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All Company Information

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Authentication

Summary：

- Login verification and obtain the system token

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/login
- https://icloud.assetscontrols.com:3443/OpenApi/login

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FUserName	Yes	string	System assigned user name
FPassword	Yes	string	Password(MD5(32))

Python -Get MD5-32 password.
E.g. login account's password is 123456

```
import hashlib
# python code
```

```
def md5sum(password):
        m = hashlib.md5()
        m.update(password.encode("utf-8"))
        return m.hexdigest()
print(md5sum('123456'))

#Get Resulst: 'e10adc3949ba59abbe56e057f20f883e'
```

Response example:

Correct response:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": [{
        "FUserName": "admin",
        "FUserGUID": "63C399BD-2A0B-40E9-857D-6DEBF4908F92",
        "FTokenID": "DB7F20D9-84C3-44C3-B05A-06A9C392A189",
        "FExpireTime": "2020-07-30T08:00:00"
    }]
}
```

Error response:

```
{
    "Result": 103,
    "Message": "userName or password is error",
    "FObject": null
}
```

Return parameter description:

Parameter	Data type	Explanation
FUserName	String	System assigned user name
FUserGUID	String	User unique ID
FTokenID	String	token（All subsequent request interfaces need to use this as authentication）
FExpireTime	DateTime	Account expiration time（UTC）

Other result status description:

- 106：Account expiration
- 103：Wrong user name or password
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/login";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FUserName:\"admin\",FPassword:\"E10ADC3949BA59ABBE56E057F20
F883E\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C#(.NET):

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/login";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FUserName:\"admin\",FPassword:\"E10ADC3949BA59ABBE56E057F20
F883E\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/login'
      data = {
      'FUserName': 'admin',
      'FPassword': 'E10ADC3949BA59ABBE56E057F20F883E'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      return page;
```

Dashboard(Device statistics)

Summary：

- Get device statistics info.

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2024-08-20	2024-08-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Monitor
- https://icloud.assetscontrols.com:3443/OpenApi/Monitor

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	yes	string	QueryAssetStatusData

Response example::

Correct response:

```
{
```

```
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "FTotalCount": 212,
        "FOnlineCount": 6,
        "FOfflineCount": 36,
        "FInactiveCount": 165,
        "FMotionCount": 0,
        "FStationaryCount": 6,
        "FIdlingCount": 0,
        "FExpiringCount": 0,
        "FExpiredCount": 5,
        "FUnLockCount": 7,
        "FLockCount": 31,
        "FDoorOpenCount": 0,
        "FDoorCloseCount": 1,
        "FAlarmCount": 1,
        "FLowBatteryCount": 17
    }
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation
FTotalCount	Int	Total number of devices (total number = offline number + online number + unactivated number + expired number)
FOfflineCount	Int	Number of offline devices (the time when the device last received data + the device offline duration currently set by the company < the current time. If the above condition is met, it means the device is offline)
FOnlineCount	Int	Number of online devices

FIdlingCount	Int	Number of devices idling (if the ACC-Ignition status of the device is on and the speed is 0, it means idling. This status is mainly used in vehicle tracker devices)
FStationaryCount	Int	Number of stopped devices (if the device speed is 0, it means it is stopped）
FMotionCount	Int	Number of mobile devices (if the device speed is greater than 0, it means it is Motion)
FInactiveCount	Int	Number of unactivated devices (number of devices that have not been connected to the platform)
FExpiringCount	Int	Number of devices that are about to expire (expiring within 1 month)
FExpiredCount	Int	Number of expired devices
FUnLockCount	Int	Number of unlocked devices (statistics of current lock status is ‘unlock’)
FLockCount	Int	Number of locked devices (statistics of devices with the current lock status set to ‘lock’)
FAlarmCount	Int	Current device alarm count (statistics of alarm data uploaded by current devices)
FLowBatteryCount	Int	Current number of low-power devices (low-power threshold less than 20%)
FDoorOpenCount	Int	Number of open doors (statistics of the current device door status is open, if there is no door sensor device, this field can be ignored)
FDoorCloseCount	Int	Number of closed doors (statistics of the current device door status is closed, if there is no door sensor device, this field can be ignored)

Note:

- More returned error codes are as follows：
- 104：Token error or expired
- 105：System abnormality
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Monitor";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAssetStatusData\",FTokenID:\"3acef045-d302-4
032-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");

conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);

pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C# :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Monitor";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryAssetStatusData\",FTokenID:\"3acef045-d302-4
032-b40a-d9ee6c1519cd\"}";
```

```
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 //Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Monitor'
      data = {
      'FAction': 'QueryAssetStatusData',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Single Device Information

Summary：

- Getting single information of Device

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2022-06-06	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	Yes	string	QueryAdminAssetByAssetId
FAssetID	Yes	string	Device Id / Mac

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "b8ac068d-b9c2-428f-ac52-5df88d069e5e",
            "FAssetID": "2690929719",
            "FAssetTypeID": 200,
            "FDescription": "",
            "FSIMNumber": "89860410102170005799",
            "FAgentGUID": "042032ac-6382-43b6-974f-7ec7f2c0fdfb",
            "FMac": "",
            "FAgentName": "kelierbu",
            "FCreateTime": "2022-05-31T02:08:11.873",
            "FExpireTime": null,
            "FVehicleGUID": "d30bd042-f69a-4f81-ad64-bac303c70980",
            "FVehicleName": "2690929719"
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FDescription	String	Description
FSIMNumber	String	Sim No.
FAgentGUID	String	Unique identification of the company to which the device belongs

FAgentName	String	Company name
FCreateTime	DateTime	Registration time(UTC)
FExpireTime	DateTime	Expiration time(UTC)
FVehicleGUID	String	Unique identification of asset
FVehicleName	String	Assets name
FMac	String	Mac

Other result status description:

- 104：Token error or expiration
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAdminAssetByAssetId\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FAssetID:\"2690929760\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
```

```
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAdminAssetByAssetId\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FAssetID:\"2690929760\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminAssetList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FAssetID': '2690929719'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
```

```
        'Connection': 'keep-alive'
        }
    req = request.Request(url, headers=headers, data=data)
    page = request.urlopen(req).read()
    page = page.decode('utf-8')
    # json_array = json.loads(page)
    return page;
```

All Devices information

Summary：

- Getting information of all Devices

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	Yes	string	QueryAdminAssetList

Response example:

Correct response:

```
{
```

```
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "10f47be0-fefc-4cc2-ae69-50a14bbfa55c",
            "FAssetID": "7560717002",
            "FAssetTypeID": 701,
            "FDescription": "",
            "FSIMNumber": "343343434",
            "FAgentGUID": "25a48ca5-a844-4732-8af4-afa2a9d5c6dc",
            "FMac": "",
            "FAgentName": "测试",
            "FGroupGUID": null,
            "FGroupName": null,
            "FCreateTime": "2020-05-17T12:10:44.143"
        },
        {
            "FGUID": "983809d8-a894-43f8-8b52-37bab146fb13",
            "FAssetID": "868120231481844",
            "FAssetTypeID": 1010,
            "FDescription": "",
            "FSIMNumber": "868120231481844",
            "FAgentGUID": "4bfca45f-807d-45f4-bf4c-4ebabbf857ca",
            "FMac": "",
            "FAgentName": "Concox测试",
            "FGroupGUID": null,
            "FGroupName": null,
            "FCreateTime": "2020-07-31T02:30:37.433"
        }
    }
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation

FGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FDescription	String	Description
FSIMNumber	String	Sim No.
FAgentGUID	String	Unique identification of the company to which the device belongs
FAgentName	String	Company name
FCreateTime	DateTime	Registration time(UTC)
FExpireTime	DateTime	Expiration time(UTC)
FMac	String	Mac

Other result status description:

- 104：Token error or expiration
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAdminAssetList\",FTokenID:\"3acef045-d302-40
32-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
```

```
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryAdminAssetList\",FTokenID:\"3acef045-d302-40
32-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminAssetList',
```

```
        'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
         }
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Single Assets(Vehicle/Container) Information

Summary：

- Getting single information of asset

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2022-06-06	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	Yes	string	QueryAdminVehicleByVehicleName
FVehicleName	Yes	string	assets name

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "5b24bab0-829d-452b-898f-cc492bc9287b",
            "FVehicleName": "2690929760",
            "FAssetGUID": "0a1ecd86-1b0d-4b51-af37-e41dbf71d46a",
            "FAssetID": "2690929760",
            "FAssetTypeID": 200,
            "FVehicleCode": "",
            "FVehicleTypeID": 1,
            "FDescription": "",
            "FOperateType": "1",
            "FVIN": "",
            "FAgentGUID": "042032ac-6382-43b6-974f-7ec7f2c0fdfb",
            "FAgentName": "keerbu",
            "FGroupGUID": "d1026011-6479-4b74-8a98-eaa42ce2cedc",
            "FGroupName": "shajiangguan",
            "FMainDriverGUID": "00000000-0000-0000-0000-000000000000",
            "FDriverName": null,
            "FDriverPhoneNumber": null,
            "FCreateTime": "2022-06-01T14:12:24.523"
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of assets
FVehicleName	String	Assets name
FAssetGUID	String	Unique identification of device

FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FVehicleCode	String	Assets code
FVehicleTypeID	Int	Assets type
FDescription	String	Description
FOperateType	String	Operation type（1：Own；2：Leasing）
FVIN	String	vehicle frame VIN number
FAgentGUID	String	Unique identification of the company to which the assets belongs
FAgentName	String	Company name
FGroupGUID	String	Group unique identifier
FGroupName	String	Group name
FMainDriverGUID	String	Unique identification of main driver
FDriverName	String	Name of main driver
FDriverPhoneNumber	String	Driver's telephone
FCreateTime	DateTime	Registration time(UTC)

Other result status description:

- 105: System exception
- 104：Token error or expiration
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
```

```
String body = "{FAction:\"QueryAdminVehicleByVehicleName\",FTokenID:\"3acef
045-d302-4032-b40a-d9ee6c1519cd\",FVehicleName:\"2690929760\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C# :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAdminVehicleByVehicleName\",FTokenID:\"3acef
045-d302-4032-b40a-d9ee6c1519cd\",FVehicleName:\"2690929760\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
```

```
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminVehicleList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FVehicleName': '2690929760'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

All Assets(Vehicle/Container) Information

Summary：

- Getting information of all assets

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	Yes	string	QueryAdminVehicleList

Response example:

Correct response:

```
{
```

```
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "4b0be13f-4703-4629-93d2-b51f632344dc",
            "FVehicleName": "视频机816",
            "FAssetGUID": "066cd9b2-b64b-44f5-9f19-b6e7dc974140",
            "FAssetID": "6165016816",
            "FAssetTypeID": 808,
            "FVehicleCode": "816",
            "FVehicleTypeID": 1,
            "FDescription": "",
            "FOperateType": "",
            "FVIN": "",
            "FAgentGUID": "903ba776-b329-474e-86b1-3a922c54f821",
            "FAgentName": "部标测试",
            "FGroupGUID": "0b887ae3-e190-42a2-81f3-81f6127c8aa1",
            "FGroupName": "视频机测试",
            "FMainDriverGUID": "778572c1-7ca4-44a9-ab2d-6c4f9cfed800",
            "FDriverName": "Jhon",
            "FDriverPhoneNumber": "18362985485",
            "FCreateTime": "2020-07-20T06:13:37.613"
        },
        {
            "FGUID": "9154a616-038e-40da-91b4-87b7faccc15f",
            "FVehicleName": "粤B45678",
            "FAssetGUID": null,
            "FAssetID": null,
            "FAssetTypeID": null,
            "FVehicleCode": "",
            "FVehicleTypeID": 1,
            "FDescription": "粤B45678",
            "FOperateType": "1",
            "FVIN": "",
            "FAgentGUID": "4b3dd67a-00af-4118-87bf-fa9583a83b25",
            "FAgentName": "Joint测试",
            "FGroupGUID": "b595f14b-e8a7-49b3-b26c-4687ebfcb33f",
            "FGroupName": "JT702/JT705",
            "FMainDriverGUID": "00000000-0000-0000-0000-000000000000",
            "FDriverName": null,
            "FDriverPhoneNumber": null,
            "FCreateTime": "2020-08-04T09:27:21.127"
        }
    ]
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of assets
FVehicleName	String	Assets name
FAssetGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FVehicleCode	String	Assets code
FVehicleTypeID	Int	Assets type
FDescription	String	Description
FOperateType	String	Operation type（1：Own；2：Leasing）
FVIN	String	vehicle frame VIN number
FAgentGUID	String	Unique identification of the company to which the assets belongs
FAgentName	String	Company name
FGroupGUID	String	Group unique identifier
FGroupName	String	Group name
FMainDriverGUID	String	Unique identification of main driver
FDriverName	String	Name of main driver
FDriverPhoneNumber	String	Driver's telephone

FCreateTime	DateTime	Registration time(UTC)

Other result status description:

- 105: System exception
- 104：Token error or expiration
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAdminVehicleList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C# :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryAdminVehicleList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminVehicleList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Real time location data

Summary：

- Obtain real-time location data

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/LBS
- https://icloud.assetscontrols.com:3443/OpenApi/LBS

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	Yes	string	QueryLBSMonitorListByFGUIDs
FGUIDs	Yes	string	Unique identification of assets / device, multiple separated by ‘,’
FType	Yes	int	1：assets 2：device

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FAssetID": "7500313618",
            "FAssetTypeID": 701,
            "FLongitude": 113.916965,
            "FLatitude": 22.58107,
            "FSpeed": 0,
            "FDirection": 0,
            "FMileage": 0,
            "FGPSTime": "2020-08-12T01:56:16Z",
            "FRecvTime": "2020-08-12T01:56:31.036Z",
            "FLocationType": 1,
            "FCellSignal": 8,
            "FGPSSignal": 5,
            "FMNC": 0,
            "FMCC": 460,
            "FLAC": 10342,
            "FCELLID": 4242,
            "FBattery": 100,
            "FACC": -1,
            "FLockRope": 0,
            "FLockStatus": 0,
            "FFuelCut": -1,
            "FDoor": -1,
            "FMotor": -1,
            "FFuelValue1": -1,
            "FFuelValue2": -1,
            "FFuelValue3": -1,
            "FTemperature1": -1000.0,
            "FTemperature2": -1000.0,
            "FTemperature3": -1000.0,
            "FTemperature4": -1000.0,
            "FTemperature5": -1000.0,
            "FTemperature6": -1000.0,
            "FHumidity1": 0,
            "FHumidity2": 0,
            "FHumidity3": 0,
            "FHumidity4": 0,
            "FHumidity5": 0,
```

```
            "FHumidity6": 0,
            "FExpandProto": null,
            "SubAssets": {
                "E0171A0107": {
                    "FAssetID": "E0171A0107",
                    "FDateTime": "2020-08-12T01:53:10Z",
                    "FEvent": 6,
                    "FHumidity": 0,
                    "FLockRope": 0,
                    "FLockStatus": 0,
                    "FLockTimes": 1028,
                    "FPower": 68,
                    "FRSSI": 84,
                    "FSensorType": 4,
                    "FTemperature": -1000.0,
                    "FVoltage": 3.93
                },
                "1018330094": {
                    "FAssetID": "1018330094",
                    "FDateTime": "2020-08-12T01:34:30Z",
                    "FEvent": -1,
                    "FHumidity": 71,
                    "FLockRope": 1,
                    "FLockStatus": 1,
                    "FLockTimes": -1,
                    "FPower": 98,
                    "FRSSI": 69,
                    "FSensorType": 1,
                    "FTemperature": 27.6,
                    "FVoltage": 3.04
                },
                "E0171A00FD": {
                    "FAssetID": "E0171A00FD",
                    "FDateTime": "2020-08-11T11:07:35Z",
                    "FEvent": 5,
                    "FHumidity": 0,
                    "FLockRope": 0,
                    "FLockStatus": 0,
                    "FLockTimes": 17,
                    "FPower": 68,
                    "FRSSI": 53,
                    "FSensorType": 4,
                    "FTemperature": -1000.0,
                    "FVoltage": 3.93
                },
                "1018100169": {
```

```
                    "FAssetID": "1018100169",
                    "FDateTime": "2020-08-12T01:29:29Z",
                    "FEvent": -1,
                    "FHumidity": 71,
                    "FLockRope": 1,
                    "FLockStatus": 1,
                    "FLockTimes": -1,
                    "FPower": 98,
                    "FRSSI": 87,
                    "FSensorType": 1,
                    "FTemperature": 28.200000000000003,
                    "FVoltage": 3.04
                }
            }
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FLongitude	Decimal	Longitude
FLatitude	Decimal	Latitude
FSpeed	Int	Speed (km/h)
FDirection	Int	Direction (0~360)
FMileage	Int	Mileage (km)
FGPSTime	DateTime	GPS time（UTC）

FRecvTime	DateTime	Data receiving time（UTC）
FLocationType	Int	Location type 1:GNSS(GPS/BeiDou) located 2:Base Station positioning(Device's function) 3:LBS positioning(Platform's function) 4:Mobile location 0:Unlocated
FCellSignal	Int	GSM signal quality
FMNC	Int	MNC
FMCC	Int	MCC
FLAC	Int	LAC
FCELLID	Int	CID
FBattery	Int	quantity of electricity
FACC	Int	ACC status （1：Open；0:Close）
FLockRope	Int	Lock rope status (1: Pull out 0:Insert -1:Undefined)
FLockStatus	Int	Lock state (1: Unlock 0:Lock -1:Undefined)
FFuelCut	Int	Fuel cut
FDoor	Int	Door status
FMotor	Int	Motor status
FFuelValue1	Int	Oil level value 1
FFuelValue2	Int	Oil level value 2
FFuelValue3	Int	Oil level value 3
FTemperature1	Decimal	Temperature value 1
FTemperature2	Decimal	Temperature value 2
FTemperature3	Decimal	Temperature value 3
FTemperature4	Decimal	Temperature value 4
FTemperature5	Decimal	Temperature value 5
FTemperature6	Decimal	Temperature value 6

FHumidity1	Decimal	Humidity value 1
FHumidity2	Decimal	Humidity value 2
FHumidity3	Decimal	Humidity value 3
FHumidity4	Decimal	Humidity value 4
FHumidity5	Decimal	Humidity value 5
FHumidity6	Decimal	Humidity value 6
FExpandProto	String	Reserved field
SubAssets	String	Slave information
FOnline	Int	Device Online status 1：Online 0：Offline

**FExpandProto: **

Parameter	Data type	Explanation
FAwake	Int	Wake-up source -1：null 0: Reboot 1: RTC 2: Vibration 3: Open cover/removal 4: Lock rope/bar 5: Charging 6: Swipe card 7: Lora 8: VIP phone number 9: SMS/Calling 10: Bluetooth 11: Insert lock rope 12: Closing cover 13: Simulation 14: Press Button 15: Non-VIP phone number 16: VIP phone number wake-up 17: Reset 18: Abnormal temperature and humidity 19: Abnormal air pressure 20: Power on 21: Open and close the door 22: Light sensor
FPosture	Int	Posture coefficient
FDesc	String	other extended information Json string

FDesc: other extended information Json string

E.g.:

{“fBackBattery”:”92,4.08,0”,”fChange”:0,”fNetworkType”:4,”fPosture”:”x:-178;y:3;z:12169”,”fRopeInfo”:”{"batteryStatus":0,"exist":0,"mac":"000000000000","ropeStatus":6,"rssi":0}”,”fVoltage”:0.0}

The following are all fields of extended information. The actual number of Json string fields returned will not be so many.

