href="#">The resource type</a> , for example, the wallpaper. If it is not the resource task (for example, resetting), this parameter is not required.
platformType	String	<a href="#">The device type</a> .

**14.3. Retrieving Timer Tasks by Paging****Request Method**

- POST

**Request URL**

- /api/open/v1/manager/task/getPagedList

**Request Parameter**

- Body parameter

Parameter	Data Type	Required	Length	Description
abnormal	boolean	false	0/-	Only retrieve the abnormal task or not. If it is true, you can get the result containing only the abnormal tasks. If it is false, you can get the result containing all the tasks.
autoCount	boolean	false	0/-	

Parameter	Data Type	Required	Length	Description
key	String	false	0/-	The keyword for searching.
latestResult	String	false	0/-	The result, there are three values: 1, successful; -2, abnormal; -1, failed.
limit	Integer	false	0/-	
mac	String	false	0/-	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
repeatType	String	false	0/-	The repeat type.
skip	Integer	false	0/-	
status	String	false	0/-	
taskType	String	false	0/-	The task type.

### Example Request

```
{
  "limit": 1
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "1bb56c67bf2949b398cab50c3baff7dc",
        "createTime": 1562128570308,
        "deleted": false,
        "enterpriseId": "2680cc3128bb4eab92c57bb1f54432c3",
        "executeTime": "2022/06/30 11:47:31",
        "id": "1bb56c67bf2949b398cab50c3baff7dc",
        "initTime": 1656560851000,
        "initTimeStr": "2022/06/30 11:47:31",
        "modifyTime": 1562128570360,
        "name": "1562128570098",

```



```

    "nextExecTime": 1656560851000,
    "repeatType": "once",
    "status": "0",
    "type": "message",
    "typeExtra": {
      "content": "add timetask",
      "duration": 5
    },
    "platformType": "phone"
  }
],
"orderbys": [
  {
    "field": "status",
    "order": 1
  },
  {
    "field": "createTime",
    "order": -1
  }
],
"skip": 0,
"total": 1
},
"ret": 1
}

```

## 14.4. Retrieving the Task Results by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/task/findTaskResultPagedList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
taskId	String	false	0/-	The task ID.
autoCount	boolean	false	0/-	
searchKey	String	false	0/-	The keywords for searching.
result	String	false	0/-	The result of the executed task.
limit	Integer	false	0/-	
mac	String	false	0/-	

Parameter	Data Type	Required	Length	Description
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	
taskType	String	false	0/-	The task type.
skip	Integer	false	0/-	
startDateTime	Long	false	0/-	The timestamps of the start time.
endDateTime	Long	false	0/-	The timestamps of the end time.

### Example Request

```
{
  "autoCount": true,
  "limit": 10,
  "orderbys": [
    {
      "field": "createTime",
      "order": -1
    }
  ],
  "skip": 0
}
```

### Example of Successful Response

```
{
  "data": {
    "autoCount": true,
    "data": [
      {
        "_id": "b4001c47203441f6b495113dd876dba8",
        "createTime": 1562076086092,
        "deleted": false,
        "enterpriseId": "b3f6fbeb4363418995ad7bafea3790d2",
        "executeTime": 1562076086082,
        "id": "b4001c47203441f6b495113dd876dba8",
        "modifyTime": 1562076086092,
        "repeatType": "immed",
        "status": "0",
        "task": {
          "_id": "f15ecaeb311b49ac956dc1717a96dbb7",
          "createTime": 1562076086082,
          "deleted": false,
          "enterpriseId": "b3f6fbeb4363418995ad7bafea3790d2",

```

```
    "id": "f15ecaeb311b49ac956dc1717a96dbb7",
    "modifyTime": 1562119243254,
    "nextExecTime": 1562076086082,
    "repeatType": "immed",
    "status": "2",
    "type": "reboot",
    "typeExtra": {
      "duration": 5
    }
  },
  "taskId": "f15ecaeb311b49ac956dc1717a96dbb7",
  "taskType": "reboot"
},
{}
],
"limit": 10,
"orderbys": [
  {
    "field": "createTime",
    "order": -1
  }
],
"skip": 0,
"total": 285
},
"ret": 10
}
```

## 14.5. Updating Timer Tasks

### Request Method

- POST

### Request URL

- /api/open/v1/manager/task/update

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
deviceIds	List	false	0/-	The list of the device IDs. You are required to enter this value only when you set the deviceScope as custom.
deviceIds.E	String	false	0/-	The device ID.
id	String	true	1/-	
initTime	Long	true	1/-	The Unix timestamps of the first time you execute the task (milliseconds).
initTimeStr	String	true	1/-	The date and time format string (milliseconds). It indicates the time and date when you initiate the task.
executeTime	String	true	1/-	The date and time format string (milliseconds). It indicates the time and date when the first time you execute the task.
deviceScope	String	true	1/-	The device type you can select when adding timer tasks, one of all, region, group, or custom.
deviceScopelds	List	false	1/-	Enter this value according to the deviceScope value you select.
zoneld	String	true	1/-	The time zone.
name	String	true	1/64	The task name.
offset	Integer	true	1/-	The time offset of the UTC (GMT). For example, if the time zone is UTC-5, the time offset is -18800 (-5 X 60 X 60).
repeatType	String	true	1/-	The repeat type.
type	String	true	1/-	The task type.
typeExtra	TypeExtra	true	1/-	The parameter of the task content.

Parameter	Data Type	Required	Length	Description
typeExtra.content	String	true	1/-	The ID of the content or the resource, for example, the ID of the wallpaper or the message to be sent.
typeExtra.type	String	true	1/-	<a href="#">The resource type</a> , for example, the wallpaper. If it is not the resource task (for example, resetting), this parameter is not required.
platformType	String	false	1/-	<a href="#">The device type</a> . It defaults to phone

### Example Request

```
{
  "deviceIds": [
    "sba2a8s95f5a44cf9a1277d7acf848da"
  ],
  "id": "fba2a8795f5a44cf9a1277d7acf848da",
  "initTime": 1656560851000,
  "name": "1562032844117",
  "offset": 28800,
  "devicesScope": "custom",
  "repeatType": "once",
  "type": "message",
  "typeExtra": {
    "content": "add timetask",
    "duration": 5
  }
}
```

### Example of Successful Response

```
{
  "data": [],
  "ret": 0
}
```

### Response Description

- The returned data is the list of the unsupported devices.

Parameter	Data Type	Description
key	String	The reason why the device is not supported.
mac	String	
name	String	

## 14.6. Retrieving the Executed Task Records by Paging

### Request Method

- POST

### Request URL

- /api/open/v1/manager/task/findDetailResultPagedList

### Request Parameter

- Body parameter

Parameter	Data Type	Required	Length	Description
taskResultId	String	true	1/-	The ID of the executed task.
searchKey	String	false	1/-	The keywords for searching.
status	String	false	1/-	The the status of the executed task: 0, executing -1, failed 1, successful
autoCount	boolean	false	0/-	
skip	Integer	false	0/-	
limit	Integer	false	0/100	
orderbys	List	false	0/-	
orderbys.E	OrderBy	false	0/-	
orderbys.E.field	String	false	0/-	
orderbys.E.order	int	false	0/-	

### Example Request

```
{
  "taskResultId": "bb0f85d2e3ab4211a72c0ddf5945631d"
}
```

### Example of Successful Response

```
{
  "ret": 1,
  "data": {
    "skip": null,
    "limit": null,
    "total": 1,
    "autoCount": false,
```

```

"orderbys": null,
"data": [
  {
    "deviceId": "3a1f6ebed89d460cb4098f51a5675cec",
    "mac": "001565d4c887",
    "model": "SIP-T54S",
    "deviceName": "T54S",
    "deviceStatus": "offline",
    "failReason": "device_offline",
    "taskId": "2a52666bbfdd4554960e29a715b49a75",
    "ip": "10.81.99.68",
    "taskResultId": "bb0f85d2e3ab4211a72c0ddf5945631d",
    "status": "-1",
    "machineId": null,
    "clientType": "sip",
    "silentUpgrade": false
  }
]
},
"error": null
}

```

### Response Description

- The returned data is paging information of the executed tasks.

Parameter	Data Type	Description
deviceId	String	The device ID.
mac	String	The MAC address.
deviceName	String	The device name.
deviceStatus	String	The device status.
failReason	String	The reason for the failed task.
taskId	String	The task ID.
ip	String	The device IP.
taskResultId	String	The ID of the task result.
status	String	The task status.