Parameter	Data type	Explanation

fBackBattery	String	Backup battery
fNetworkType	Int	Networktype 0: Unknown 2：2G 3:3G 4:4:G 5:5G
fPosture	String	attitude “x:1;y:-29;z:-2903”
fRopeInfo	String	lock rope info.(Json string)
fVoltage	Float	Battery voltage
fAngle	Int	Inclination
fAcceleration	String	Acceleration
fLx	Float	Illumination
fPressure	Float	Air pressure
fVibrate	Int	Amplitude
fReportType	Int	Datatype 0：Real-time；1:Historical；2：Alarm
fDoor1	Int	1:Door1 Open 0：Door1 Close
fDoor2	Int	1:Door2 Open 0：Door2 Close
fVolStatus	Int	Voltage Status（0：LED voltage normal 1：LED High voltage status flag）
fVolValue	Double	LED voltage value
fEleStatus	Int	current state 0：LED current normal 1：LED High current status flag
fEleValue	Double	LED Current value
fLuminance	Int	brightness 0：Indicates off (energy saving level one)， <=25 (Energy Saving Level 2) <=50 (Energy saving level three) <=75 (Energy Saving Level 4) <=100 (Energy saving level five)
fBackCover	Int	Back Cover Status：-1：null；0：back cover close；1：back cover open
fMainBattery	Int	JT705C，Main battery status（1: Main battery removal,0:Main battery installed；-1：null）

fRopeInfo:Other extended information Json string

E.g.: “fRopeInfo”:”{"batteryStatus":0,"exist":0,"mac":"000000000000","ropeStatus":6,"rssi":0}”

Parameter	Data type	Explanation
batteryStatus	Int	low battery status 0:normal ; 1:low battery ; -1:-(null)
exist	Int	bar installed 0:not in locked position ; 1:in locked position ; -1:-(null)
mac	String	lock bar bluetooth mac address
ropeStatus	Int	lock rope status 0:unknown ; 2: Bend ;3: Saw off ;4: Lost ; 5: Shackle hook saw off ; 6: Lock bar saw off ; 7: Lock bar pulled out ;-1: – (null)
rssi	Int	RSSI

Other result status description:

- 105：Request error
- 104：Token error or expiration
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/LBS";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryLBSMonitorListByFGUIDs\",FTokenID:\"3acef045
-d302-4032-b40a-d9ee6c1519cd\",FGUIDs:\"BE2A1E27-B36E-4301-B2C8-465A62AD215
F,FE0BDE75-4A30-4B9C-AD2E-66D8A4F44F5E\",FType:\"1\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
```

```
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C# :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/LBS";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryLBSMonitorListByFGUIDs\",FTokenID:\"3acef045
-d302-4032-b40a-d9ee6c1519cd\",FGUIDs:\"BE2A1E27-B36E-4301-B2C8-465A62AD215
F,FE0BDE75-4A30-4B9C-AD2E-66D8A4F44F5E\",FType:\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/LBS'
     data = {
```

```
        'FAction': 'QueryLBSMonitorListByFGUIDs',
        'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
        'FGUIDs':'BE2A1E27-B36E-4301-B2C8-465A62AD215F,FE0BDE75-4A30-4B9C-AD2
E-66D8A4F44F5E',
        'FType':1,
         }
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                      r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Historical track records

Summary：

- Obtain historical track records

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/LBS
- https://icloud.assetscontrols.com:3443/OpenApi/LBS

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryLBSTrackListByFGUID
FGUID	yes	string	Unique identification of assets / device
FType	yes	int	1：Unique identification of assets 2:Unique identification of device
FAssetTypeID	yes	int	Device type

FStartTime	yes	datetime	Start time(UTC)
FEndTime	yes	datetime	End time(UTC)
FLanguage	no	int	1：Chinese 0：English
FDateType	yes	int	1：Query by receiving time；0：Query by GPS time

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T16:13:47",
            "RT": "2020-12-27T16:14:06",
            "Bat": 45,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
```

```
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T16:43:48",
            "RT": "2020-12-27T16:44:07",
            "Bat": 45,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T17:13:49",
            "RT": "2020-12-27T17:14:08",
            "Bat": 45,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.06537285643,
            "Lat": 22.57270175043,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 176023831,
            "GT": "2020-12-27T17:43:50",
            "RT": "2020-12-27T17:44:09",
```

```
            "Bat": 45,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T18:13:51",
            "RT": "2020-12-27T18:14:10",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.064252,
            "Lat": 22.572598,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 1,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T18:43:26",
            "RT": "2020-12-27T18:43:45",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
```

```
        },
        {
            "Lon": 114.063952788266,
            "Lat": 22.5727879731391,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 176023834,
            "GT": "2020-12-27T19:13:53",
            "RT": "2020-12-27T19:14:13",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T19:43:54",
            "RT": "2020-12-27T19:44:14",
            "Bat": 44,
            "LS": 1
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
```

```
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T20:13:55",
            "RT": "2020-12-27T20:14:16",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.063952788266,
            "Lat": 22.5727879731391,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 176023834,
            "GT": "2020-12-27T20:43:56",
            "RT": "2020-12-27T20:44:16",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T21:13:57",
            "RT": "2020-12-27T21:14:17",
            "Bat": 44,
            "LS": 1,
```

```
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T21:43:58",
            "RT": "2020-12-27T21:44:19",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T22:13:59",
            "RT": "2020-12-27T22:14:20",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
```

```
            "Lon": 114.06580855643,
            "Lat": 22.57472835043,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 176023821,
            "GT": "2020-12-27T22:44:00",
            "RT": "2020-12-27T22:44:21",
            "Bat": 44,
            "LS": 1
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T23:14:01",
            "RT": "2020-12-27T23:14:22",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 0.000000,
            "Lat": 0.000000,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 0,
            "MCC": 0,
            "MNC": 0,
            "LAC": 0,
            "CID": 0,
```

```
            "GT": "2020-12-27T23:25:50",
            "RT": "2020-12-27T23:27:00",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        },
        {
            "Lon": 114.062655140347,
            "Lat": 22.5711617062429,
            "Speed": 0,
            "Dir": 0,
            "Mil": 38,
            "LType": 3,
            "MCC": 460,
            "MNC": 0,
            "LAC": 9351,
            "CID": 9493077,
            "GT": "2020-12-27T23:26:50",
            "RT": "2020-12-27T23:27:13",
            "Bat": 44,
            "LS": 1,
            "Hum1": 63,
            "Hum2": 0,
            "Temp1": 27.799999237060547,
            "Temp2": -1000.0
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation

Lon	Decimal	Longitude
Lat	Decimal	Latitude
Speed	Int	Speed (km/h)
Dir	Int	Direction (0~360)
Mil	Int	Mileage (km)
MCC	Int	MCC
MNC	Int	MNC
LAC	Int	LAC
CID	Int	CID
GT	DateTime	GPS time（UTC）
RT	DateTime	Data receiving time（UTC）
LType	Int	Location type 1:GNSS 2:CellTrack 3:Cell code location 4:Mobile location 0:Unlocated
Bat	Int	quantity of electricity
ACC	Int	ACC status （1：Open；0:Close）
LS	Int	Lock rope status (1: Pull out 0:Insert -1:Undefined)
LR	Int	Lock state (1: Unlock 0:Lock -1:Undefined)
CS	Int	GSM signal quality
GS	Int	Gnss signal quality
FV1	Int	Oil level value 1
FV2	Int	Oil level value 2
FV3	Int	Oil level value 3
Hum1	Int	FHumidity1
Hum2	Int	FHumidity2
Temp1	Decimal	FTemperature1 （-1000 indicates invalid data）

Temp12	Decimal	FTemperature2 （-1000 indicates invalid data）

Other result status description:

- 105：Request error
- 104：Token error or expiration
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/LBS";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryLBSTrackListByFGUID\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FGUID:\"BE2A1E27-B36E-4301-B2C8-465A62AD215F\",
FType:\"1\",FStartTime:\"2020-08-05 16:00:00\",FEndTime:\"2020-08-12 15:59:
59\",FAssetTypeID:\"701\",FLanguage:\"1\",FDateType:\"0\"}";
URL realUrl = new URL(url);
// Set properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//JSON string is returned
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/LBS";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryLBSTrackListByFGUID\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FGUID:\"BE2A1E27-B36E-4301-B2C8-465A62AD215F\",
FType:\"1\",FStartTime:\"2020-08-05 16:00:00\",FEndTime:\"2020-08-12 15:59:
59\",FAssetTypeID:\"701\",FLanguage:\"1\",FDateType:\"0\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //JSON string is returned
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/LBS'
      data = {
      'FAction': 'QueryLBSTrackListByFGUID',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUID':'BE2A1E27-B36E-4301-B2C8-465A62AD215F',
      'FType':1,
      'FStartTime':'2020-08-05 16:00:00',
      'FEndTime':'2020-08-12 15:59:59',
      'FAssetTypeID':'701',
      'FLanguage':'1',
      'FDateType':0
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
```

```
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Remote command unlocking

Send unlock command

Query unlock status

Send unlock command

Summary：

- Send unlock command

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode:

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	Yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Yes	string	token
FAction	Yes	string	OpenLockControl
FAssetGUID	Yes	string	Unique identification of device

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 113：No unlocking in the unlocked area.
- 115：Not positioned, unable to unlock
- 111: device offline or sleep
- 110：No unlocking permission
- 108：Unlock command sending exception
- 106：The device does not belong to this user
- 105：System exception
- 123：Device does not support this command

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"OpenLockControl\",FTokenID:\"3acef045-d302-4032-b
40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
```

```
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"OpenLockControl\",FTokenID:\"3acef045-d302-4032-b
40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'OpenLockControl',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd' ,
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c'
       }
```

```
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Query unlock status

Summary：

- Query unlock status

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode:

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryLockStatus
FAssetGUID	yes	string	Unique identification of device

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "succeed",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 109：opening（Query once every 2S. After 10 queries, If the result is still “Result”: 109 after 10 queries, it means unlocking device failed;if “Result”: 200 means unlocking device success）
- 111：Device offline or sleep
- 116：Unlock password error
- 106：The device does not belong to this user
- 105：System exception
- 102：Parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryLockStatus\",FTokenID:\"3acef045-d302-4032-b
40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
```

```
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryLockStatus\",FTokenID:\"3acef045-d302-4032-b
40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'QueryLockStatus',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd' ,
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c'
       }
```

```
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Remote control

Open/Close dynamic password

Open/Close dynamic password status

Query unlock password

Update unlock password

Unlock password update status

Open/Close dynamic password

Summary：

- Open/Close dynamic unlock password

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	OpenCloseDynamicPassword
FAssetGUID	yes	string	Unique identification of device
FStatus	yes	string	1:Open；0：Close

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 123：Device does not support this command
- 111: device offline or sleep
- 108：command send error
- 106：The device does not belong to this user
- 105：System exception
- 104：token error or expire
- 102：parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"OpenCloseDynamicPassword\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a
3c\",FStatus:\"1\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
```

```
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"OpenCloseDynamicPassword\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a
3c\",FStatus:\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'OpenCloseDynamicPassword' ,
```

```
        'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
        'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c',
        'FStatus':1
         }
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Open/Close dynamic password status

Summary：

- Query open/close dynamic unlock password command send status

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryOpenCloseDynamicPasswordStatus
FAssetGUID	yes	string	Unique identification of device
FStatus	yes	Int	1：Open，0：Close

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "succeed",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 109：Sending （Query once every 2S. After 10 queries, it still fails）
- 105：System exception
- 102：Parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryOpenCloseDynamicPasswordStatus\",FTokenID:\"
3acef045-d302-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec
-9e2d8c5f6a3c\",FStatus:\"1\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
```

```
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryOpenCloseDynamicPasswordStatus\",FTokenID:\"
3acef045-d302-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec
-9e2d8c5f6a3c\",FStatus:\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'QueryOpenCloseDynamicPasswordStatus',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c',
      'FStatus':1
       }
```

```
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Query unlock password

Summary：

- Query unlock password

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryAssetPassword
FGUIDs	yes	string	Unique identification of device, multiple separated by ‘,’
FPageSize	no	Int	Number of entries per page,default 10
FPageIndex	no	Int	Current page number,default 1

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FAssetGUID": "3a70d699-ab9d-4426-b394-3319874a7706",
            "FAssetID": "7200622909",
            "FAssetTypeID": 1701,
            "FAgentGUID": "4b3dd67a-00af-4118-87bf-fa9583a83b25",
            "FDynPsd": 1,
            "FStaticPsd": "123456",
            "FDynamicPsd": "677831",
            "RowNo": 1
        },
        {
            "FAssetGUID": "9c1d9a6d-9daf-4e8c-b409-0127743325ce",
            "FAssetID": "7581213453",
            "FAssetTypeID": 701,
            "FAgentGUID": "4b3dd67a-00af-4118-87bf-fa9583a83b25",
            "FDynPsd": 0,
            "FStaticPsd": "123456",
            "FDynamicPsd": null,
            "RowNo": 2
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation

FAssetGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FAgentGUID	String	Unique identification of company
FDynPsd	Int	Dynamic password open state
FStaticPsd	String	Static password
FDynamicPsd	String	Dynamic password

Other result status description:

- 105：System exception
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAssetPassword\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FGUIDs:\"3A70D699-AB9D-4426-B394-3319874A7706,9C1D9A6
D-9DAF-4E8C-B409-0127743325CE\",FPageSize:\"20\",FPageIndex:\"1\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
```

```
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# (.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryAssetPassword\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FGUIDs:\"3A70D699-AB9D-4426-B394-3319874A7706,9C1D9A6
D-9DAF-4E8C-B409-0127743325CE\",FPageSize:\"20\",FPageIndex:\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'QueryAssetPassword',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs':'3A70D699-AB9D-4426-B394-3319874A7706,9C1D9A6D-9DAF-4E8C-B40
9-0127743325CE',
      'FPageSize': 20,
      'FPageIndex': 1
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
```

```
        'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                      r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
        'Connection': 'keep-alive'
        }
       req = request.Request(url, headers=headers, data=data)
       page = request.urlopen(req).read()
       page = page.decode('utf-8')
       # json_array = json.loads(page)
       return page;
```

Update unlock password

Summary：

- Update static unlock password

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	UpdateLockPassword
FAssetGUID	yes	string	Unique identification of device
FNewPassword	yes	string	New password
FOldPassword	yes	string	Old password

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 105：System exception
- 102：Request parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"UpdateLockPassword\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FAssetGUID:\"3A70D699-AB9D-4426-B394-3319874A7706\",F
NewPassword:\"123456\",FOldPassword:\"123478\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
```

```
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"UpdateLockPassword\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FAssetGUID:\"3A70D699-AB9D-4426-B394-3319874A7706\",F
NewPassword:\"123456\",FOldPassword:\"123478\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'UpdateLockPassword',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUID':'3A70D699-AB9D-4426-B394-3319874A7706',
      'FNewPassword': '123456',
```

```
        'FOldPassword': '123478'
         }
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Unlock password update status

Summary：

- Query unlock password update state

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryUpdateLockPasswordStatus
FAssetGUID	yes	string	Unique identification of device

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "succeed",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 109：updating（Query once every 2S. After 10 queries, it still fails）
- 105：System exception
- 102：Parameter error

Examples:

Java:

```
String result = "";
//Request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryUpdateLockPasswordStatus\",FTokenID:\"3acef0
45-d302-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8
c5f6a3c\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
```

```
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
//Request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
string body = "{FAction:\"QueryUpdateLockPasswordStatus\",FTokenID:\"3acef0
45-d302-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8
c5f6a3c\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'QueryUpdateLockPasswordStatus',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd' ,
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
```

```
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Query the latest photos taken by the vehicle

Brief description:

- Query the latest photo taken by a vehicle.