## 15. Code Sample

## 15.1. Java

The specific method is in the main function and with references to related dependencies. Select the method according to the scenario.

```
import jodd.datetime.JDateTime;
import jodd.http.*;
import jodd.http.up.FileUploadable;
import jodd.json.JsonSerializer;
import jodd.util.MimeTypes;
import org.apache.commons.codec.binary.Base64;
import org.apache.commons.lang3.StringUtils;
import org.json.JSONObject;

import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import java.io.*;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;
import java.util.HashMap;
import java.util.Map;
import java.util.TreeMap;
import java.util.UUID;

public class YealinkOpenApiDemo {

    public final static String accessKeyId = "xxxxx";
    public final static String accessKeySecret = "xxxxx";
    /**
     * Note that 'base_url' should end with a slash(/)
     */
    public static String BASE_URL = "http://xxxxx/";

    public static final String ALGORITHM_NAME = "HmacSHA256";
    public static final String ENCODING = "UTF-8";
    public static final String SEPARATOR_LF = "\n";
    public static final String SEPARATOR_COLON = ":";
    public static final String SEPARATOR_AND = "&";
    public static final String SEPARATOR_EQUAL = "=";
    public static final String X_CA_KEY = "X-Ca-Key";
    public static final String X_CA_TIMESTAMP = "X-Ca-Timestamp";
    public static final String X_CA_NONCE = "X-Ca-Nonce";
    public static final String CONTENT_MD5 = "Content-MD5";
    public static final String X_CA_SIGNATURE = "X-Ca-Signature";

    public static void main(String[] args) throws IOException {
        deviceList();
        deviceEdit();
        regionAll();
        upload();
    }
}
```



```

/**
 * get request api demo(no params)
 * Note that the following uri cannot start with a slash(/)
 */
public static void regionAll() {
    String regionAllUri = "api/open/v1/manager/region/getAll";

    System.out.println(doRequest.get(BASE_URL + regionAllUri)
        .send()
        .bodyText());
}

/**
 * get request api demo(have params)
 */
public static void deviceEdit() {
    String deviceGetEditUri = "api/open/v1/manager/device/getEdit";
    System.out.println(doRequest.get(BASE_URL + deviceGetEditUri)
        .query("id", "e812201cd384449d86a0519e667ecadc")
        .send()
        .bodyText());
}

/**
 * post request api demo
 */
public static void deviceList() {
    String deviceListUri = "api/open/v1/manager/task/getPagedList";
    Map<String, Object> parameters = new HashMap<>();
    parameters.put("limit", 20);
    String content =doRequest.map2jsonstr(parameters);
    System.out.println(doRequest.post(BASE_URL + deviceListUri)
        .body(getBytesUtf8(content),MimeTypes.MIME_APPLICATION_JSON)
        .send()
        .bodyText());
}

public static void upload() throws IOException {

    String groupConfigAddUri = "api/open/v1/manager/groupConfig/add";

    System.out.println(doRequest.post(BASE_URL + groupConfigAddUri)
        .form("file", new File("E:\\\\805ec00fce19.cfg"))
        .form("name", "test open api")
        .send()
        .bodyText());
}

public static class doRequest extends HttpRequest {

```

```

public static HttpRequest get(String destination) {
    HttpRequest requestForDemo = new doRequest()
        .method("GET")
        .set(destination);
    return requestForDemo;
}

public static HttpRequest post(String destination) {
    HttpRequest requestForDemo = new doRequest()
        .method("POST")
        .set(destination);
    return requestForDemo;
}

@Override
public HttpResponse send() {

    sign();
    if (httpConnection == null) {
        open();
    }
    if (timeout != -1) {
        httpConnection.setTimeout(timeout);
    }
    HttpResponse httpResponse;
    try {
        OutputStream outputStream = httpConnection.getOutputStream();
        sendTo(outputStream);
        InputStream inputStream = httpConnection.getInputStream();
        httpResponse = HttpResponse.readFrom(inputStream);
    } catch (IOException ioex) {
        throw new HttpException(ioex);
    }

    boolean keepAlive = httpResponse.isConnectionPersistent();

    if (keepAlive == false) {
        // closes connection if keep alive is false, or if counter reached 0
        httpConnection.close();
        httpConnection = null;
    }

    return httpResponse;
}

@Override
public doRequest body(String body) {
    return (doRequest) super.body(body);
}

@Override
public doRequest body(byte[] content, String contentType) {
    return (doRequest) super.body(content, contentType);
}

```

```

}

public doRequest sign( ) {

    String timestamp = Long.toString(new JDateTIme ().getTimeInMillis());
    String nonce = randomUUID();

    this.header(X_CA_TIMESTAMP, timestamp);
    this.header(X_CA_NONCE, nonce);
    this.header(X_CA_KEY, accessKeyId);

    if (this.body()!=null) {
        String contentMd5 = contentMd5(this);
        this.header(CONTENT_MD5, contentMd5);
    }

    String signature = Sign2String(this.method(), uri(),
        getQueries(this), getHeaders(this), accesskeySecret);

    this.header(X_CA_SIGNATURE, signature);

    return this;
}

public doRequest jsonBody(String content) {
    return (doRequest) body(getBytesUtf8(content), MimeTypes.MIME_APPLICATION_JSON);
}

public doRequest jsonBody(Object content) {

    if (content instanceof String) {
        return jsonBody((String) content);
    }

    return jsonBody(serialize(content));
}

public String contentMd5(doRequest request) {
    try {
        return new String(Base64.encodeBase64(MD5GetHash(request.bodyBytes())), "UTF-8");
    } catch (UnsupportedEncodingException e) {
        e.printStackTrace();
    }
    return null;
}

public static byte[] MD5GetHash(byte[] secretBytes){
    try {
        secretBytes = MessageDigest.getInstance("md5").digest(secretBytes);
    } catch (NoSuchAlgorithmException e) {
        e.printStackTrace ();
    }
    return secretBytes;
}

```

```

public String uri() {
    Integer endIndex = this.url().indexOf("?");
    if (endIndex <= 0) {
        return this.url().substring(this.hostUrl().length());
    }
    return this.url().substring(this.hostUrl().length(), endIndex);
}

public Map<String, String> getHeaders(doRequest request) {

    Map<String, String> headers = new HashMap<>();
    headers.put(X_CA_TIMESTAMP, request.header(X_CA_TIMESTAMP));
    headers.put(X_CA_NONCE, request.header(X_CA_NONCE));
    headers.put(X_CA_KEY, request.header(X_CA_KEY));

    if (request.header(CONTENT_MD5)!=null) {
        headers.put(CONTENT_MD5, request.header(CONTENT_MD5));
    }

    return headers;
}

public Map<String, String> getQueries(doRequest request) {

    Map<String, String> result = new HashMap<>();

    HttpMultiMap<String> query = request.query();
    if (query!=null) {
        for (String key : query.names()) {
            result.put(key, query.get(key));
        }
    }

    //exclude form
    HttpMultiMap<?> form = request.form();
    if (form!=null) {
        for (String key : form.names()) {
            if (form.get(key) instanceof Fileuploadable) {
                continue;
            }
        }
    }

    return result;
}

public static String serialize(Object value) {

    return serialize(value, (String[]) null);
}

public static String serialize(Object value, String... includes) {

    if (includes != null) {

```

```

        return new
JsonSerializer().deep(true).exclude("*").include(includes).serialize(value);
    }

    return new JsonSerializer().deep(true).serialize(value);
}
public static String map2jsonstr(Map<String,?> map){
    return String.valueOf(new JSONObject(map));
}

}
private static Map<String, String> getHeaders2Sign(Map<String, String> headers) {

    Map<String, String> headers2Sign = new HashMap<>();

    if (null == headers.get(X_CA_KEY) || null == headers.get(X_CA_TIMESTAMP) || null ==
headers.get(X_CA_NONCE)) {
        throw new IllegalArgumentException("system header can not be null");
    }

    if (null != headers.get(CONTENT_MD5)) {
        headers2Sign.put(CONTENT_MD5, headers.get(CONTENT_MD5));
    }

    headers2Sign.put(X_CA_KEY, headers.get(X_CA_KEY));
    headers2Sign.put(X_CA_TIMESTAMP, headers.get(X_CA_TIMESTAMP));
    headers2Sign.put(X_CA_NONCE, headers.get(X_CA_NONCE));

    return headers2Sign;
}
public static String sign2String(String method, String path, Map<String, String> queries,
Map<String, String> headers, String accessSecret) {
    try {
        Mac mac = Mac.getInstance(ALGORITHM_NAME);
        mac.init(new SecretKeySpec (
            accessSecret.getBytes(ENCODING), ALGORITHM_NAME));
        byte[] signData = mac.doFinal(composeStringToSign(method, path, queries,
getHeaders2Sign(headers)).getBytes(ENCODING));
        return new String(Base64.encodeBase64(signData), ENCODING);
    } catch (Exception e) {
        throw new RuntimeException(e);
    }
}
private static String composeStringToSign(String method, String path,
Map<String, String> queries, Map<String, String>
headers) {
    StringBuilder stringToSign = new StringBuilder();
    stringToSign.append(method);
    stringToSign.append(SEPARATOR_LF);
    stringToSign.append(buildHeaderString(headers));
    stringToSign.append(SEPARATOR_LF);
    stringToSign.append(path.substring(1));
    if (null != queries && !queries.isEmpty()) {