API version:

Version	Author	Creation Date	Revision Date
2.0.0	Lenny	2024-01-24	

Request URL:

- International clients: http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- Domestic clients: http://cloud.assetscontrols.com:8092/OpenApi/Instruction

Request Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryCameraImgsList)
FVehicleGUID	Yes	string	Vehicle GUID, e.g. 3C611B54-623E-6FA8-3924-791C9CC94323
FStartTime	Yes	string	Start time
FEndTime	Yes	String	End time

FVersion	Yes	String	Version number

Response Example:

When successful:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FVehicleGUID": "a4b40424-cfc4-4b78-84ed-6fbb0b7f28d2",
            "FVehicleName": "876208000137",
            "FAssetGuid": "a64b2e58-9305-4a01-9c51-092205123945",
            "FAssetID": "876208000137",
            "FAssetTypeID": 3705,
            "FCameraID": 1,
            "FType": 0,
            "FDateTime": "2024/1/24 6:17:21",
            "FLongitude": "0",
            "FLatitude": "0",
            "FReasonKey": 0,
            "FUrl": "http://jointech-705c-bucket.obs.ap-southeast-1.myhuawe
icloud.com/OBS_LockFiles/876208000137_1706105841/876208000137_1706105841_08
_00.jpeg"
        }
    ]
}
```


When there's an error:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Response Parameters:

Parameter	Type	Description
FVehicleGUID	String	Vehicle ID

FVehicleName	String	License plate number
FAssetID	String	Terminal ID
FAssetTypeID	String	Terminal type
FCameraID	String	Camera ID
FGpsTime	DateTime	Capture time
FLongitude	Double	Capture longitude
FLatitude	Double	Capture latitude
FShortName	String	Company abbreviation
FReasonKey	String	Capture reason, 1 for timed capture, 2 for triggered capture, 3 for immediate capture
FUrl	String	Image URL
FCustomAssetTypeName	String	Custom device type name

Note:

- Additional error codes include:
- 105: System exception
- 102: Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{\"FAction\":\"QueryCameraImgsList\",\"FVehicleGUID\":\"a4b4
0424-cfc4-4b78-84ed-6fbb0b7f28d2\",\"FStartTime\":\"2024-01-23 16:00:00\",\
"FEndTime\":\"2024-01-24 15:59:59\",\"FTokenID\":\"3acef045-d302-4032-b40a-
d9ee6c1519cd\",\"FTimeDifferent\":28800,\"FLanguage\":\"1\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
```

```
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
string body = "{\"FAction\":\"QueryCameraImgsList\",\"FVehicleGUID\":\"a4b4
0424-cfc4-4b78-84ed-6fbb0b7f28d2\",\"FStartTime\":\"2024-01-23 16:00:00\",\
"FEndTime\":\"2024-01-24 15:59:59\",\"FTokenID\":\"3acef045-d302-4032-b40a-
d9ee6c1519cd\",\"FTimeDifferent\":28800,\"FLanguage\":\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction"
payload = {
    "FAction": "QueryCameraImgsList",
    "FVehicleGUID": "a4b40424-cfc4-4b78-84ed-6fbb0b7f28d2",
    "FStartTime": "2024-01-23 16:00:00",
    "FEndTime": "2024-01-24 15:59:59",
```

```
    "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd",
    "FTimeDifferent": 28800,
    "FLanguage": "1"
}
headers = {
    "Authorization": "eyJhbGciOiJIUzUxMiJ9.eyJsb2dpbl91c2VyX2tleSI6IjZjNTg4
Yjk2LTkyNTQtNDcyMC1iYzMwLWQ0ZTI0Mzc4YzMyMCJ9.oTjYmJFpmPDSqFX8oHkzdBMYhidGWx
DaeygdKY3SphFrxq3yRzyPOq80kFUW1CH-gVW8M6tRlzTrPkvANMQxMg",
    "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:121.0) Geck
o/20100101 Firefox/121.0",
    "Accept": "application/json, text/plain, */*",
    "Accept-Language": "zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,
en;q=0.2",
    "Accept-Encoding": "gzip, deflate",
    "Content-Type": "application/json",
    "Origin": "http://120.25.245.20:8081",
    "Connection": "keep-alive",
    "Referer": "http://120.25.245.20:8081/",
    "content-type": "application/json"
}

response = requests.request("POST", url, json=payload, headers=headers)

print(response.text)
```

Node.js:

```
const request = require('request');

const options = {
  method: 'POST',
 url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction',
  headers: {
    Authorization: 'eyJhbGciOiJIUzUxMiJ9.eyJsb2dpbl91c2VyX2tleSI6IjZjNTg4Yj
k2LTkyNTQtNDcyMC1iYzMwLWQ0ZTI0Mzc4YzMyMCJ9.oTjYmJFpmPDSqFX8oHkzdBMYhidGWxDa
eygdKY3SphFrxq3yRzyPOq80kFUW1CH-gVW8M6tRlzTrPkvANMQxMg',
    'User-Agent': 'Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:121.0) Geck
o/20100101 Firefox/121.0',
    Accept: 'application/json, text/plain, */*',
    'Accept-Language': 'zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,
en;q=0.2',
    'Accept-Encoding': 'gzip, deflate',
    'Content-Type': 'application/json',
    Origin: 'http://120.25.245.20:8081',
```

```
    Connection: 'keep-alive',
    Referer: 'http://120.25.245.20:8081/',
    'content-type': 'application/json'
  },
  body: {
    FAction: 'QueryCameraImgsList',
    FVehicleGUID: 'a4b40424-cfc4-4b78-84ed-6fbb0b7f28d2',
    FStartTime: '2024-01-23 16:00:00',
    FEndTime: '2024-01-24 15:59:59',
    FTokenID: '3acef045-d302-4032-b40a-d9ee6c1519cd',
    FTimeDifferent: 28800,
    FLanguage: '1'
  },
  json: true
};

request(options, function (error, response, body) {
  if (error) throw new Error(error);

  console.log(body);
});
```

Active Photograph (including GP and Su standard)

Brief Description:

- Active Photograph (including GP and Su standard)

API Version:

Version	Created by	Created Date	Revised Date
2.0.0	lenny	2024-01-24	

Request URL:

- International Client: http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- Domestic Client: http://cloud.assetscontrols.com:8092/OpenApi/Instruction

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (ActivePhotograph)
FVehicleGUID	Yes	string	Terminal unique identifier
FT_GpActivePhotograph	Yes	Object	

FT_GpActivePhotograph

Parameter	Required	Type	Description
FCameraID	Yes	String	Camera ID
FInterval	Yes	int	Image transmission interval in seconds, maximum value is 3600 seconds, minimum value is 10 seconds.
FCount	Yes	int	Number of images to be transmitted. If set to 0, no more image data will be uploaded. Maximum value is 100.

Response Example:

When successful:

```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": []
}
```

When there's an error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Response Parameters:

None

Note:

- Additional error codes include:
- 105: System exception
- 108: Failed to send
- 102: Parameter error

Request Example:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{\"FAction\":\"ActivePhotograph\",\"FAssetGUID\":\"a64b2e58-
9305-4a01-9c51-092205123945\",\"FT_GpActivePhotograph\":{\"FAssetID\":\"876
208000137\",\"FCount\":1},\"FTokenID\":\"3acef045-d302-4032-b40a-d9ee6c1519
cd\",\"FTimeDifferent\":28800,\"FLanguage\":\"1\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
string body = "{\"FAction\":\"ActivePhotograph\",\"FAssetGUID\":\"a64b2e58-
9305-4a01-9c51-092205123945\",\"FT_GpActivePhotograph\":{\"FAssetID\":\"876
208000137\",\"FCount\":1},\"FTokenID\":\"3acef045-d302-4032-b40a-d9ee6c1519
cd\",\"FTimeDifferent\":28800,\"FLanguage\":\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
```

```
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python：

```
url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction"

payload = {
    "FAction": "ActivePhotograph",
    "FAssetGUID": "a64b2e58-9305-4a01-9c51-092205123945",
    "FT_GpActivePhotograph": {
        "FAssetID": "876208000137",
        "FCount": 1
    },
    "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd",
    "FTimeDifferent": 28800,
    "FLanguage": "1"
}
headers = {
    "Authorization": "eyJhbGciOiJIUzUxMiJ9.eyJsb2dpbl91c2VyX2tleSI6IjZjNTg4
Yjk2LTkyNTQtNDcyMC1iYzMwLWQ0ZTI0Mzc4YzMyMCJ9.oTjYmJFpmPDSqFX8oHkzdBMYhidGWx
DaeygdKY3SphFrxq3yRzyPOq80kFUW1CH-gVW8M6tRlzTrPkvANMQxMg",
    "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:121.0) Geck
o/20100101 Firefox/121.0",
    "Accept": "application/json, text/plain, */*",
    "Accept-Language": "zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,
en;q=0.2",
    "Accept-Encoding": "gzip, deflate",
    "Content-Type": "application/json",
    "Origin": "http://120.25.245.20:8081",
    "Connection": "keep-alive",
    "Referer": "http://120.25.245.20:8081/",
    "content-type": "application/json"
}

response = requests.request("POST", url, json=payload, headers=headers)

print(response.text)
```

Node.js:

```
const request = require('request');

const options = {
  method: 'POST',
  url: 'http://120.25.245.20:8092/OpenApi/Instruction',
  headers: {
    Authorization: 'eyJhbGciOiJIUzUxMiJ9.eyJsb2dpbl91c2VyX2tleSI6IjZjNTg4Yj
k2LTkyNTQtNDcyMC1iYzMwLWQ0ZTI0Mzc4YzMyMCJ9.oTjYmJFpmPDSqFX8oHkzdBMYhidGWxDa
eygdKY3SphFrxq3yRzyPOq80kFUW1CH-gVW8M6tRlzTrPkvANMQxMg',
    'User-Agent': 'Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:121.0) Geck
o/20100101 Firefox/121.0',
    Accept: 'application/json, text/plain, */*',
    'Accept-Language': 'zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,
en;q=0.2',
    'Accept-Encoding': 'gzip, deflate',
    'Content-Type': 'application/json',
    Origin: 'http://120.25.245.20:8081',
    Connection: 'keep-alive',
    Referer: 'http://120.25.245.20:8081/',
    'content-type': 'application/json'
  },
  body: {
    FAction: 'ActivePhotograph',
    FAssetGUID: 'a64b2e58-9305-4a01-9c51-092205123945',
    FT_GpActivePhotograph: {FAssetID: '876208000137', FCount: 1},
    FTokenID: '3acef045-d302-4032-b40a-d9ee6c1519cd',
    FTimeDifferent: 28800,
    FLanguage: '1'
  },
  json: true
};

request(options, function (error, response, body) {
  if (error) throw new Error(error);

  console.log(body);
});
```

Query Asset Online Status

Brief Description:

- Query Asset Online Status

API Version:

Version	Created by	Created Date	Revised Date
2.0.0	lenny	2024-01-24	

Request URL:

- International Client: http://icloud.assetscontrols.com:8092/OpenApi/Monitor
- Domestic Client: http://cloud.assetscontrols.com:8092/OpenApi/Monitor

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryAssetOnlineStatus)
FAssetGUID	Yes	string	Device unique identifier

Response Example:

When successful:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "FAssetID": "876208000034",
        "FStatus": 3,
        "FGPSTime": "2023-10-07T07:40:26Z",
        "FRecvTime": "2023-10-07T07:40:31.631Z",
        "FLongitude": 0,
        "FLatitude": 0
    }
}
```


When there's an error:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Response Parameters:

Parameter	Type	Description
FAssetID	String	Device ID
FStatus	String	Status (0: Not activated, 1: Online, 3: Offline)
FGPSTime	String	GPS time
FRecvTime	String	Receiving time
FLongitude	Double	Longitude of the photo
FLatitude	Double	Latitude of the photo

Note:

- Additional error codes include:
- 105: System exception
- 102: Parameter error

Request Example:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Monitor";
String body = "{\r\n    \"FAction\": \"QueryAssetOnlineStatus\",\r\n    \"F
AssetGUID\": \"76e63f83-b869-4431-af27-a5dbecb5a49c\",\r\n    \"FTokenID\":
 \"3acef045-d302-4032-b40a-d9ee6c1519cd\",\r\n    \"FTimeDifferent\": 28800
,\r\n    \"FLanguage\": \"1\"\r\n}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Monitor";
string body = "{\r\n    \"FAction\": \"QueryAssetOnlineStatus\",\r\n    \"F
AssetGUID\": \"76e63f83-b869-4431-af27-a5dbecb5a49c\",\r\n    \"FTokenID\":
 \"3acef045-d302-4032-b40a-d9ee6c1519cd\",\r\n    \"FTimeDifferent\": 28800
,\r\n    \"FLanguage\": \"1\"\r\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
```

```
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = "http://cloud.assetscontrols.com:8092/OpenApi/Monitor"

payload = {
    "FAction": "QueryAssetOnlineStatus",
    "FAssetGUID": "76e63f83-b869-4431-af27-a5dbecb5a49c",
    "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd",
    "FTimeDifferent": 28800,
    "FLanguage": "1"

}
headers = {
    "Authorization": "eyJhbGciOiJIUzUxMiJ9.eyJsb2dpbl91c2VyX2tleSI6IjZjNTg4
Yjk2LTkyNTQtNDcyMC1iYzMwLWQ0ZTI0Mzc4YzMyMCJ9.oTjYmJFpmPDSqFX8oHkzdBMYhidGWx
DaeygdKY3SphFrxq3yRzyPOq80kFUW1CH-gVW8M6tRlzTrPkvANMQxMg",
    "User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:121.0) Geck
o/20100101 Firefox/121.0",
    "Accept": "application/json, text/plain, */*",
    "Accept-Language": "zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,
en;q=0.2",
    "Accept-Encoding": "gzip, deflate",
    "Content-Type": "application/json",
    "Origin": "http://120.25.245.20:8081",
    "Connection": "keep-alive",
    "Referer": "http://120.25.245.20:8081/",
    "content-type": "application/json"
}

response = requests.request("POST", url, json=payload, headers=headers)

print(response.text)
```

Node.js:

```
const request = require('request');
```

```
const options = {
  method: 'POST',
  url: ' http://cloud.assetscontrols.com:8092/OpenApi/Monitor',
  headers: {
    Authorization: 'eyJhbGciOiJIUzUxMiJ9.eyJsb2dpbl91c2VyX2tleSI6IjZjNTg4Yj
k2LTkyNTQtNDcyMC1iYzMwLWQ0ZTI0Mzc4YzMyMCJ9.oTjYmJFpmPDSqFX8oHkzdBMYhidGWxDa
eygdKY3SphFrxq3yRzyPOq80kFUW1CH-gVW8M6tRlzTrPkvANMQxMg',
    'User-Agent': 'Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:121.0) Geck
o/20100101 Firefox/121.0',
    Accept: 'application/json, text/plain, */*',
    'Accept-Language': 'zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,
en;q=0.2',
    'Accept-Encoding': 'gzip, deflate',
    'Content-Type': 'application/json',
    Origin: 'http://120.25.245.20:8081',
    Connection: 'keep-alive',
    Referer: 'http://120.25.245.20:8081/',
    'content-type': 'application/json'
  },
 body: {
    FAction: 'QueryAssetOnlineStatus',
    FAssetGUID: '76e63f83-b869-4431-af27-a5dbecb5a49c',
    FTokenID: '3acef045-d302-4032-b40a-d9ee6c1519cd',
    FTimeDifferent: 28800,
    FLanguage: '1'
  },
  json: true
};

request(options, function (error, response, body) {
  if (error) throw new Error(error);

  console.log(body);
});
```

Remote command list

Query command list

Send command

Query send record

Query command list

Summary：

- Query command list supported by the device

Version：

No.	Editor	Edit date	Revision date
1.0.0	admin	2021-12-31	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QuerySystemRemoteInstructions
FAssetGUID	yes	string	Unique identification of device
FLanguage	yes	Int	0：english；1：chinese

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FType": null,
            "FName": "P01-查询终端版本",
            "FInsType": "P01"
        },
        {
            "FType": null,
            "FName": "P03-低电休眠控制",
            "FInsType": "P03"
        },
        {
            "FType": null,
            "FName": "P04-设置/查询数据上传间隔和休眠自动唤醒间隔",
            "FInsType": "P04"
        },
        {
            "FType": null,
            "FName": "P06-设置/查询监控中心IP、端口、APN",
            "FInsType": "P06"
        },
        {
            "FType": null,
            "FName": "P10-设置/查询时差",
            "FInsType": "P10"
        },
        {
            "FType": null,
            "FName": "P11-设置/查询VIP手机号码",
            "FInsType": "P11"
        },
        {
            "FType": null,
            "FName": "P12-设置/查询VIP号码是否允许报警",
            "FInsType": "P12"
        },
        {
            "FType": null,
            "FName": "P13-恢复出厂设置",
            "FInsType": "P13"
        },
```

```
        {
            "FType": null,
            "FName": "P14-读取终端的IMEI号",
            "FInsType": "P14"
        },
        {
            "FType": null,
            "FName": "P15-重启设备",
            "FInsType": "P15"
        },
        {
            "FType": null,
            "FName": "P22-授时(同步GMT时间)",
            "FInsType": "P22"
        },
        {
            "FType": null,
            "FName": "P23-设置/取消短信、电话可唤醒工作模式",
            "FInsType": "P23"
        },
        {
            "FType": null,
            "FName": "P32-主动进入休眠指令",
            "FInsType": "P32"
        },
        {
            "FType": null,
            "FName": "P37-设置G-sensor参数",
            "FInsType": "P37"
        },
        {
            "FType": null,
            "FName": "P38-查询/设置开锁报警时间间隔参数",
            "FInsType": "P38"
        },
        {
            "FType": null,
            "FName": "P40-查询/设置GPRS通道和短消息通道的报警开关",
            "FInsType": "P40"
        },
        {
            "FType": null,
            "FName": "P54-查询/设置设备追踪模式(设备持续工作)",
            "FInsType": "P54"
        },
        {
```

```
            "FType": null,
            "FName": "P55-查询/设置剩余电量百分比报警",
            "FInsType": "P55"
        },
        {
            "FType": null,
            "FName": "P56-超速报警速度阈值及时间阈值设置指令",
            "FInsType": "P56"
        },
        {
            "FType": null,
            "FName": "P57-GSM低信号报警阈值设置指令",
            "FInsType": "P57"
        },
        {
            "FType": null,
            "FName": "P61-电量低报警提示阀值设置",
            "FInsType": "P61"
        },
        {
            "FType": null,
            "FName": "P62-查询/设置里程统计相关参数",
            "FInsType": "P62"
        },
        {
            "FType": null,
            "FName": "P63-静态飘移处理功能设置",
            "FInsType": "P63"
        },
        {
            "FType": null,
            "FName": "P64-远程关机",
            "FInsType": "P64"
        },
        {
            "FType": null,
            "FName": "ZZZZ-自定义指令",
            "FInsType": "ZZZZ"
        }
    ]
}
```


Error response:

```
{
```

```
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter	Data type	Explanation
FName	String	command name
FInsType	String	command type

Other result status description:

- 105：System exception
- 104：token error or expire
- 102：parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{FAction:\"QuerySystemRemoteInstructions\",FTokenID:\"3acef0
45-d302-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8
c5f6a3c\",FLanguage:\"1\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
```