```

```

        stringToSign.append(SEPARATOR_LF);
        stringToSign.append(buildQueriesString(queries));
    }
    return stringToSign.toString();
}
private static String buildQueriesString(Map<String, String> queries) {

    if (null == queries || queries.isEmpty()) {
        return "";
    }

    StringBuilder sb = new StringBuilder();

    Map<String, String> sortMap = new TreeMap<>();
    sortMap.putAll(queries);

    for (Map.Entry<String, String> each : sortMap.entrySet()) {
        if (0 < sb.length()) {
            sb.append(SEPARATOR_AND);
        }
        sb.append(each.getKey());
        if (!StringUtils.isBlank (each.getValue())) {
            sb.append(SEPARATOR_EQUAL).append(each.getValue());
        }
    }

    return sb.toString();
}
private static String buildHeaderString(Map<String, String> headers) {

    StringBuilder sb = new StringBuilder();

    Map<String, String> sortMap = new TreeMap<> ();

    sortMap.putAll(headers);

    for (Map.Entry<String, String> each : sortMap.entrySet()) {

        if (StringUtils.isBlank(each.getValue())) {
            continue;
        }

        if (0 < sb.length()) {
            sb.append(SEPARATOR_LF);
        }
        sb.append(each.getKey());
        sb.append(SEPARATOR_COLON);
        sb.append(each.getValue());
    }

    return sb.toString();
}
public static byte[] getBytesUtf8(String s) {

```

```

    if (StringUtils.isBlank(s)) {
        return null;
    }

    try {
        return s.getBytes("UTF-8");
    } catch (UnsupportedEncodingException e) {
        e.printStackTrace();
        return null;
    }
}
/**
 * uuid without -
 *
 * @return
 */
public static String randomUUID() {
    String uuid = UUID.randomUUID().toString();
    StringBuilder sb = new StringBuilder();
    sb.append(uuid.substring(0, 8));
    sb.append(uuid.substring(9, 13));
    sb.append(uuid.substring(14, 18));
    sb.append(uuid.substring(19, 23));
    sb.append(uuid.substring(24));
    return sb.toString();
}
}

```

## 15.2. PHP

The specific method is in `var_dump()` function. Select the method according to the scenario.

```

<?php

$accessKey = 'xxxxxxx';
$secretKey = 'xxxxxx';
$baseUri = 'https://xxxxxx/';
/**
 * Note that 'base_url' should end with a slash(/)
 */
$yealink = new YealinkOpenApi($accessKey, $secretKey, $baseUri);

/**
 * get request api demo(no params)
 * Note that the following uri cannot start with a slash(/)
 */
$regionAllUri = "api/open/v1/manager/region/getAll";
var_dump($yealink->get($regionAllUri));

/**
 * get request api demo(have params)

```

```

*/
$deviceEditUri = "api/open/v1/manager/device/getEdit";
var_dump($yealink->get($deviceEditUri,["id"=>"1213"]));

/**
 * post request api demo
 */
$deviceListUri = "api/open/v1/manager/device/getList";
$postDeviceListData = [
    "limit" => 20
];
var_dump($yealink->post($deviceListUri, json_encode($postDeviceListData)));

/**
 * form request api demo
 */
$file = new CURLFile("F:\\0000000000079-all.cfg");
$addGroupConfigUri = "api/open/v1/manager/groupConfig/add";
$addGroupData = [
    'file'=>$file,
    'name'=>'open api test'
];

var_dump($yealink->form($addGroupConfigUri,$addGroupData));

class YealinkOpenApi
{
    const LF = "\n";
    const GET = "GET";
    const POST = "POST";
    const CONTENT_TYPE_JSON = "Content-Type: application/json";

    private $accessKey;
    private $secretKey;
    private $baseUri;

    public function __construct($accessKey, $secretKey, $baseUri)
    {
        $this->secretKey = $secretKey;
        $this->accessKey = $accessKey;
        $this->baseUri = $baseUri;
    }

    public function get($uri, $query = [])
    {
        return $this->doRequest(self::GET, $uri, $query);
    }

    public function post($uri, $body = false)
    {
        return $this->doRequest(self::POST, $uri, [], $body, [self::CONTENT_TYPE_JSON]);
    }
}