```
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
string body = "{FAction:\"QuerySystemRemoteInstructions\",FTokenID:\"3acef0
45-d302-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8
c5f6a3c\",FLanguage:\"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'QuerySystemRemoteInstructions',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c',
      'FLanguage':1
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
```

```
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Send command

Summary：

- send command

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2021-12-31	2021-12-31

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	CommandInstruction
FAssetGUID	yes	string	Unique identification of device
FOffline	yes	string	offline command support 1：yes 0：no
FInsType	yes	string	command type

JT701(D) ASCII Commands:

FInsType=P01 (Query Firmware version)

FInsType=P03 (Low power sleep control)
FT_P03Ins
{
FOperationType：Operation type（1：Setting；0：Query）
FOpenType：1: turns on, 0: turns off
FValue：When the power level is set to be lower than, it will enter sleep. The default is 31%, and the settable range is 15% ~ 90%
}

FInsType=P04 (Query and Set data upload interval and RTC timing upload interval)
FT_P04Ins
{
FOperationType: Operation mode（1：setting；0：query）
FUpLoadInterval: Data upload time interval，unit in seconds，default 30 sec，value range[5-600]
FAwakenInterval: RTC timing wake-up interval，unit in seconds，default 30 sec，value range[30-1440]
}

FInsType=P06 (Query and Set main IP1/port/SIM1(SIM2) card slot corresponds to APN)
FT_P06Ins:
{
FOperationType: Operation mode（0：Query SIM1 parameters；1：Set SIM1 parameters； 2：Query SIM2 parameters；3：Set SIM2 parameters）
FIP: Host IP address
FPort: TCP port
FCMNET: APNname(maximum 50 characters)
FAPN: APNuser(maximum 50 characters)
FPassword: APNpass(maximum 50 characters)
}

FInsType=P10 (Query and Set SMS alarm time difference)
FT_P10Ins:
{
FOperationType: Operation mode（1：setting；0：query）
FTimeDifference: Time difference value. The unit is in minutes. Value range [-720~780]，default value=0
}

FInsType=P11 (Query and Set VIP phone number)
FT_P11Ins:
{

FOperationType: Operation mode（1：setting；0：query）
FIndex: VIP phone No. index. Value range [1~5] Max support 5 VIP number
FPhone：The mobile phone number cannot exceed 15 digits and must be preceded by the international dial code, which is 86 or +86 for China.
}

FInsType=P12 (Query and Set VIP phone number to receive SMS alarm)
FT_P12Ins:
{
FOperationType: Operation mode（1：setting；0：query）
FVIP1: VIP1, 1 enable to receive SMS alarm on VIP1 number; 0 disable
FVIP2：VIP2, 1 enable to receive SMS alarm on VIP2 number; 0 disable
FVIP3：VIP3, 1 enable to receive SMS alarm on VIP3 number; 0 disable
FVIP4：VIP4, 1 enable to receive SMS alarm on VIP4 number; 0 disable
FVIP5：VIP5, 1 enable to receive SMS alarm on VIP5 number; 0 disable
}

FInsType=P13 (Factory reset)

FInsType=P14 (Query IMEI number of 4G/3G/2G module)

FInsType=P15 (Restart device remotely)

FInsType=P22 (Time synchronization)
FT_P22Ins:
{
FTime: Day/month/year/hour/minute/second,the time is UTC time
}

FInsType=P23 (Query and Set SMS/phone call wake-up function)
FT_P23Ins:
{
FOperationType：Operation mode（1：setting；0：query）
FAwakenState: 1 means allowing SMS messages and phone calls to wake up, 0 means canceling SMS messages and phone calls to wake up, and the default is 0.
}

FInsType=P32 (Force device enter sleep)

FInsType=P37 (Query and Set motion detection by G-sensor)
FT_P37Ins
{
FOperationType：Operation mode（1：setting；0：query）
FValue1: Motion detection threshold, the value range is 0 or [63~500], the unit is mg, the default value is 126.If set value is 0, the G-sensor motion detection function is turned off;
FValue2: Acceleration threshold for motion detection.customzied firmware function.can be

ignored.
}

FInsType=P38 (Query and Set long-time unlocking alarm)
FT_P38Ins
{
FOperationType：Operation mode（1：setting；0：query）
FValue: Long-time unlocking alarm threshold, the unit is minute,default,120 minutes the value range is [3~180]
}

FInsType=P40 (Query and Set the switch of GPRS/SMS alarm)
FT_P40Ins
{
FOperationType：Operation mode（1：setting；0：query）
FLockRope：Lock rope cut alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FIllegalCard：Swiping illegal RFID card alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLongTimeOpened: Long-time unlocking alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FFivePasswordError: 5 consecutive incorrect passwords alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FVibration: Vibration alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FInGeoFence: Enter Geo-fence alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FOutGeoFence: Exit Geo-fence alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowPower: Low Battery alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FUnCoverBack: Back Cover opened alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLockStuck: Motor Struck alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowGSM: GSM signal alow alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FOverSpeed: Speeding alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FDynamicToStatic: MotiontoStatic alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FStaticToDynamic: StatictoMotion alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
}

FInsType= P54 (Query and Set tracking mode)
FT_P54Ins
{
FOperationType：Operation mode（1：setting；0：query）
FStatus：1 means enable tracking mode, 0 Stop tracking mode
}

FInsType= P61 (Query and Set low battery alarm threshold)
FT_P61Ins
{
FOperationType：Operation mode（1：setting；0：query）
FValue：low battery alarm threshold, value range [0~90]
}

FInsType= P62 (Query and Set the initial mileage)
FT_P62Ins
{
FOperationType：Operation mode（1：setting；0：query）
FValue：Initial mileage,unit in kilometers. Value range [0, 4294967295]
}

FInsType= P63 (Query and Set GPS static drift optimization function)
FT_P63Ins
{
FOperationType：Operation mode（1：setting；0：query）
FStatus：1 Enable this function；0 Disable this function. In default it is disabled.
}

FInsType= P68 (Query the IMSI and ICCID of the SIM card)
FT_P68Ins
{
FType：1：Query IMSI, 2:Query ICCID
}

FInsType= WLNET2 (Query/set slave sensor working interval)
FT_WLNET2Ins
{
FAssetID：Sensor ID
FOperationType: Operation mode（1：setting；0：query）
FValue: The slave working time interval, unit in minutes, default 5 minutes(JT126),if JT709 ,default 50 minutes.value range[5~1440]
}

FInsType= WLNET4 (Query slave sensor firmware version)

FInsType= ZZZZ (Custom Commands)

FInsContent: command content

JT709A(C)/JT707C(A)/JT705A/JT301X/JT702 ASCII Commands:

FInsType= BASE1（Query Device Firmware version/Cellular module info.）

FInsType= BASE2（Synchronize UTC time to Device）
FT_BASE2Ins
{
FAssetID：Device ID. e.g. “835210000201”
FTime：Timing time UTC time (time set by 20111018123820: year, month, day, hour, minute and second, parsed to: 2011-10-18 12:38:20)
}

FInsType= BASE3（Restart device remotely）

FInsType= BASE4（Factory reset）
FT_BASE4Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：1 means that all information is restored to the factory default value; 2 means that except the communication master and slave IP, all other information is restored to the factory default value; 3 means that except the communication master and slave IP and VIP number, all other information is restored to the factory default value.；
}

FInsType= BASE48（Query/Set alarm switch for GPRS/SMS channel）
–These fields are passed according to the device protocol, and all fields are optional.
FT_BASE48Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：1: Setting; 0: Query; 2 External module alarm query; 3 External sensor settings.
FLockRope：Lock rope cut alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FIllegalCard：Swipe illegal RFID card alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLongTimeOpened: Long-time unlocking alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FFivePasswordError: Wrong unlocking password alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FVibration: Vibration alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FInGeoFence: Enter Geo-fence alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned

on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FOutGeoFence: Exit Geo-fence alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowPower: Low Battery alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FUnCoverBack: Back Cover opened alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLockStuck: Motor struck alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowGSM: GSM signal low alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FOverSpeed: Speeding alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FErrorUnlock：Unlocking abnormal alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on) only for JT705A
FTiltAlarm：Tilt alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on) only for JT705A
FLongTimeStop：Long-time parking alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on) only for JT705A_RH
FInLoadAlarm：Entry Road alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on) only for JT705A_RH
FOutLoadAlarm： Exit Road alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on) only for JT705A_RH
FOutFenceUnlockAlarm： Exit Geo-fence but didn't lock device alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on) only for JT705A_RH

—below alarm types only supports by JT301X device model
FHighTempAlarm：High temperature alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowTempAlarm： Low temperature alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FHighHumidityAlarm：High humidity alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowHumidityAlarm：Low humidity alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FHighLightAlarm：Strong light alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowLightAlarm：Low light alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FHighPressureAlarm：High pressure alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLowPressureAlarm：Low pressure alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)

FOpenDoorAlarm：Door Open/Close alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLedHightVoltage: LED high voltage alarm (0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLedHighElectric: LED high current alarm(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
FLockException: Door lock opens abnormally and alarms(0: GPRS and SMS are both turned off, 1: Only GPRS is turned on, 2: Only SMS is turned on, 3: GPRS and SMS are turned on)
}

FInsType= BASE6（Query/Set Data reporting interval and RTC timing wake-up interval）
FT_BASE6Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FUpLoadInterval: Data reporting interval when device is waken up ,default 60s,value range: 5s to 3600s
FAwakenInterval: RTC timing wake-up time interval, default value 60min. Value range: 5min to 1440min
}
FInsType= BASE7（ Query/Set SMS or Calling wake up device）
FT_BASE7Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FType: 1 means enable SMS or calling wake up device function 0: disable this function.but the device can be waken up by other wake-up sources.like vibration,RFID card swiping,charging,bluetooth commands and so on.

}

FInsType= BASE8（Query/Set time difference of SMS message）
FT_BASE8Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FTimeDifference: Time difference (unit: minutes; the working time of the device is based on UTC time, and the local time is converted to UTC time + time difference)
}

FInsType= BASE9（Query/Set VIP phone numbers）
FT_BASE9Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）

FVIP1：The first VIP number (if not set, pass in 0)
FVIP2：The second VIP number (if not set, pass in 0)
FVIP3：The third VIP number (if not set, pass in 0)
FVIP4：The fourth VIP number (if not set, pass in 0)
FVIP5：The fifth VIP number (if not set, pass in 0)
}

FInsType= BASE10（Query/Set Main and Backup IP address(or Domain) and TCP port , APN, APN user and pass）
FT_BASE10Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FMainIP: Main IP address
FMainPort： main TCP port
FSubIP：Backup Ip address
FSubPort： Backup TCP port
FCMNET：APN
FAPN：APNuser
FPassword：APNpass
}

FInsType= BASE40（Query/Set Only VIP phone number query and device configuration are allowed）
FT_BASE40Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FType: 1 means that only VIP numbers are supported for device configuration and query, 0 means that non-VIP numbers can also be configured and queried. Default 0
}

FInsType= BASE43（Query/Set Mileage accumulation function）
FT_BASE43Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（0: Query; 1: Indicates setting the speed limit value operation of mileage statistics; 2: Indicates setting the mileage synchronization value）
FValue: If the command is 1, it means the speed limit value operation of mileage statistics (that is, if the speed is less than the changed value, the mileage will not be counted, the default is xkm/h, parameter 0-100); if the command is 2, it means setting the mileage synchronization value to x kilometers
}

FInsType= BASE44（Query/Set GPS static drift optimization）

FT_BASE44Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FType: 1 turns on this static drift processing function, 0 means turns off the static drift processing function
}

FInsType= BASE51（Query/Set Motion/Static report interval）-for JT301X device model
FT_BASE51Ins：
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FStaticUploadInterval: Static report interval, value range 10-1440, unit minute
FDynamicUploadInterval: Motion/Static report interval, the value range is 10-1440, unit minute, this item requires the device to have motion detection function, and this function is turned on, this field value will take effect.
}

FInsType= BASE52（Query/set host device name）
FT_BASE52Ins：
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FName: host device name
}

FInsType= BASE58（Query/set wakeup mode）-for JT301X device model
FT_BASE58Ins：
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FModel: Mode 0: Timing mode, 1: Intelligent mode (automatically switches between dynamic and static intervals based on vibration)
}

FInsType= BASE59（Query/Set Environment Abnormal Alarm Parameters）-for JT301X device model
FT_BASE59Ins：
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（0：query common alarm setting(light sensor),1: Set common alarms (light sensor) ,2 query extend sensors alarm setting(temperature/ humidity / pressure sensor),3 Set extend sensors alarm(temperature/ humidity / pressure sensor)）
FType: 1: temperature parameter, 2: humidity parameter, 3: light parameter, 4: air pressure

parameter
FLowThreshold: low threshold
FHighThreshold: high threshold
Note:
1: Temperature parameter, unit °C, range (-50~125), the value of -50 will not take effect
2: Humidity parameter, unit %, range 0-100%, value 0 will not take effect
3: Illumination parameter, unit lx, value 0-65535, value 0 will not take effect
4: Air pressure parameter, unit mbar, value 0-65535, value 0 will not take effect
}

FInsType= BASE78（Query/set environment anomaly detection parameters during sleep）
FT_BASE78Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（0 query common setting(light sensor),1 Set common (light sensor),2 query extend sensors setting(temperature/ humidity / pressure sensor),3 Set extend sensors(temperature/ humidity / pressure sensor)）
FValue: 1: temperature parameter, 2: humidity parameter, 3: light parameter, 4: air pressure parameter
FTime: The time interval for environment detection. The value range is [5~65535], and the unit is second.
FExceptionTime: The wakeup interval after the device detects anomalies and alarms. The value range is [60-1440], and the unit is minutes.
}

FInsType= GSENS1（Query/set vibration wake-up threshold）
FT_GSENS1Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FValue: The unit is mg (the gsensor chip 63mg is a ladder configuration, the actual chip configuration value is 500/63 rounded = 7), the minimum value is 63, and the maximum value is 8000. When the vibration reaches this value, a vibration will be detected. If the value is equal to 0, turn off the function
}

FInsType= GSENS2（ Query/set vibration alarm value）
FT_GSENS2Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FValue: Vibration alarm value: The valid range is 63 to 8000, the unit is mg, the default is 0 to turn off the vibration alarm function. Must be larger than the vibration wake-up value
}

FInsType= DEBUG5（ Query/set SMS wake-up）
FT_DEBUG5Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FType：0 means to turn off SMS wake-up, 1 means to turn on SMS wake-up
}

FInsType= DEBUG7（Deep sleep warehousing mode (Shutdown device remotely)）

FInsType= DEBUG15（Force Device enter sleep）
FT_DEBUG15Ins
{
FAssetID：Device ID e.g. “835210000201”
FTime：Indicates how many seconds it will take for the device to go to sleep.
}

FInsType= DEBUG27（Query SIM card information）

FInsType= DEBUG29（Query/delete historical (blind area) data in Flash）
FT_DEBUG29Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：delete；0：query）
}

FInsType= DEBUG30（Query/set speeding alarm）
FT_DEBUG30Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FSpeedThreshold: speeding threshold
FDuration：Duration.unit in seconds
}

FInsType= DEBUG31（Query/set low battery alarm value）
FT_DEBUG31Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FAlarmThreshold: Low battery threshold. unit in %
}

FInsType= DEBUG34（Set voice announcement volume and language）- for JT705A device model
FT_DEBUG34Ins

{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FVolume: Voice broadcast volume, the volume setting range is 1-15, 1 corresponds to the smallest volume, the default is 9
FLanguage: Language selection 0: Chinese 1: English, default Chinese
}

FInsType= ELOCK2（Query/Set long-time unlocking alarm threshold）
FT_ELOCK2Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FValue：longtime unlocking alarm threshold, unit in minutes. The device pulls out the lock rope, after unlocking, the device is not locked for preset time, and a long-time unlocking alarm is generated; the value range is 1 to 10 minutes. The default is 1 minute.
}

FInsType= ELOCK19（Query/set automatic locking time）
FT_ELOCK19Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FValue： Automatic locking time, 1 means automatic locking after 1 minute, unit minute, value 1~10
}

FInsType= ELOCK22（Query and Set the position data reporting interval when the device is unlocked or locked）
FT_ELOCK22Ins
{
FAssetID：Device ID e.g. “835210000201”
FOperationType：Operation mode（1：setting；0：query）
FFunctionType：0 turns off the function, 1: turns on the function
FUnLockUploadInterval：Position data reporting interval in unlocked state, unit in seconds. Value range [5-3600]
FLockUploadInterval：Position data reporting interval in the locked state, unit in seconds .Value range [5-600]
}

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "success",
    "FObject": []
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Other result status description:

- 105：System exception
- 104：token error or expire
- 102：Parameter error
- 131: command not support
- 108: send error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{FAction:\"CommandInstruction\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\",F
InsType:\"P14\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
```

```
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
string body = "{FAction:\"CommandInstruction\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\",F
InsType:\"P14\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      "FAction": "CommandInstruction",
      "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd",
      "FAssetGUID": "8dc24026-649d-4d5b-aee4-f3d24cf56fbe",
      "FOffline": "0",
      "FInsType": "P04",
      "FT_P04Ins": {
        "FOperationType": "1",
        "FUpLoadInterval": "30",
        "FAwakenInterval": "30",
        "FMotionUpLoadInterval": "45",
        "FStaticUpLoadInterval": "60",
```

Send command

```
          "FJudgingTime": "3"
        }
 }
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Query send record

Summary：

- Query send record

Version：

No.	Editor	Edit date	Revision date
1.0.0	admin	2021-12-31	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryInstructionRecord
FAssetGUID	yes	string	Unique identification of device
FPageSize	no	Int	Number per page,default 10
FPageIndex	no	Int	Page number,default 1

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FCount": 2
            }
        ],
        "Table1": [
            {
                "FGUID": "27b8c318-af8a-4304-878a-8a5f9c41aad8",
                "FAssetGUID": "9d73e134-84aa-43d1-be9b-77328c5036f6",
                "FAssetID": "231232",
                "FAssetTypeID": 701,
                "FInsType": "P14",
                "FIndex": 0,
                "FInsContent": "(P14)",
                "FBackContent": null,
                "FStatus": 0,
                "FSendTime": "2021-12-31T03:35:06.323",
                "FFinishTime": null,
                "FUserName": "test",
                "RowNo": 1
            },
            {
                "FGUID": "493d64d3-c1aa-4095-936b-6defeab35aad",
                "FAssetGUID": "9d73e134-84aa-43d1-be9b-77328c5036f6",
                "FAssetID": "231232",
                "FAssetTypeID": 701,
                "FInsType": "P14",
                "FIndex": -1,
                "FInsContent": "(P14)",
                "FBackContent": null,
                "FStatus": 0,
                "FSendTime": "2021-12-31T03:04:58.21",
                "FFinishTime": null,
                "FUserName": "test",
                "RowNo": 2
            }
        ]
    }
```

```
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of record
FAssetGUID	String	Unique identification of device
FAssetID	String	device id
FAssetTypeID	Int	device type
FInsType	String	command type
FInsContent	String	command content
FBackContent	String	back content
FStatus	Int	execution status；1：succeed；0：unsucceed
FUserName	String	Operator
FSendTime	DateTime	send time(UTC)
FFinishTime	DateTime	finish time(UTC)

Other result status description:

- 105：System exception
- 104：token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{FAction:\"QueryInstructionRecord\",FTokenID:\"3acef045-d302
-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c
\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
string body = "{FAction:\"QueryInstructionRecord\",FTokenID:\"3acef045-d302
-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c
\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
```

```
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
      data = {
      'FAction': 'QueryInstructionRecord',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

List of sublocks

Brief Description:

- Sublock list

API Version:

Version	Author	Date	Revision Date
1.0.0	lenny	2023-09-07	-

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QuerySubAssetInfoByFAssetGUID)
FAssetGUID	Yes	string	Device unique identifier
FLanguage	Yes	int	0: English; 1: Chinese

Response Example:

Successful Response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "8846d981-a61f-455d-94fc-33c64416ff7a",
            "FAssetGUID": "2d3d4041-dc5f-4a50-8c6a-8aac15835bf0",
            "FAssetID": "8052400008",
            "FAssetTypeID": 3701,
            "FSubAssetName": "JT709",
            "FSubAssetID": "E0171E0366",
            "FIndex": 9,
            "FDateTime": "2023-09-07T07:03:05Z",
            "FLockStatus": 0,
            "FLockRope": 0,
            "FOpenIns": 0,
            "FPower": 93,
            "FBle": 1,
            "FSensorType": 4,
            "FStatusJson": "{\"lockRope\":0,\"gateway\":0}",
            "FEvent": 6
        }
    ]
}
```


Error Response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Response Parameter Description:

Parameter	Type	Description
FGUID	String	Sublocks are uniquely identified
FAssetGUID	String	Unique identifier of the host
FAssetID	String	Host ID

FAssetTypeID	Int	Host type identifier
FSubAssetName	String	Sublock name
FSubAssetID	String	Sublock device ID
FIndex	Int	Configured submachine number
FDateTime	String	Last update time
FLockStatus	Int	Lock status (0: locked, 1: unlocked)
FLockRope	Int	Lock rope (0: closed, 1: opened)
FOpenIns	Int	Unlock command execution status (0: not executed, 1: executed)
FPower	Int	Power level
FBle	Int	Whether supports Bluetooth (1: supported, 0: not supported)
FSensorType	Int	Submachine type (1: JT126; 4: JT709; 5: JT801; 6: JT802)
FStatusJson	String	Extended information
FEvent	Int	Event type

FStatusJson

Parameter	Type	Description
lockMotor	Int	Motor status (0: motor off, 1: motor on)
lockKnob	Int	Knob status (0: closed, 1: open)
lockValve	Int	Valve status (0: closed, 1: open)
structuralDisassembly	Int	Structural disassembly status (0: not disassembled, 1: disassembled)
bottomDisassembly	Int	Bottom disassembly status (0: not disassembled, 1: disassembled)
emergencyKey	Int	Emergency key status (0: sealed, 1: enabled)

**FEvent **

State Value	Description
0	Locking Event
1	Bluetooth Unlock Event
2	Open Rear Cover Event
3	Remote Unlock Event
4	Lock Cut Alarm
5	Key Wake Up Event
6	Heartbeat Event
7	Charging Wake Up Event
8, 20	Pull Lock Rope Event
9	RFID Unlock Event
10	Unauthorized Card Alert
14	Slave Signal Lost Event
15	Valve Close Event
16	Valve Open Event
17	Low Battery Alert
18	Tamper Alert
19	Electronic Compartment Disassembled Event
21	Insert Lock Rope Event
22	Bluetooth Connection Wake Up Event
23	Emergency Compartment Open Alert
24	Emergency Compartment Close Alert
25	Abnormal Valve Open Alert
26	Lock Pin Close Event

27	Lock Pin Open Event
30	NFC Trigger
-1	Unknown Event

Remarks:

- More error codes for response:
- 104: Token error or expired
- 105: Exception error
- 102: Request parameter error

sample request:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{\n\t\"FAction\": \"QuerySubAssetInfoByFAssetGUID\",\n\t\"FA
ssetGUID\": \"2d3d4041-dc5f-4a50-8c6a-8aac15835bf0\",\n\t\"FTokenID\": \"3a
cef045-d302-4032-b40a-d9ee6c1519cd\",\n\t\"FLanguage\": \"1\"\n}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{\n\t\"FAction\": \"QuerySubAssetInfoByFAssetGUID\",\n\t\"FA
ssetGUID\": \"2d3d4041-dc5f-4a50-8c6a-8aac15835bf0\",\n\t\"FTokenID\": \"3a
cef045-d302-4032-b40a-d9ee6c1519cd\",\n\t\"FLanguage\": \"1\"\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
data = '{ "FAction": "QuerySubAssetInfoByFAssetGUID", "FAssetGUID": "2d3d40
41-dc5f-4a50-8c6a-8aac15835bf0", "FTokenID": "3acef045-d302-4032-b40a-d9ee6
c1519cd",\n\t\"FLanguage\": \"1\"\n }'
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Sublock unlocks

Brief Description:

- Unlock the sublock.

API Version:

Version	Author	Date	Revision
1.0.0	lenny	2023-09-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Instruction
- https://icloud.assetscontrols.com:3443/OpenApi/Instruction

Request Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (SubAssetOpenLock)
FAssetGUID	Yes	string	Device unique identifier
FSubAssetGUID	Yes	string	Sublock unique identifier
FLanguage	Yes	Int	0: English; 1: Chinese

Response Example:

Successful Response:

```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": []
}
```

Error Response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}

{
    "Result": 108,
    "Message": "ins send error",
    "FObject": []
}
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```

Remarks:

- More error codes for response:
- 104: Token error or expired
- 105: Exception error
- 102: Request parameter error
- 108: Unlocking failed
- 113：No unlocking in the unlocked area.
- 115：Not positioned, unable to unlock
- 111: device offline or sleep
- 110：No unlocking permission
- 108：Unlock command sending exception
- 106：The device does not belong to this user
- 105：System exception
- 123：Device does not support this command

- 138:command execution timeout, device has gone into sleep or offline

Request Example:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{\n\t\"FAction\": \"SubAssetOpenLock\",\n\t\"FAssetGUID\": \
"2d3d4041-dc5f-4a50-8c6a-8aac15835bf0\",\n\t\"FSubAssetGUID\": \"8846d981-a
61f-455d-94fc-33c64416ff7a\",\n\t\"FTokenID\": \"3acef045-d302-4032-b40a-d9
ee6c1519cd\",\n\t\"FLanguage\": \"1\"\n}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Instruction";
String body = "{\n\t\"FAction\": \"SubAssetOpenLock\",\n\t\"FAssetGUID\": \
"2d3d4041-dc5f-4a50-8c6a-8aac15835bf0\",\n\t\"FSubAssetGUID\": \"8846d981-a
61f-455d-94fc-33c64416ff7a\",\n\t\"FTokenID\": \"3acef045-d302-4032-b40a-d9
ee6c1519cd\",\n\t\"FLanguage\": \"1\"\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
```

```
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Instruction'
data = '{ "FAction": "SubAssetOpenLock", "FAssetGUID": "2d3d4041-dc5f-4a50-
8c6a-8aac15835bf0", "FSubAssetGUID": "8846d981-a61f-455d-94fc-33c64416ff7a"
, "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd", "FLanguage": "1" }'
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Device/Alarm/Event/Unlock Type Description

Device type：

ID	DeviceModel
100	JTR100
201	JT301A
400	GP4000
500	JT300B
501	JT704-04
502	JT300B-04
503	JT300D-02
504	JT300D-04
551	JT300DB
552	GP2000
553	GP7000
600	GP6000
601	GP6000F
602	JT600C
700	JT700DT
701	JT701
702	JT702
703	JT703
704	JT704
705	JT705

706	JT706
707	JT707A
709	JT709
802	JT802
808	JT/T808
1002	RTCC
1010	ConcoxTrack
1011	ConcoxTrack(MQTT)
1020	Skycniot(GT60)
1021	Skycniot(TX60)
1030	MeiTrack
1040	Queclink
1050	Eelink
1060	EasyTrack
1070	CanTrack
1080	TopTen
1090	KHDTrack
1100	BiidiWatch
1110	SeeWord(S208)
1111	SeeWord(S112U)
1120	AnyTrack
1130	HCIOT
1140	JTS6SA
1150	AOVX-A/G

1151	AOVX-V
1160	Teltonika
1170	JT300T1
1200	MiWiTrack
1301	JT301B
1600	eLock
1701	JT701-TRA
1704	JT704H
1705	JT705A
1707	JT707B
1709	JT709A
1808	CB-2019
2000	UDP
2301	JT301C
2701	JT701D(MQTT)
2705	JT705A_RH
2707	JT707C
2709	JT709B
2808	JT/T 808-2019
3301	JT301D
3701	JT701D
3709	JT709C
4701	Vietnam701
4709	JT709C(DMP)

5701	JT701D_BLE
5709	JT709N
6701	JT701(HWIOT)
6709	JT709C(MQTT)

Only list Alarm/Event types for smart lock

Alarm type	Alarm name
1	Speeding Alarm
19	Overtime Parking
23	Route deviation Alarm
40	Loke rope cut
41	Vibration
42	Long-time unlocking
43	Unlock password error for 5 consecutive times
44	Swiping illegal RFID card
45	Low power
46	Back cover opened
47	Motor stuck
48	Enter fence alarm
49	Exit fence alarm
63	Temperature and humidity alarm
193	Lock device abnormal
194	Unlock password error
195	Do not perform unlocking without positioning

196	No unlocking outside the fence
197	Attitude alarm
198	Slave sensor signal lost
199	Supervision status forbids unlocking
200	Main battery replacement
201	Self-check exception
202	Not enough storage space
203	Lock bar bent
204	Chain saw off
205	Lock bar missing
206	Forbidden to unlock in the sealed state
316	Light sensor alarm
332	Air pressure alarm
400	Overtime idle alarm
402	Fence stop alarm
403	Out fence unlock
404	late warning(Routes)
405	late alarm(Routes)
406	late arrival warning(Routes)
407	Late Arrival Alarm(Routes)
410	Lora communication abnormality
10000	Custom alarm-Defined via 'Rules Engine'

Event type	Event name
3	Unlock

4	Lock
5	Sublock unlock
6	Sublock lock
12	Device offline
17	Charging
18	Maintenance
19	Press button
20	Pull out lock rope
31	Open door
32	Close door
33	Sealing device outside fence
34	Unsealing device in fence
44	Snapshot
45	Timing shooting
46	leave the starting point(Routes)
47	Reach the destination(Routes)
48	Leave the destination(Routes)
49	Complete the waybill(Routes)
50	Enter the waypoint(Routes)
51	Leave waypoint(Routes)
68	Enter the starting point(Routes)
10000	Custom event-Defined via ‘Rules Engine’

Unlock type	Unlock method name
-1	Device Locked

1	Swipe RFID card
2	Remote unlock
3	BLE unlock
4	lock rope cut unlock
5	SMS unlock
6	Press button unlock
7	NFC unlock

Reports

Unlock report

Slave track

Alarm report

Event report

Temperature & humidity curve

Curve of state

Summary：

- Curve of state

Version：

No.	Editor	Edit date	Revision date
1.0.0	lenny	2023-08-07	2023-08-07

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	Required	string	Token ID
FAction	Required	string	Method name (QueryReportStatusTrack)
FGUID	Required	string	Vehicle/Equipment unique identifier
FStartTime	Required	string	Start time, e.g., “2023-07-08 16:00:00”
FEndTime	Required	string	End time, e.g., “2023-08-07 15:59:59”
FSelectType	Required	int	Query type (0: Vehicle, 1: Equipment)

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FVehicleName": "837303000449",
            "FAssetID": "837303000449",
            "FGPSTime": "2023-07-10T09:40:32",
            "Bat": 76,
            "TH": "25.1℃(60%)",
            "Lx": 0,
            "Vib": 4519,
            "Press": 0,
            "Acce": "x:-2880;y:1376;z:-3200",
            "Pos": "x:-2880;y:1376;z:-3200",
            "FD": -1,
            "FLongitude": 113.918228424976,
            "FLatitude": 22.6726779622259,
            "FDir": 0,
            "FTemp1": 25.1000003814697,
            "FTemp2": -1000,
            "FHum1": 60,
            "FHum2": 0
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation

FVehicleName	String	Vehicle ID
FAssetID	Int	Equipment ID
FGPSTime	String	GPS time
Bat	Int	Battery level
TH	String	Temperature and humidity value
Lx	Int	Light intensity
Vib	Int	Vibration amplitude
Press	Int	Pressure
Acce	String	Acceleration
Pos	String	Position
FD	Int	Door status
FLongitude	Double	Current longitude
FLatitude	Double	Current latitude
FDir	Int	Description
FTemp1	Double	Temperature 1
FTemp2	Double	Temperature 2
FHum1	Double	Humidity 1
FHum2	Double	Humidity 2

Other result status description:

- 105：System exception
- 104：token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
```

```
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
String body = "{\r\n  \"FAction\": \"QueryReportStatusTrack\",\r\n  \"FGUID
\": \"f6538348-bccf-4da2-86f0-6659cfcaa33d\",\r\n  \"FStartTime\": \"2023-0
7-08 16:00:00\",\r\n  \"FEndTime\": \"2023-08-07 15:59:59\",\r\n  \"FSelect
Type\": 0,\r\n  \"FTokenID\": \"3acef045-d302-4032-b40a-d9ee6c1519cd\",\r\n
  \"FTimeDifferent\": 28800,\r\n  \"FLanguage\": \"1\"\r\n}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# (.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{
  "FAction": "QueryReportStatusTrack",
  "FGUID": "f6538348-bccf-4da2-86f0-6659cfcaa33d",
  "FStartTime": "2023-07-08 16:00:00",
  "FEndTime": "2023-08-07 15:59:59",
  "FSelectType": 0,
  "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd",
  "FTimeDifferent": 28800,
  "FLanguage": "1"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
```

```
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python：

```
 url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
 data = '{ "FAction": "QueryReportStatusTrack", "FGUID": "f6538348-bccf-4da
2-86f0-6659cfcaa33d", "FStartTime": "2023-07-08 16:00:00", "FEndTime": "202
3-08-07 15:59:59", "FSelectType": 0, "FTokenID": "3acef045-d302-4032-b40a-d
9ee6c1519cd", "FTimeDifferent": 28800, "FLanguage": "1" }'
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Unlock&lock report

Summary：

- Query Device Unlock&lock Report

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-08-20	2024-08-21

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryReportOpenLockList
FGUIDs	yes	string	Unique identification of assets / device, multiple separated by ‘,’
FSelectType	yes	int	1：Query by assets；0：Query by device
FStartTime	yes	datetime	Start time(UTC)

FEndTime	yes	datetime	End time(UTC)
FDateType	yes	int	1：Query by receiving time；0：Query by GPS time

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FVehicleGUID": "3bf410f9-c2fb-4768-a086-39c7c378a473",
            "FVehicleName": "8042400950",
            "FAssetGUID": "0f2b5344-46e6-46d6-bea0-63f574c08df3",
            "FAssetID": "8042400950",
            "FAssetTypeID": 3701,
            "FDateTime": "2024-08-21T03:23:02",
            "FLongitude": 26.172225,
            "FLatitude": -29.269373,
            "FMileage": 45000,
            "FType": 0,
            "FCardNo": "",
            "FOpenType": -1,
            "FCreateTime": "2024-08-21T03:23:03.49",
            "FCell": null,
            "FUserName": null
        },
        {
            "FVehicleGUID": "3bf410f9-c2fb-4768-a086-39c7c378a473",
            "FVehicleName": "8042400950",
            "FAssetGUID": "0f2b5344-46e6-46d6-bea0-63f574c08df3",
            "FAssetID": "8042400950",
            "FAssetTypeID": 3701,
            "FDateTime": "2024-08-21T03:22:37",
            "FLongitude": 26.172225,
            "FLatitude": -29.269373,
            "FMileage": 45000,
            "FType": 1,
            "FCardNo": "",
            "FOpenType": 2,
            "FCreateTime": "2024-08-21T03:22:38.797",
```

```
            "FCell": null,
            "FUserName": "szctestys"
        },
        {
            "FVehicleGUID": "3bf410f9-c2fb-4768-a086-39c7c378a473",
            "FVehicleName": "8042400950",
            "FAssetGUID": "0f2b5344-46e6-46d6-bea0-63f574c08df3",
            "FAssetID": "8042400950",
            "FAssetTypeID": 3701,
            "FDateTime": "2024-08-21T03:07:44",
            "FLongitude": 26.172225,
            "FLatitude": -29.269373,
            "FMileage": 45000,
            "FType": 0,
            "FCardNo": "",
            "FOpenType": -1,
            "FCreateTime": "2024-08-21T03:07:45.31",
            "FCell": null,
            "FUserName": null
        },
        {
            "FVehicleGUID": "3bf410f9-c2fb-4768-a086-39c7c378a473",
            "FVehicleName": "8042400950",
            "FAssetGUID": "0f2b5344-46e6-46d6-bea0-63f574c08df3",
            "FAssetID": "8042400950",
            "FAssetTypeID": 3701,
            "FDateTime": "2024-08-21T03:07:35",
            "FLongitude": 26.172225,
            "FLatitude": -29.269373,
            "FMileage": 45000,
            "FType": 1,
            "FCardNo": "0000127898",
            "FOpenType": 1,
            "FCreateTime": "2024-08-21T03:07:36.07",
            "FCell": null,
            "FUserName": "[0000127898]"
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
```