```



```

}

public function form($uri, $body = false)
{
    return $this->doRequest(self::POST, $uri, [], $body);
}

private function doRequest($method, $uri, $query = [], $body = false, $headers = false)
{
    list($signHeader, $queryParams) = $this->sign($method, $uri, $query, $body, !$headers);

    $ch = curl_init();
    $url = $this->getUrl($uri, $queryParams);
    curl_setopt($ch, CURLOPT_URL, $url);
    if ($method != self::GET) {
        curl_setopt($ch, CURLOPT_CUSTOMREQUEST, $method);
    }

    curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
    $convertHeader = $this->convertCurlHeader($signHeader);
    curl_setopt($ch, CURLOPT_HTTPHEADER, $convertHeader);

    if ($method != self::GET && $body) {
        curl_setopt($ch, CURLOPT_POSTFIELDS, $body);
        if ($headers) {
            curl_setopt($ch, CURLOPT_HTTPHEADER, array_merge($convertHeader, $headers));
        }
    }

    var_dump($signHeader);

    if ($j = curl_exec($ch)) {
        return json_decode($j);
    } else {
        return false;
    }
}

private function sign($method, $uri, $query = [], $body = false, $form = false)
{
    $systemHeader['X-Ca-Key'] = $this->accessKey;
    $systemHeader['X-Ca-Nonce'] = sha1(uniqid('yealink'));
    $systemHeader['X-Ca-Timestamp'] = intval(microtime(true) * 1000);
    if ($body && !$form) {
        $systemHeader['Content-MD5'] = base64_encode(md5($body, true));
    }
    ksort($systemHeader);
    $qs = null;
    if ($query) {
        ksort($query);
        $qs = http_build_query($query);
    }
}

```

```

    }

    // build string to sign
    $toSign = $method;
    foreach ($systemHeader as $k => $v) {
        $toSign .= self::LF . $k . ':' . $v;
    }
    $toSign .= self::LF . $uri;
    if (isset($qs)) {
        $toSign .= self::LF . $qs;
    }

    $systemHeader['X-Ca-Signature'] = base64_encode(hash_hmac('sha256', trim($toSign), $this->secretKey, true));
    return [$systemHeader, $qs];
}

private function getUrl($uri, $params)
{
    return isset($params) ? $this->baseUri . $uri . '?' . $params : $this->baseUri . $uri;
}

public function convertCurlHeader($arr)
{
    $header = [];
    $i = 0;
    foreach ($arr as $key => $val) {
        $header[$i++] = $key . ": " . $val;
    }
    return $header;
}
}
}

```

### 15.3. C#

There are two main functions in the method and the annotated demo is the form submission. Select the method according to the scenario.

```

using Newtonsoft.Json;
using System;
using System.Collections.Generic;
using System.IO;
using System.Net;
using System.Net.Http;
using System.Security.Cryptography;
using System.Text;
using System.Threading.Tasks;
using System.Web;

namespace YealinkOpenApiDemo

```

```

{

class Program
{

    public readonly static String accessKeyId = "xxxxxxxxxxxxxxxx";
    public readonly static String accessKeySecret = "xxxxxxxxxxxxxxxx";
    //Note that 'base_url' should end with a slash(/)
    public static String base_url = "https://xxxxxx/";

    public static String GET = "GET";
    public static String POST = "POST";

    public readonly static String SEPARATOR_LF = "\n";
    public readonly static String SEPARATOR_AND = "&";
    public readonly static String SEPARATOR_EQUAL = "=";
    public readonly static String SEPARATOR_COLON = ":";

    //constant key
    public readonly static String X_CA_KEY = "X-Ca-Key";
    public readonly static String X_CA_TIMESTAMP = "X-Ca-Timestamp";
    public readonly static String X_CA_NONCE = "X-Ca-Nonce";
    public readonly static String X_CA_SIGNATURE = "X-Ca-Signature";
    public readonly static String X_CA_CONTENT_MD5 = "Content-MD5";

    /**
     * Use post/get request,excluding form submission
     */
    public static void Main(string[] args)
    {
        deviceEdit();
        deviceList();
        regionAll();
    }

    /**
     * form request api demo,it's easier to use httpClient
     */
    //public static async Task Main(string[] args)
    //{
    //    string groupConfigAddUri = "api/open/v1/manager/groupConfig/add";

    //    string fileNamePath = "E:\\805ec00fce19.cfg";
    //    string fileName = "805ec00fce19.cfg";
    //    string groupConfigName = "open api test";
    //    string groupConfigNameParam = "name";

    //    using (var client = new HttpClient())
    //    {

    //        /**