```
    "FObject": []
}
```

Return parameter description:

Parameter	Data type	Explanation
FVehicleGUID	String	Unique identification of assets
FVehicleName	String	assets No.
FAssetGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FDateTime	DateTime	date time
FLongitude	Decimal	Longitude
FLatitude	Decimal	Latitude
FMileage	Int	Mileage (km)
FType	Int	Lock state （1：Open；0：Close）
FCardNo	String	RFID Card No.
FOpenType	Int	Open type (-1：locked ; 1：Swipe RFID card；2：Remote unlock command；3：BLE unlock;4:lock rope cut unlock;5:SMS unlock;6:Press button unlock;7:NFC unlock)
FCreateTime	DateTime	Receive date time
FCell	String	MCC:MNC:LAC:CID(P45 customized firmware)
FUserName	String	Unlock Person(LoginUsername) or Personnel bound to RFID card or RFID card no.

Other result status description:

- 105：System exception
- 104：token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
String body = "{FAction:\"QueryReportOpenLockList\",FTokenID:\"3acef045-d30
2-4032-b40a-d9ee6c1519cd\",FGUIDs:\"BE2A1E27-B36E-4301-B2C8-465A62AD215F,FE
0BDE75-4A30-4B9C-AD2E-66D8A4F44F5E\",FSelectType:\"1\",FStartTime:\"2020-08
-18 16:00:00\",FEndTime:\"2020-08-25 15:59:59\",FDateType:\"0\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# (.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{FAction:\"QueryReportOpenLockList\",FTokenID:\"3acef045-d30
2-4032-b40a-d9ee6c1519cd\",FGUIDs:\"BE2A1E27-B36E-4301-B2C8-465A62AD215F,FE
0BDE75-4A30-4B9C-AD2E-66D8A4F44F5E\",FSelectType:\"1\",FStartTime:\"2020-08
-18 16:00:00\",FEndTime:\"2020-08-25 15:59:59\",FDateType:\"0\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
```

```
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
      data = {
      'FAction': 'QueryReportOpenLockList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs':'BE2A1E27-B36E-4301-B2C8-465A62AD215F,FE0BDE75-4A30-4B9C-AD2
E-66D8A4F44F5E',
      'FSelectType':1,
      'FStartTime':'2020-08-05 16:00:00',
      'FEndTime':'2020-08-12 15:59:59',
      'FDateType':0
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

T&H sensor and Sublock tracks

Summary：

- Query T&H sensor and Sublock tracks

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-08-20	2020-08-20

Request URL:

- http://icloud.jointcontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryReportSubAssetTrack
FGUID	yes	string	Unique identification of assets / device
FSelectType	yes	int	1：Query by assets；0：Query by device
FStartTime	yes	datetime	Start time(UTC)
FEndTime	yes	datetime	End time(UTC)

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:11:27",
            "FRecvTime": "2020-08-24T05:12:36",
            "FLongitude": 113.916800,
            "FLatitude": 22.580777,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:01:01Z\",\"FDateTimestamp\":1598241661000,\"FEvent
\":6,\"FFlowId\":0,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":117,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:11:27",
            "FRecvTime": "2020-08-24T05:14:39",
            "FLongitude": 113.916800,
            "FLatitude": 22.580777,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:01:01Z\",\"FDateTimestamp\":1598241661000,\"FEvent
\":6,\"FFlowId\":0,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":117,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:11:27",
            "FRecvTime": "2020-08-24T05:17:43",
            "FLongitude": 113.916800,
            "FLatitude": 22.580777,
            "FSpeed": 0,
```

```
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:01:01Z\",\"FDateTimestamp\":1598241661000,\"FEvent
\":6,\"FFlowId\":0,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":117,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:11:27",
            "FRecvTime": "2020-08-24T05:19:45",
            "FLongitude": 113.916800,
            "FLatitude": 22.580777,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:01:01Z\",\"FDateTimestamp\":1598241661000,\"FEvent
\":6,\"FFlowId\":0,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":117,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:41:37",
            "FRecvTime": "2020-08-24T05:41:58",
            "FLongitude": 113.917333,
            "FLatitude": 22.581298,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:31:21Z\",\"FDateTimestamp\":1598243481000,\"FEvent
\":6,\"FFlowId\":1,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":118,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:41:37",
            "FRecvTime": "2020-08-24T05:46:04",
            "FLongitude": 113.917333,
            "FLatitude": 22.581298,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:31:21Z\",\"FDateTimestamp\":1598243481000,\"FEvent
\":6,\"FFlowId\":1,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":118,\"FSensorType\":4,\"FTemperature\
```

```
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:41:37",
            "FRecvTime": "2020-08-24T05:49:08",
            "FLongitude": 113.917333,
            "FLatitude": 22.581298,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:31:21Z\",\"FDateTimestamp\":1598243481000,\"FEvent
\":6,\"FFlowId\":1,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":118,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T05:11:27",
            "FRecvTime": "2020-08-24T05:11:35",
            "FLongitude": 113.916800,
            "FLatitude": 22.580777,
            "FSpeed": 0,
            "FSubInfo": "{\"E0171A0107\":{\"FAssetID\":\"E0171A0107\",\"FDa
teTime\":\"2020-08-24T04:01:01Z\",\"FDateTimestamp\":1598241661000,\"FEvent
\":6,\"FFlowId\":0,\"FHumidity\":0,\"FLockRope\":0,\"FLockStatus\":0,\"FLoc
kTimes\":1038,\"FPower\":68,\"FRSSI\":117,\"FSensorType\":4,\"FTemperature\
":-1000.0,\"FVoltage\":\"3.93\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T06:25:12",
            "FRecvTime": "2020-08-24T06:25:40",
            "FLongitude": 113.917333,
            "FLatitude": 22.580717,
            "FSpeed": 0,
            "FSubInfo": "{\"1018330094\":{\"FAssetID\":\"1018330094\",\"FDa
teTime\":\"2020-08-23T16:22:29Z\",\"FDateTimestamp\":1598199749000,\"FEvent
\":-1,\"FFlowId\":236,\"FHumidity\":75,\"FLockRope\":1,\"FLockStatus\":1,\"
FLockTimes\":-1,\"FPower\":96,\"FRSSI\":97,\"FSensorType\":1,\"FTemperature
\":28.3,\"FVoltage\":\"3.00\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
```

```
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T06:25:12",
            "FRecvTime": "2020-08-24T06:26:40",
            "FLongitude": 113.917333,
            "FLatitude": 22.580717,
            "FSpeed": 0,
            "FSubInfo": "{\"1018330094\":{\"FAssetID\":\"1018330094\",\"FDa
teTime\":\"2020-08-23T16:22:29Z\",\"FDateTimestamp\":1598199749000,\"FEvent
\":-1,\"FFlowId\":236,\"FHumidity\":75,\"FLockRope\":1,\"FLockStatus\":1,\"
FLockTimes\":-1,\"FPower\":96,\"FRSSI\":97,\"FSensorType\":1,\"FTemperature
\":28.3,\"FVoltage\":\"3.00\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T06:25:12",
            "FRecvTime": "2020-08-24T06:27:42",
            "FLongitude": 113.917333,
            "FLatitude": 22.580717,
            "FSpeed": 0,
            "FSubInfo": "{\"1018330094\":{\"FAssetID\":\"1018330094\",\"FDa
teTime\":\"2020-08-23T16:22:29Z\",\"FDateTimestamp\":1598199749000,\"FEvent
\":-1,\"FFlowId\":236,\"FHumidity\":75,\"FLockRope\":1,\"FLockStatus\":1,\"
FLockTimes\":-1,\"FPower\":96,\"FRSSI\":97,\"FSensorType\":1,\"FTemperature
\":28.3,\"FVoltage\":\"3.00\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T06:25:12",
            "FRecvTime": "2020-08-24T06:29:46",
            "FLongitude": 113.917333,
            "FLatitude": 22.580717,
            "FSpeed": 0,
            "FSubInfo": "{\"1018330094\":{\"FAssetID\":\"1018330094\",\"FDa
teTime\":\"2020-08-23T16:22:29Z\",\"FDateTimestamp\":1598199749000,\"FEvent
\":-1,\"FFlowId\":236,\"FHumidity\":75,\"FLockRope\":1,\"FLockStatus\":1,\"
FLockTimes\":-1,\"FPower\":96,\"FRSSI\":97,\"FSensorType\":1,\"FTemperature
\":28.3,\"FVoltage\":\"3.00\"}}"
        },
        {
            "FAssetGUID": "8e762610-ed26-4974-ac04-87710890e8ab",
            "FAssetID": "7500313618",
            "FGPSTime": "2020-08-24T06:25:12",
            "FRecvTime": "2020-08-24T06:30:47",
            "FLongitude": 113.917333,
```

```
            "FLatitude": 22.580717,
            "FSpeed": 0,
            "FSubInfo": "{\"1018330094\":{\"FAssetID\":\"1018330094\",\"FDa
 teTime\":\"2020-08-23T16:22:29Z\",\"FDateTimestamp\":1598199749000,\"FEvent
 \":-1,\"FFlowId\":236,\"FHumidity\":75,\"FLockRope\":1,\"FLockStatus\":1,\"
 FLockTimes\":-1,\"FPower\":96,\"FRSSI\":97,\"FSensorType\":1,\"FTemperature
 \":28.3,\"FVoltage\":\"3.00\"}}"
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation
FAssetGUID	String	Unique identification of device
FAssetID	String	Device Id
FGPSTime	DateTime	Gps time
FRecvTime	DateTime	Receive time
FLongitude	Decimal	Longitude
FLatitude	Decimal	Latitude
FSpeed	Int	Speed (km/h)
FSubInfo	String	slave information
FSubAssetID	String	slave Id
FSensorType	Int	slave type（1：JT126；4：JT709;5:JT801;6:JT802）
FDateTime	DateTime	slave time
FEvent	Int	event type

FTemperature	String	Temperature
FHumidity	String	Humidity
FLockRope	Int	Lock rope state
FLockStatus	Int	Lock state
FLockTimes	Int	Unlock time
FPower	Int	battery
FVoltage	float	Voltage
FRSSI	Int	RSSI

Other result status description:

- 105：System exception
- 104：token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
String body = "{FAction:\"QueryReportSubAssetTrack\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FGUID:\"EABD84FC-0228-4836-A0A2-3404EC074A13\",
FSelectType:\"1\",FStartTime:\"2020-08-18 16:00:00\",FEndTime:\"2020-08-25
15:59:59\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
```

```
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{FAction:\"QueryReportSubAssetTrack\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FGUID:\"EABD84FC-0228-4836-A0A2-3404EC074A13\",
FSelectType:\"1\",FStartTime:\"2020-08-18 16:00:00\",FEndTime:\"2020-08-25
15:59:59\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
      data = {
      'FAction': 'QueryReportSubAssetTrack',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUID':'EABD84FC-0228-4836-A0A2-3404EC074A13',
      'FSelectType':1,
      'FStartTime':'2020-08-18 16:00:00',
      'FEndTime':'2020-08-24 15:59:59',
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
```

```
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Alarm report

Summary：

- Query alarm report

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2020-08-20	2020-08-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryMessageAlarmList
FGUIDs	yes	string	Unique identification of assets / device, multiple separated by ‘,’
FSelectType	yes	int	1：Query by assets；0：Query by device
FStartTime	yes	datetime	Start time(UTC)

FEndTime	yes	datetime	End time(UTC)
FDataTypes	yes	string	Alarm type, multiple separated by ‘,’
FDateType	yes	int	1：Query by receiving time；0：Query by GPS time

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "0d6a1334-8eee-4b9b-822e-0042f4cedfd6",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-06T09:23:45",
            "FStartLongitude": 113.856122,
            "FStartLatitude": 22.585537,
            "FEndLongitude": 113.856122,
            "FEndLatitude": 22.585537,
            "FEndTime": "2020-06-06T09:23:45",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 38,
            "FEndMileage": 38,
            "FKeepDistance": 0,
            “FDescribeJSON":"",
            "FRelateGUID": "258dbdb5-1c01-495c-98f5-6165e9fa8b4c",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\"}"
        },
        {
            "FGUID": "cd2ec92b-6046-47c8-a9f4-00ebf6bde5a8",
```

```
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-06T05:21:42",
            "FStartLongitude": 113.856103,
            "FStartLatitude": 22.585535,
            "FEndLongitude": 113.856103,
            "FEndLatitude": 22.585535,
            "FEndTime": "2020-06-06T05:21:42",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 23,
            "FEndMileage": 23,
            "FKeepDistance": 0,
            “FDescribeJSON":"",
            "FRelateGUID": "258dbdb5-1c01-495c-98f5-6165e9fa8b4c",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\"}"
        },
        {
            "FGUID": "1de8e107-41d8-45a7-b67e-00fd7ac6b6d7",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-05T17:20:24",
            "FStartLongitude": 113.856107,
            "FStartLatitude": 22.585558,
            "FEndLongitude": 113.856107,
            "FEndLatitude": 22.585558,
            "FEndTime": "2020-06-05T17:20:24",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 22,
            "FEndMileage": 22,
```

```
            "FKeepDistance": 0,
            “FDescribeJSON":"",
            "FRelateGUID": "258dbdb5-1c01-495c-98f5-6165e9fa8b4c",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\"}"
        },
        {
            "FGUID": "52824179-d573-430c-b87f-0114cc62c032",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 44,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-05T21:20:48",
            "FStartLongitude": 113.856132,
            "FStartLatitude": 22.585435,
            "FEndLongitude": 113.856132,
            "FEndLatitude": 22.585435,
            "FEndTime": "2020-06-05T21:20:48",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 22,
            "FEndMileage": 22,
            "FKeepDistance": 0,
            “FDescribeJSON":"{\"cardno\":\"0003587086\"}",
            "FRelateGUID": "258dbdb5-1c01-495c-98f5-6165e9fa8b4c",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\"}"
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of alarm record
FVehicleGUID	String	Unique identification of asset
FVehicleName	String	asset No.
FAssetGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FSubAssetID	String	Slave Id
FDataType	Int	Alarm type
FCurrentStatus	Int	record state（1：in progress；2：Finished ；3：one time）
FStartTime	DateTime	Start time(UTC)
FStartLongitude	Decimal	Start longitude
FStartLatitude	Decimal	Start latitude
FEndLongitude	Decimal	End longitude
FEndLatitude	Decimal	End latitude
FEndTime	DateTime	End time(UTC)
FKeepSeconds	Int	Duration（s）
FStartMileage	Int	Start mileage (km)
FEndMileage	Int	End mileage (km)
FKeepDistance	Int	Continuous distance
FCreateTime	DateTime	Receive time
FStartCell	String	Start address cell code
FEndCell	String	End address cell code
FDescribeJSON	String	Alarm Describe

FFenceName	String	event bind fence name
FRelateGUID	String	Unique identification of waybill
FWaybillInfo	String	waybill info ,json

FWaybillInfo Parameters Description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of waybill
FWaybillNo	String	waybill no
FFenceName	String	event bind fence name

FDescribeJSON Description:

1.Attitude alarm（FDataType：197）:

E.g.：{"type":1}

ParameterName	Type	Descriptioin
type	Int	Attitude alarm type: 1: Leaning forward 2: Leaning backward 3: Leaning left 4: Leaning right

2.Temperature and humidity alarm（FDataType：63）

E.g.：{"F":"65.0","ID":"867730057935318","N":"27.600000381469727","T":4}

ParameterName	Type	Descriptioin
T	int	Alarm type: 1: High temperature alarm 2: Low temperature alarm 3: High humidity alarm 4: Low humidity alarm 5: High light 6: Low light 7: High air pressure 8: Low air pressure
F	Double	Threshold
N	Double	Actual value
ID	String	Sensor

3.Vibration（collision） alarm（FDataType：29）

E.g.：{"fAcceleration":"x:65488;y:160;z:864","fVibrate":254}

ParameterName	Type	Descriptioin
fAcceleration	String	Three-axis acceleration value
fVibrate	Int	vibration value

Response example:

- 105：System exception
- 104：Token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
String body = "{FAction:\"QueryMessageAlarmList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\",FGUIDs:\"D128C716-9D21-4FD2-AC40-EF18A0724AF3,D118
407E-6AB2-4B59-AA89-3334CA1C34C4\",FSelectType:\"1\",FStartTime:\"2020-06-0
5 16:00:00\",FEndTime:\"2020-06-11 15:59:59\",FDataTypes:\"42,46\",FDateTyp
e:\"0\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{FAction:\"QueryMessageAlarmList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\",FGUIDs:\"D128C716-9D21-4FD2-AC40-EF18A0724AF3,D118
407E-6AB2-4B59-AA89-3334CA1C34C4\",FSelectType:\"1\",FStartTime:\"2020-06-0
5 16:00:00\",FEndTime:\"2020-06-11 15:59:59\",FDataTypes:\"42,46\",FDateTyp
e:\"0\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
      data = {
      'FAction': 'QueryMessageAlarmList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs':'D128C716-9D21-4FD2-AC40-EF18A0724AF3,D118407E-6AB2-4B59-AA8
9-3334CA1C34C4',
      'FSelectType':1,
      'FStartTime':'2020-08-05 16:00:00',
      'FEndTime':'2020-08-11 15:59:59',
      'FDataTypes':'42,46',
      'FDateType':0
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
```

```
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Event report

Summary：

- Query event report

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2022-02-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryMessageEventList
FGUIDs	yes	string	Unique identification of assets / device, multiple separated by ‘,’
FSelectType	yes	int	1：Query by assets；0：Query by device
FStartTime	yes	datetime	Start time(UTC)

FEndTime	yes	datetime	End time(UTC)
FDataTypes	yes	string	Event type, multiple separated by ‘,’
FDateType	yes	int	1：Query by receiving time；0：Query by GPS time

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "0d6a1334-8eee-4b9b-822e-0042f4cedfd6",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-06T09:23:45",
            "FStartLongitude": 113.856122,
            "FStartLatitude": 22.585537,
            "FEndLongitude": 113.856122,
            "FEndLatitude": 22.585537,
            "FEndTime": "2020-06-06T09:23:45",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 38,
            "FEndMileage": 38,
            "FKeepDistance": 0,
            "FFenceName": "",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\",\"FFenceName\":\"\"}"
        },
        {
            "FGUID": "cd2ec92b-6046-47c8-a9f4-00ebf6bde5a8",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
```

```
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-06T05:21:42",
            "FStartLongitude": 113.856103,
            "FStartLatitude": 22.585535,
            "FEndLongitude": 113.856103,
            "FEndLatitude": 22.585535,
            "FEndTime": "2020-06-06T05:21:42",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 23,
            "FEndMileage": 23,
            "FKeepDistance": 0,
            "FFenceName": "",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\",\"FFenceName\":\"\"}"
        },
        {
            "FGUID": "1de8e107-41d8-45a7-b67e-00fd7ac6b6d7",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-05T17:20:24",
            "FStartLongitude": 113.856107,
            "FStartLatitude": 22.585558,
            "FEndLongitude": 113.856107,
            "FEndLatitude": 22.585558,
            "FEndTime": "2020-06-05T17:20:24",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 22,
            "FEndMileage": 22,
            "FKeepDistance": 0,
            "FFenceName": "",
```

```
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\",\"FFenceName\":\"\"}"
        },
        {
            "FGUID": "52824179-d573-430c-b87f-0114cc62c032",
            "FVehicleGUID": "d128c716-9d21-4fd2-ac40-ef18a0724af3",
            "FVehicleName": "44444",
            "FAssetGUID": "488c91fb-9a41-4bd8-a433-b93ad58aae04",
            "FAssetID": "7560717001",
            "FAssetTypeID": 701,
            "FSubAssetID": null,
            "FDataType": 42,
            "FCurrentStatus": 3,
            "FStartTime": "2020-06-05T21:20:48",
            "FStartLongitude": 113.856132,
            "FStartLatitude": 22.585435,
            "FEndLongitude": 113.856132,
            "FEndLatitude": 22.585435,
            "FEndTime": "2020-06-05T21:20:48",
            "FStartSpeed": 0,
            "FEndSpeed": 0,
            "FKeepSeconds": 0,
            "FStartMileage": 22,
            "FEndMileage": 22,
            "FKeepDistance": 0,
            "FFenceName": "海谷",
            "FWaybillInfo": "{\"FGUID\":\"258dbdb5-1c01-495c-98f5-6165e9fa8
b4c\",\"FWaybill\":\"\",\"FFenceName\":\"海谷\"}"
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter	Data type	Explanation

FGUID	String	Unique identification of event record
FVehicleGUID	String	Unique identification of asset
FVehicleName	String	asset No.
FAssetGUID	String	Unique identification of device
FAssetID	String	Device Id
FAssetTypeID	Int	Device type
FSubAssetID	String	Slave Id
FDataType	Int	Event type
FCnName	String	Event name(cn)
FEnName	String	Event name(en)
FCurrentStatus	Int	record state（1：in progress；2：Finished ；3：one time）
FStartTime	DateTime	Start time(UTC)
FStartLongitude	Decimal	Start longitude
FStartLatitude	Decimal	Start latitude
FEndLongitude	Decimal	End longitude
FEndLatitude	Decimal	End latitude
FEndTime	DateTime	End time(UTC)
FKeepSeconds	Int	Duration（s）
FStartMileage	Int	Start mileage (km)
FEndMileage	Int	End mileage (km)
FKeepDistance	Int	Continuous distance
FCreateTime	DateTime	eceive time (UTC)
FStartCell	String	Start address cell code
FEndCell	String	End address cell code

FFenceName	String	event bind fence name
FWaybillInfo	String	waybill info ,json

FWaybillInfo Parameter Description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of waybill
FWaybillNo	String	waybill no
FFenceName	String	event bind fence name

Response example:

- 105：System exception
- 104：Token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
String body = "{FAction:\"QueryMessageEventList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\",FGUIDs:\"D128C716-9D21-4FD2-AC40-EF18A0724AF3,D118
407E-6AB2-4B59-AA89-3334CA1C34C4\",FSelectType:\"1\",FStartTime:\"2020-06-0
5 16:00:00\",FEndTime:\"2020-06-11 15:59:59\",FDataTypes:\"42,46\",FDateTyp
e:\"0\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
```

```
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{FAction:\"QueryMessageEventList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\",FGUIDs:\"D128C716-9D21-4FD2-AC40-EF18A0724AF3,D118
407E-6AB2-4B59-AA89-3334CA1C34C4\",FSelectType:\"1\",FStartTime:\"2020-06-0
5 16:00:00\",FEndTime:\"2020-06-11 15:59:59\",FDataTypes:\"42,46\",FDateTyp
e:\"0\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
      data = {
      'FAction': 'QueryMessageEventList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs':'D128C716-9D21-4FD2-AC40-EF18A0724AF3,D118407E-6AB2-4B59-AA8
9-3334CA1C34C4',
      'FSelectType':1,
      'FStartTime':'2020-08-05 16:00:00',
      'FEndTime':'2020-08-11 15:59:59',
      'FDataTypes':'42,46',
      'FDateType':0
```

```
        }
    data = parse.urlencode(data).encode('utf-8')
    headers = {
     'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                   r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
     'Connection': 'keep-alive'
     }
    req = request.Request(url, headers=headers, data=data)
    page = request.urlopen(req).read()
    page = page.decode('utf-8')
    # json_array = json.loads(page)
    return page;
```