```

```

//      * Add header,the signature only needs to include X_CA_KEY,X_CA_TIMESTAMP and
X_CA_NONCE
//      **/
//      Dictionary<String, String> headers = buildHeaders(POST, groupConfigAddUri,
null, null);
//      string url = base_url + groupConfigAddUri;
//      foreach (KeyValuePair<string, string> kv in headers)
//      {
//          client.DefaultRequestHeaders.Add(kv.Key, kv.Value);
//      }

//      var formData = new MultipartFormDataContent();

//      formData.Add(new StringContent(groupConfigName), groupConfigNameParam);

//      using (FileStream fs = new FileStream(fileNamePath, FileMode.Open,
FileAccess.Read))
//      {
//          formData.Add(new
ByteArrayContent(System.IO.File.ReadAllBytes(fileNamePath)), "file", fileName);
//      }

//      var response = await client.PostAsync(url, formData);

//  }

//}

/**
 * get request api demo(no params)
 * Note that the following uri cannot start with a slash(/)
 */
public static void regionAll()
{
    string regionAllUri = "api/open/v1/manager/region/getAll";

    get(regionAllUri, null);
}
/**
 * get request api demo(have params)
 */
public static void deviceEdit()
{
    string deviceListUri = "api/open/v1/manager/device/getEdit";
    Dictionary<String, String> parameters = new Dictionary<String, String>();
    parameters.Add("id", "e812201cd384449d86a0519e667ecadc");
    get(deviceListUri, parameters);
}
/**
 * post request api demo
 */
public static void deviceList()

```

```

{
    string deviceListUri = "api/open/v1/manager/task/getPagedList";
    Dictionary<String, Object> parameters = new Dictionary<String, Object>();
    parameters.Add("limit", 20);
    post(deviceListUri, parameters);
}

public static void get(string url, Dictionary<String, String> queries)
{
    Console.WriteLine(createRequest(GET, url, queries, null));
}
public static void post(string url, Dictionary<String, Object> body)
{
    Console.WriteLine(createRequest(POST, url, null, body));
}

public static string createRequest(string method, string url, Dictionary<String, String>
queries, Dictionary<String, Object> body)
{
    Dictionary<String, String> headers = buildHeaders(method, url, queries, body);

    HttpWebRequest request = null;

    url = base_url + url;

    if (method == GET&&queries!=null)
    {
        String parameter = buildQueriesString(queries);
        url = url + "?" + parameter;
    }

    request.Method = method;
    request.ContentType = "application/json";

    foreach (KeyValuePair<string, string> kv in headers)
    {
        request.Headers.Add(kv.Key, kv.Value);
    }

    if (method == POST)
    {
        string jsonBody = JsonConvert.SerializeObject(body);

        byte[] data = Encoding.UTF8.GetBytes(jsonBody);
        request.ContentLength = data.Length;
        using (Stream reqStream = request.GetRequestStream())
        {
            reqStream.Write(data, 0, data.Length);
            reqStream.Close();
        }
    }
}

```

```

string result = "";
HttpWebResponse resp = (HttpWebResponse)request.GetResponse();
Stream stream = resp.GetResponseStream();
using (StreamReader reader = new StreamReader(stream, Encoding.UTF8))
{
    result = reader.ReadToEnd();
}
return result;
}

public static Dictionary<String, String> buildHeaders(string method, string url,
Dictionary<String, String> queries, Dictionary<String, Object> body)
{
    Dictionary<String, String> headers = new Dictionary<String, String>();
    if (body != null )
    {
        string jsonBody = JsonConvert.SerializeObject(body);
        Console.WriteLine(jsonBody);
        headers.Add(X_CA_CONTENT_MD5, Convert.ToBase64String(GetMD5Hash(jsonBody)));
    }
    headers.Add(X_CA_KEY, accessKeyId);
    headers.Add(X_CA_NONCE, System.Guid.NewGuid().ToString("N"));
    headers.Add(X_CA_TIMESTAMP, GetTimeStamp());

    String signString = Sign(method, url, queries, headers);
    headers.Add(X_CA_SIGNATURE, hmacsha256encode(signString, accesskeySecret));

    return headers;
}

public static string Sign(string method, string url, Dictionary<String, String> queries,
Dictionary<String, String> headers)
{
    stringBuilder stringToSignBuilder = new stringBuilder();

    stringToSignBuilder.Append(method);
    stringToSignBuilder.Append(SEPARATOR_LF);
    stringToSignBuilder.Append(buildHeaderString(headers));
    stringToSignBuilder.Append(SEPARATOR_LF);
    stringToSignBuilder.Append(url);

    if ( queries!=null)
    {
        stringToSignBuilder.Append(SEPARATOR_LF);
        stringToSignBuilder.Append(buildQueriesString(queries));
    }

    string stringToSign = stringToSignBuilder.ToString();

    Console.WriteLine("stringToSign:{0}", stringToSign);

    return stringToSignBuilder.ToString();
}

```

```

}
public static String buildQueriesString(Dictionary<String, String> queries)
{
    StringBuilder sb = new StringBuilder();
    foreach (KeyValuePair<string, string> kv in queries)
    {
        if (0 < sb.Length)
        {
            sb.Append(SEPARATOR_AND);
        }
        sb.Append(kv.Key);
        if (!string.IsNullOrEmpty(kv.Value))
        {
            sb.Append(SEPARATOR_EQUAL).Append(kv.Value);
        }
    }
    return sb.ToString();
}

public static String buildHeaderString(Dictionary<String, String> headers)
{
    StringBuilder sb = new StringBuilder();
    foreach (KeyValuePair<string, string> kv in headers)
    {
        if (string.IsNullOrEmpty(kv.Value))
        {
            continue;
        }
        if (0 < sb.Length)
        {
            sb.Append(SEPARATOR_LF);
        }
        sb.Append(kv.Key);
        sb.Append(SEPARATOR_COLON);
        sb.Append(kv.Value);
    }

    return sb.ToString();
}

public static byte[] GetMD5Hash(String str)
{
    MD5 md5 = MD5.Create();
    byte[] buffer = Encoding.Default.GetBytes(str);
    byte[] md5buffer = md5.ComputeHash(buffer);
    return md5buffer;
}

private static string hmacsha256encode(string message, string secret)
{

```





```

print (r.text, r.status_code)

if method == 'POST':
    if not isForm:
        jsonBody = json.dumps(body)
        r = requests.post(url, headers = headers, data = jsonBody, verify=False)
        print (r.text, r.status_code)
    else:
        encode_data = encode_multipart_formdata(body)
        body = encode_data[0]
        headers['Content-Type'] = encode_data[1]
        r = requests.post(url, headers = headers, data = body, verify=False)
        print (r.text, r.status_code)

def buildHeaders(method, uri, query, body):
    headers = {}
    if len(body) > 0:
        headers['Content-MD5'] = str(base64.b64encode(md5(json.dumps(body)).encode("utf-8")).digest()).decode("utf-8"))
        headers['X-Ca-Key'] = str(accessKeyId)
        headers['X-Ca-Nonce'] = str(''.join(str(uuid.uuid4()).split('-')))
        headers['X-Ca-Timestamp'] = str(int(round(time.time() * 1000)))
        headers['X-Ca-Signature'] = str(base64.b64encode(hmac.new(accesskeySecret.encode("utf-8"),
sign(method, uri, query, body , headers).encode("utf-8"),
digestmod=hashlib.sha256).digest()).decode('utf8'))
    return headers

def getQueries(query):
    formattedQueryString = ""
    paramIndex = 0
    for p in query:
        formattedQueryString += str(p) +"="+ str(query[p])
        paramIndex += 1
    if paramIndex != len(query):
        formattedQueryString += "&"
    return formattedQueryString

def buildHeaderString(headers):
    header_string = ""
    for key,value in headers.items():
        if len(value) == 0:
            continue
        if len(header_string) > 0:
            header_string += "\n"
        header_string+=key
        header_string+=":"
        header_string+=value
    return header_string

def sign(method, uri, query, body , header):
    header_string = buildHeaderString(header)
    stringToSign = method + "\n"+ str(header_string) + "\n" + uri
    if len(query) > 0:

```

```
stringToSign += ("\n" +getQueries(query))
return str(stringToSign)

# Note that the following uri cannot start with a slash(/)

print("GET deviceEdit:")
doRequest('GET', 'api/open/v1/manager/device/getEdit', {"id": "e812201cd384449d86a0519e667ecadc"},
 {}, False)

print("POST firmwareGetPagedList:")
doRequest('POST', 'api/open/v1/manager/firmware/getPagedList', {}, {"limit":10,"skip":0}, False)

print("Form GroupConfigAdd:")
data ={}
data['file']= ("805ec00fce19.cfg", open("E:\\805ec00fce19.cfg", 'rb').read())
data['name']= "open api test"
doRequest('POST', 'api/open/v1/manager/groupConfig/add', {}, data, True)
```