Temperature & humidity curve

Summary：

- Query temperature & humidity curve

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2022-02-18	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryReportTemperatureTrackNew
FGUID	yes	string	Unique identification of assets / device
FSelectType	yes	int	1：Query by assets；0：Query by device
FStartTime	yes	datetime	Start time(UTC)
FEndTime	yes	datetime	End time(UTC)

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T08:48:40",
            "FDateTime": "2022-02-17T08:48:40",
            "FTemperature": "31",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T08:51:56",
            "FDateTime": "2022-02-17T08:51:56",
            "FTemperature": "32",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T09:21:58",
            "FDateTime": "2022-02-17T09:21:58",
            "FTemperature": "31",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T09:52:00",
            "FDateTime": "2022-02-17T09:52:00",
            "FTemperature": "31",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T10:21:46",
            "FDateTime": "2022-02-17T10:21:46",
```

```
            "FTemperature": "29",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T10:49:46",
            "FDateTime": "2022-02-17T10:49:46",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T11:20:05",
            "FDateTime": "2022-02-17T11:20:05",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T11:50:10",
            "FDateTime": "2022-02-17T11:50:10",
            "FTemperature": "24",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T12:20:26",
            "FDateTime": "2022-02-17T12:20:26",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T12:50:12",
            "FDateTime": "2022-02-17T12:50:12",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
```

```
            "FGPSTime": "2022-02-17T13:20:07",
            "FDateTime": "2022-02-17T13:20:07",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T13:50:09",
            "FDateTime": "2022-02-17T13:50:09",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T14:20:07",
            "FDateTime": "2022-02-17T14:20:07",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T14:50:11",
            "FDateTime": "2022-02-17T14:50:11",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T15:20:01",
            "FDateTime": "2022-02-17T15:20:01",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T15:50:10",
            "FDateTime": "2022-02-17T15:50:10",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
```

```
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T16:20:22",
            "FDateTime": "2022-02-17T16:20:22",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T16:50:08",
            "FDateTime": "2022-02-17T16:50:08",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T17:20:11",
            "FDateTime": "2022-02-17T17:20:11",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T17:50:37",
            "FDateTime": "2022-02-17T17:50:37",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T18:20:40",
            "FDateTime": "2022-02-17T18:20:40",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T18:50:33",
            "FDateTime": "2022-02-17T18:50:33",
            "FTemperature": "23",
            "FHumidity": 0,
```

```
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T19:20:33",
            "FDateTime": "2022-02-17T19:20:33",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T19:50:36",
            "FDateTime": "2022-02-17T19:50:36",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T20:20:36",
            "FDateTime": "2022-02-17T20:20:36",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T20:50:44",
            "FDateTime": "2022-02-17T20:50:44",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T21:20:38",
            "FDateTime": "2022-02-17T21:20:38",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T21:50:30",
            "FDateTime": "2022-02-17T21:50:30",
```

```
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T22:20:40",
            "FDateTime": "2022-02-17T22:20:40",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T22:50:32",
            "FDateTime": "2022-02-17T22:50:32",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T23:20:35",
            "FDateTime": "2022-02-17T23:20:35",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-17T23:50:38",
            "FDateTime": "2022-02-17T23:50:38",
            "FTemperature": "22",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T00:20:43",
            "FDateTime": "2022-02-18T00:20:43",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
```

```
            "FGPSTime": "2022-02-18T00:50:58",
            "FDateTime": "2022-02-18T00:50:58",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T01:20:48",
            "FDateTime": "2022-02-18T01:20:48",
            "FTemperature": "23",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T01:50:53",
            "FDateTime": "2022-02-18T01:50:53",
            "FTemperature": "26",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T02:21:05",
            "FDateTime": "2022-02-18T02:21:05",
            "FTemperature": "30",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T02:51:01",
            "FDateTime": "2022-02-18T02:51:01",
            "FTemperature": "36",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T03:21:38",
            "FDateTime": "2022-02-18T03:21:38",
            "FTemperature": "29",
            "FHumidity": 0,
            "FIndex": 1
        },
```

```
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T03:51:47",
            "FDateTime": "2022-02-18T03:51:47",
            "FTemperature": "27",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T04:21:07",
            "FDateTime": "2022-02-18T04:21:07",
            "FTemperature": "26",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T04:51:15",
            "FDateTime": "2022-02-18T04:51:15",
            "FTemperature": "26",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T05:21:08",
            "FDateTime": "2022-02-18T05:21:08",
            "FTemperature": "25",
            "FHumidity": 0,
            "FIndex": 1
        },
        {
            "FSubAssetID": "Temperature",
            "FGPSTime": "2022-02-18T05:51:20",
            "FDateTime": "2022-02-18T05:51:20",
            "FTemperature": "25",
            "FHumidity": 0,
            "FIndex": 1
        }
    ]
}
```


Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter	Data type	Explanation
FSubAssetID	String	Slave ID
FGPSTime	DateTime	GPS time(UTC)
FDateTime	DateTime	Receive time(UTC)
FTemperature	string	Temperature
FHumidity	Int	Humidity
FIndex	Int	Index

Response example:

- 105：System exception
- 104：Token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
String body = "{FAction:\"QueryReportTemperatureTrackNew\",FTokenID:\"3acef
045-d302-4032-b40a-d9ee6c1519cd\",FGUID:\"EABD84FC-0228-4836-A0A2-3404EC074
A13\",FSelectType:\"1\",FStartTime:\"2020-08-18 16:00:00\",FEndTime:\"2020-
08-25 15:59:59\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
```

```
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{FAction:\"QueryReportTemperatureTrackNew\",FTokenID:\"3acef
045-d302-4032-b40a-d9ee6c1519cd\",FGUID:\"EABD84FC-0228-4836-A0A2-3404EC074
A13\",FSelectType:\"1\",FStartTime:\"2020-08-18 16:00:00\",FEndTime:\"2020-
08-25 15:59:59\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
      data = {
      'FAction': 'QueryReportTemperatureTrackNew',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUID':'EABD84FC-0228-4836-A0A2-3404EC074A13',
```

```
        'FSelectType':1,
        'FStartTime':'2020-08-18 16:00:00',
        'FEndTime':'2020-08-24 15:59:59',
         }
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Fuel consumption report

Refueling report

Brief Description:

- Fuel Refueling Report

API Version:

Version	Author	Date	Revision Date
1.0.0	lenny	2023-09-07	2023-09-07

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryReportFuelRefuel)
FVehicleGUIDs	Yes	string	Vehicle/Equipment unique identifier list (e.g., “a524d10f-c543-485c-ad92-381eeb739aaf,a524d10f-c543-485c-ad92-381eeb739aaf”)
FStartTime	Yes	string	Start time, e.g., (“2023-07-08 16:00:00”)

FEndTime	Yes	string	End time, e.g., (“2023-08-07 15:59:59”)

Response Example:

Successful response:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FTotalCount": 4
            }
        ],
        "Table1": [
            {
                "FVehicleGUID": "a524d10f-c543-485c-ad92-381eeb739aaf",
                "FVehicleName": "14161647151",
                "FAgentName": "Jiutong Testing Department",
                "FStartTime": "2022-04-27T09:01:03",
                "FEndTime": "2022-04-27T09:06:05",
                "FStartLiter": 70,
                "FEndLiter": 448,
                "FLatitude": 22.58,
                "FLongitude": 113.9174,
                "FRefuel": 378,
                "RowNo": 1
            }
        ]
    }
}
```

Error response:

```
// Indicates that the passed-in vehicle or equipment is empty, indicating a
 data format error
{
    "Result": 102,
    "Message": "FGUID is null",
    "FObject": []
}
// Indicates an exception error
{
```

```
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```

Remarks:

- More error codes are as follows:
- 102: Parameter error
- 104: Token expired
- 105: Exception error

Parameter Description:

Parameter	Type	Description
FVehicleGUID	String	Vehicle unique identifier
FVehicleName	String	Vehicle ID
FAgentName	String	Company name
FStartTime	String	Start time
FEndTime	String	End time
FStartLiter	Double	Start reading in liters
FEndLiter	Double	End reading in liters
FLongitude	Double	Current longitude
FLatitude	Double	Current latitude
FRefuel	Double	Refueling amount in liters

Response example:

Correct response:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
```

```
            {
                "FTotalCount": 4
            }
        ],
        "Table1": [
            {
                "FVehicleGUID": "a524d10f-c543-485c-ad92-381eeb739aaf",
                "FVehicleName": "14161647151",
                "FAgentName": "久通中试部",
                "FStartTime": "2022-04-27T09:01:03",
                "FEndTime": "2022-04-27T09:06:05",
                "FStartLiter": 70,
                "FEndLiter": 448,
                "FLatitude": 22.58,
                "FLongitude": 113.9174,
                "FRefuel": 378,
                "RowNo": 1
            }
        ]
    }
}
```


Error response:


```
{
    "Result": 102,
    "Message": "FGUID is null",
    "FObject": []
}
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```


Other result status description:

- More error codes are as follows:
- 102: Parameter error
- 104: Token expired
- 105: Exception error

Return parameter description:

Parameter	Type	Description
FVehicleGUID	String	Vehicle unique identifier
FVehicleName	String	Vehicle ID
FAgentName	String	Company name
FStartTime	String	Start time
FEndTime	String	End time
FStartLiter	Double	Start fuel volume in liters
FEndLiter	Double	End fuel volume in liters
FLongitude	Double	Current longitude
FLatitude	Double	Current latitude
FRefuel	Double	Fuel refueling volume in liters

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
String body = "{\n\t\"FAction\": \"QueryReportFuelRefuel\",\n\t\"FVehicleGU
IDs\": \"a524d10f-c543-485c-ad92-381eeb739aaf\",\n\t\"FStartTime\": \"2022-
04-05 16:00:00\",\n\t\"FEndTime\": \"2022-05-06 15:59:59\",\n\t\"FPageSize\
": 50,\n\t\"FPageIndex\": 1,\n\t\"FTokenID\": \"3acef045-d302-4032-b40a-d9e
e6c1519cd\",\n\t\"FTimeDifferent\": 28800,\n\t\"FLanguage\": \"1\"\n}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
```

```
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
String body = "{\n\t\"FAction\": \"QueryReportFuelRefuel\",\n\t\"FVehicleGU
IDs\": \"a524d10f-c543-485c-ad92-381eeb739aaf\",\n\t\"FStartTime\": \"2022-
04-05 16:00:00\",\n\t\"FEndTime\": \"2022-05-06 15:59:59\",\n\t\"FPageSize\
": 50,\n\t\"FPageIndex\": 1,\n\t\"FTokenID\": \"3acef045-d302-4032-b40a-d9e
e6c1519cd\",\n\t\"FTimeDifferent\": 28800,\n\t\"FLanguage\": \"1\"\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'

data = '{ "FAction": "QueryReportFuelRefuel", "FVehicleGUIDs": "a524d10f-c5
43-485c-ad92-381eeb739aaf", "FStartTime": "2022-04-05 16:00:00", "FEndTime"
: "2022-05-06 15:59:59", "FPageSize": 50, "FPageIndex": 1, "FTokenID": "3ac
ef045-d302-4032-b40a-d9ee6c1519cd", "FTimeDifferent": 28800, "FLanguage": "
1" }'

      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
```

```
36 (KHTML, like Gecko) '
                      r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
        'Connection': 'keep-alive'
        }
       req = request.Request(url, headers=headers, data=data)
       page = request.urlopen(req).read()
       page = page.decode('utf-8')
       # json_array = json.loads(page)
       return page;
```

Abnormal fuel consumption

Brief Description:

- Abnormal fuel consumption

API Version:

Version	Author	Date	Revision Date
1.0.0	lenny	2023-09-07	2023-09-07

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryReportFuelImproper)
FVehicleGUIDs	Yes	string	Vehicle/Equipment unique identifier list (e.g., “a524d10f-c543-485c-ad92-381eeb739aaf,a524d10f-c543-485c-ad92-381eeb739aaf”)
FStartTime	Yes	string	Start time, e.g., (“2023-07-08 16:00:00”)

FEndTime	Yes	string	End time, e.g., (“2023-08-07 15:59:59”)

Response Example:

Successful response:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FTotalCount": 4
            }
        ],
        "Table1": [
            {
                "FVehicleGUID": "a524d10f-c543-485c-ad92-381eeb739aaf",
                "FVehicleName": "14161647151",
                "FAgentName": "Jiutong Testing Department",
                "FStartTime": "2022-04-27T09:01:03",
                "FEndTime": "2022-04-27T09:06:05",
                "FStartLiter": 70,
                "FEndLiter": 448,
                "FLatitude": 22.58,
                "FLongitude": 113.9174,
                "FImproper": 378,
                "RowNo": 1
            }
        ]
    }
}
```

Error response:

```
// Indicates that the passed-in vehicle or equipment is empty, indicating a
 data format error
{
    "Result": 102,
    "Message": "FGUID is null",
    "FObject": []
}
// Indicates an exception error
{
```

```
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```

Remarks:

- More error codes are as follows:
- 102: Parameter error
- 104: Token expired
- 105: Exception error

Parameter Description:

Parameter	Type	Description
FVehicleGUID	String	Vehicle unique identifier
FVehicleName	String	Vehicle ID
FAgentName	String	Company name
FStartTime	String	Start time
FEndTime	String	End time
FStartLiter	Double	Start reading in liters
FEndLiter	Double	End reading in liters
FLongitude	Double	Current longitude
FLatitude	Double	Current latitude
FImproper	Double	Abnormal fuel consumption

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
String body = "{\n\t\"FAction\": \"QueryReportFuelImproper\",\n\t\"FVehicle
GUIDs\": \"a524d10f-c543-485c-ad92-381eeb739aaf\",\n\t\"FStartTime\": \"202
2-04-05 16:00:00\",\n\t\"FEndTime\": \"2022-05-06 15:59:59\",\n\t\"FPageSiz
```

```
e\": 50,\n\t\"FPageIndex\": 1,\n\t\"FTokenID\": \"3acef045-d302-4032-b40a-d
9ee6c1519cd\",\n\t\"FTimeDifferent\": 28800,\n\t\"FLanguage\": \"1\"\n}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
String body = "{\n\t\"FAction\": \"QueryReportFuelImproper\",\n\t\"FVehicle
GUIDs\": \"a524d10f-c543-485c-ad92-381eeb739aaf\",\n\t\"FStartTime\": \"202
2-04-05 16:00:00\",\n\t\"FEndTime\": \"2022-05-06 15:59:59\",\n\t\"FPageSiz
e\": 50,\n\t\"FPageIndex\": 1,\n\t\"FTokenID\": \"3acef045-d302-4032-b40a-d
9ee6c1519cd\",\n\t\"FTimeDifferent\": 28800,\n\t\"FLanguage\": \"1\"\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    return reader.ReadToEnd();
```

```
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'

data = '{ "FAction": "QueryReportFuelImproper", "FVehicleGUIDs": "a524d10f-
c543-485c-ad92-381eeb739aaf", "FStartTime": "2022-04-05 16:00:00", "FEndTim
e": "2022-05-06 15:59:59", "FPageSize": 50, "FPageIndex": 1, "FTokenID": "3
acef045-d302-4032-b40a-d9ee6c1519cd", "FTimeDifferent": 28800, "FLanguage":
 "1" }'

      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Fuel consumption analysis

Brief description:

- Fuel consumption analysis

Interface version:

Version number	Originator	Creation date	Revision date
1.0.0	lenny	2023-09-18	2023-09-18

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request method:

- POST

Request headers:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryReportFuelTrack)
FVehicleGUID	Yes	string	Vehicle unique identifier
FStartTime	Yes	string	Start time (e.g., “2023-07-08 16:00:00”)
FEndTime	Yes	string	End time (e.g., “2023-08-07 15:59:59”)

Response example:

Successful response:

```
{
    "Result":200,
    "Message":"check token success",
    "FObject":{
        "Table":[
            {
                "Speed":66,
                "Mil":4390,
                "GT":"2023-09-17T16:02:03",
                "FV1":455,
                "FV2":457,
                "FV3":0,
                "FC":912
            }
        ],
        "Table1":[
            {
                "FSensorIndex":1,
                "FFuelSize":473,
                "FSensorName":""
            }
        ]
    }
}
```

Error response:

```
// Indicates that the vehicle is empty, suggesting a data format error
{
    "Result": 102,
    "Message": "FVehicleGUID is null",
    "FObject": []
}
// Indicates an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```

Remarks:

- More error codes returned are as follows:
- 102: Request parameter error
- 104: Token expired
- 105: Exception error occurred

Response parameter explanation:

Table

Parameter name	Type	Description
Speed	int	Speed
Mil	int	Mileage
GT	String	GPS time
FV1	int	Fuel level 1
FV2	int	Fuel level 2
FV3	int	Fuel level 3
FC	int	Total fuel level

Table1

Parameter name	Type	Description
FSensorIndex	int	Sensor index
FFuelSize	int	Fuel tank capacity
FSensorName	string	Sensor port name

Request example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
```

```
// Request parameters, recommend using an object to pass in JSON format par
ameters
String body = "{\n\t\"FAction\": \"QueryReportFuelTrack\",\n\t\"FVehicleGUI
D\": \"a4b098c1-66e4-416d-8cf4-2d1cf88b65ab\",\n\t\"FStartTime\": \"2023-09
-17 16:00:00\",\n\t\"FEndTime\": \"2023-09-18 15:59:59\",\n\t\"FTokenID\":
\"bbd9ab6d-55df-4aa8-96d5-07595519e76d\"\n}";
URL realUrl = new URL(url);
// Set common request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request, must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream's cache
pw.flush();
// Define a BufferedReader to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is a JSON string
return result;
```

C#:

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, recommend using an object to pass in JSON format par
ameters
String body = "{\n\t\"FAction\": \"QueryReportFuelTrack\",\n\t\"FVehicleGUI
D\": \"a4b098c1-66e4-416d-8cf4-2d1cf88b65ab\",\n\t\"FStartTime\": \"2023-09
-17 16:00:00\",\n\t\"FEndTime\": \"2023-09-18 15:59:59\",\n\t\"FTokenID\":
\"bbd9ab6d-55df-4aa8-96d5-07595519e76d\"\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
```

```
 // Request method: POST / GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The response is a JSON string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'


data = '{ "FAction": "QueryReportFuelTrack", "FVehicleGUID": "a4b098c1-66e4
-416d-8cf4-2d1cf88b65ab", "FStartTime": "2023-09-17 16:00:00", "FEndTime":
"2023-09-18 15:59:59", "FTokenID": "bbd9ab6d-55df-4aa8-96d5-07595519e76d"}'

data = parse.urlencode(data).encode('utf-8')
headers = {
   'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (
KHTML, like Gecko) '
                 r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
   'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# The response is a JSON string
return page;
```

Daily mileage report

Summary：

- Query daily mileage report

Version：

No.	Editor	Edit date	Revision date
2.0.0	admin	2026-03-02	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Report
- https://icloud.assetscontrols.com:3443/OpenApi/Report

Request mode：

- POST

Request header：

Parameter	Required field	Data type	Explanation
Content-Type	yes	string	application/json

Request parameter:

Parameter	Required field	Data type	Explanation
FTokenID	yes	string	token
FAction	yes	string	QueryReportDayMileageList
FVehicleGUIDs	yes	string	Unique identification of assets , multiple separated by ‘,’
FStartTime	yes	datetime	Start time(UTC)
FEndTime	yes	datetime	End time(UTC)

FPageSize	yes	int	Page Size.Supports paginated queries, allowing you to specify the number of records returned per page. For example, 50 or 100 records per page.
FPageIndex	yes	int	Page Index.To query which page to start from, for example, page 1; we can find the total number of records by checking the **FTotalCount** field in the API **response records**. Dividing FTotalCount by Page Size gives the total number of pages.

Response example:

Correct response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FTotalCount": 2
            }
        ],
        "Table1": [
            {
                "FGUID": "ce716b7c-c778-4a48-b4f8-008479b79a94",
                "FVehicleName": "14141414",
                "FDate": "2026-02-25",
                "FTotalMileage": 0,
                "FStartMileage": 0,
                "FEndMileage": 0,
                "FAssetID": "2525252",
                "RowNo": 1
            },
            {
                "FGUID": "f767264b-6178-482c-b566-1250da6fe6b2",
                "FVehicleName": "854565265246",
                "FDate": "2026-02-25",
                "FTotalMileage": 0,
                "FStartMileage": 0,
                "FEndMileage": 0,
                "FAssetID": "15228655",
```

```
                "RowNo": 2
            }
        ]
    }
}
```

Error response:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter	Data type	Explanation
FGUID	String	Unique identification of record
FVehicleName	String	vehicle name
FDate	String	date
FTotalMileage	String	total mileage,unit: km
FStartMileage	int	start mileage,unit: km
FEndMileage	int	end mileage,unit: km
FAssetID	String	device id

Response example:

- 105：System exception
- 104：Token error or expire
- 102：Parameter error

Examples:

Java:

```
String result = "";
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
```

```
String body = "{\n\t\"FAction\": \"QueryReportDayMileageList\",\n\t\"FVehic
leGUIDs\": \"a524d10f-c543-485c-ad92-381eeb739aaf\",\n\t\"FStartTime\": \"2
022-04-05 16:00:00\",\n\t\"FEndTime\": \"2022-05-06 15:59:59\",\n\t\"FPageS
ize\": 50,\n\t\"FPageIndex\": 1,\n\t\"FTokenID\": \"3acef045-d302-4032-b40a
-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
pw.print(body);
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C#(.NET) :

```
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Report";
string body = "{\n\t\"FAction\": \"QueryReportDayMileageList\",\n\t\"FVehic
leGUIDs\": \"a524d10f-c543-485c-ad92-381eeb739aaf\",\n\t\"FStartTime\": \"2
022-04-05 16:00:00\",\n\t\"FEndTime\": \"2022-05-06 15:59:59\",\n\t\"FPageS
ize\": 50,\n\t\"FPageIndex\": 1,\n\t\"FTokenID\": \"3acef045-d302-4032-b40a
-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
```

```
 Encoding.UTF8))
{
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Report'
      data = { "FAction": "QueryReportDayMileageList", "FVehicleGUIDs": "a5
24d10f-c543-485c-ad92-381eeb739aaf", "FStartTime": "2022-04-05 16:00:00", "
FEndTime": "2022-05-06 15:59:59", "FPageSize": 50, "FPageIndex": 1, "FToken
ID": "3acef045-d302-4032-b40a-d9ee6c1519cd"  }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

All Company Information

Brief description：

- Get basic company information under your login account.

Interface version：

Version number	Developer	Development date	Revision date
2.0.0	Lenny	2024-3-27	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method：

- POST

Request header：

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryAllSuperAdminAgentList)

Return example:

Returned correctly:

```
{
```

```
    "Result": 200,
    "Message": "check token success",
    "FObject":
            [{
                "FAgentGUID": "37c1b3fc-119e-4ed1-b87d-47f3a6fa73bc",
                "FName": "testcompany",
                "FCode": "test",
                "FContacts": "",
                "FTelephone": "",
                "FEMailAddress": "",
                "FCountry": "China",
                "FDescribe": "",
                "FStatus": 1,
                "FCreateTime": "2021-06-28T09:43:17.117",
                "FFatherAgentGUID": "9edd97dd-6ab2-4b0e-ab11-731847271a6b",
                "FFatherAgentName": "特种业务",
                "FFatherAgentCode": "1111",
                "FTimeDifferent": 28800,
                "RowNo": 1
            },
            {
                "FAgentGUID": "d5456af1-ffa2-416b-a335-116436479998",
                "FName": "紫金矿业集团黄金冶炼有限公司",
                "FCode": "紫金矿业集",
                "FContacts": "",
                "FTelephone": "",
                "FEMailAddress": "",
                "FCountry": "China",
                "FDescribe": "",
                "FStatus": 1,
                "FCreateTime": "2021-06-04T03:45:42.38",
                "FFatherAgentGUID": "9edd97dd-6ab2-4b0e-ab11-731847271a6b",
                "FFatherAgentName": "特种业务",
                "FFatherAgentCode": "1111",
                "FTimeDifferent": 28800,
                "RowNo": 2
            },
            {
                "FAgentGUID": "82c5ee8e-8f57-4021-ad27-6a1daa6a4637",
                "FName": "茂名市",
                "FCode": "茂名市",
                "FContacts": "",
                "FTelephone": "",
                "FEMailAddress": "",
                "FCountry": "China",
                "FDescribe": "",
```

```
            "FStatus": 1,
            "FCreateTime": "2021-05-31T10:17:15.48",
            "FFatherAgentGUID": "9edd97dd-6ab2-4b0e-ab11-731847271a6b",
            "FFatherAgentName": "特种业务",
            "FFatherAgentCode": "1111",
            "FTimeDifferent": 28800,
            "RowNo": 3
        },
        {
            "FAgentGUID": "256c6cd1-6a19-42a4-a572-de661d1c0e61",
            "FName": "北京市",
            "FCode": "北京市",
            "FContacts": "",
            "FTelephone": "",
            "FEMailAddress": "",
            "FCountry": "China",
            "FDescribe": "",
            "FStatus": 1,
            "FCreateTime": "2021-04-25T02:39:41.69",
            "FFatherAgentGUID": "9edd97dd-6ab2-4b0e-ab11-731847271a6b",
            "FFatherAgentName": "特种业务",
            "FFatherAgentCode": "1111",
            "FTimeDifferent": 28800,
            "RowNo": 4
        },
        {
            "FAgentGUID": "769d5f45-e8eb-40eb-b0e1-379131aab871",
            "FName": "深圳市",
            "FCode": "深圳市",
            "FContacts": "",
            "FTelephone": "",
            "FEMailAddress": "",
            "FCountry": "China",
            "FDescribe": "",
            "FStatus": 1,
            "FCreateTime": "2021-04-25T02:39:41.68",
            "FFatherAgentGUID": "9edd97dd-6ab2-4b0e-ab11-731847271a6b",
            "FFatherAgentName": "特种业务",
            "FFatherAgentCode": "1111",
            "FTimeDifferent": 28800,
            "RowNo": 5
        },
        {
            "FAgentGUID": "68afd094-d2c0-4796-b685-089f71b48e47",
            "FName": "中国黄金",
            "FCode": "中国黄金",
```

```
                "FContacts": "",
                "FTelephone": "",
                "FEMailAddress": "",
                "FCountry": "China",
                "FDescribe": "",
                "FStatus": 1,
                "FCreateTime": "2021-04-25T02:39:41.643",
                "FFatherAgentGUID": "9edd97dd-6ab2-4b0e-ab11-731847271a6b",
                "FFatherAgentName": "特种业务",
                "FFatherAgentCode": "1111",
                "FTimeDifferent": 28800,
                "RowNo": 6
            }
        ]

}
```


Returned incorrectly:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter name	Type	Description
FAgentGUID	String	Company unique identifier
FFatherAgentGUID	String	The unique identifier of the parent company
FName	String	Company Name
FFatherAgentName	String	Parent company name
FCode	String	company code
FFatherAgentCode	String	Parent company code
FVehicleCode	String	Vehicle code
FContacts	String	Contact person

FDescribe	String	Describe
FTelephone	String	contact number
FEMailAddress	String	Email address
FCountry	String	Country
FTimeDifferent	Int	Time Zone
FCreateTime	DateTime	Registration time

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 102: Request parameter error

Request example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, json format parameters, it is recommended to use obje
cts for transmission
String body = "{FAction:\"QueryAllSuperAdminAgentList\",FTokenID:\"3acef045
-d302-4032-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set the properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
```

```
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//Returns the JSON string
return result;
```

C# :

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use objects for
transmission.
string body = "{FAction:\"QueryAllSuperAdminAgentList\",FTokenID:\"3acef045
-d302-4032-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method - POST or GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The response is returned as a JSON string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAllSuperAdminAgentList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
       }
```

```
        data = parse.urlencode(data).encode('utf-8')
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Device management

Modifying the device

Brief description:

- Modify device

Interface version:

Version number	Developer	Development date	Revision date
2.0.0	Lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method:

- POST

Request header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (UpdateAdminAsset)
FT_AdminAsset	Yes	Object	{“FGUID”: unique identifier of the device, “FVehicleGUID”: unique identifier of the vehicle (not passed means unbinding), “FAssetID”: device ID, “FAssetTypeID”: device type, “FSIMNumber”: SIM card number, “FIMEI”: IMEI

			number, “FCustomerID”: device number, “FDescription”: description, “FAgentGUID”: unique identifier of the company}

Return example:

Returned correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

Returned incorrectly:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter name	Type	Description
Result	int	Return result code
Message	string	Return message
FObject	object	Returned object

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error
- 107: There is an existing device number

Request example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, json format parameters, it is recommended to use obje
cts for transmission
String body = "{FAction:\"UpdateAdminAsset\",FTokenID:\"3acef045-d302-4032-
b40a-d9ee6c1519cd\",FT_AdminAsset:\"{"FGUID":"5baf6ccb-478e-4a13-91a6-6805e
f93b7a7","FVehicleGUID":"9b32070e-6cf5-4995-8c60-4d250e6256f8","FAssetID":"
645342344","FAssetTypeID":701,"FSIMNumber":"","FIMEI":"","FCustomerID":"","
FDescription":"","FAgentGUID":"661e7209-c77e-4a54-afb8-6d956f962bdf"}";
URL realUrl = new URL(url);
// Set the properties of general request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//Returns the JSON string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use objects for
transmission.
string body = "{FAction:\"UpdateAdminAsset\",FTokenID:\"3acef045-d302-4032-
```

```
b40a-d9ee6c1519cd\",FT_AdminAsset:\"{"FGUID":"5baf6ccb-478e-4a13-91a6-6805e
f93b7a7","FVehicleGUID":"9b32070e-6cf5-4995-8c60-4d250e6256f8","FAssetID":"
645342344","FAssetTypeID":701,"FSIMNumber":"","FIMEI":"","FCustomerID":"","
FDescription":"","FAgentGUID":"661e7209-c77e-4a54-afb8-6d956f962bdf"}\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method - POST or GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The response is returned as a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'UpdateAdminAsset',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FT_AdminAsset': '{"FGUID":"5baf6ccb-478e-4a13-91a6-6805ef93b7a7","FVeh
icleGUID":"9b32070e-6cf5-4995-8c60-4d250e6256f8","FAssetID":"645342344","FA
ssetTypeID":701,"FSIMNumber":"","FIMEI":"","FCustomerID":"","FDescription":
"","FAgentGUID":"661e7209-c77e-4a54-afb8-6d956f962bdf"}'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

New device added

Summary:

- Add device

API Version:

Version	Developer	Date	Revised
2.0.0	lenny	2023-04-07	-

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (AddAdminAssetBatch)
FAgentGUID	Yes	string	Company unique identifier
			[{“FVehicleName”: vehicle name (not passing means unbinding),”FAssetID”: device ID,”FAssetTypeID”: device type,”FSIMNumber”: SIM card

FT_AdminAssetList	Yes	Object	number,"FIMEI": IMEI number,"FCustomerID": device number,"FDescription": description}, {"FVehicleName": vehicle name (not passing means unbinding),"FAssetID": device ID,"FAssetTypeID": device type,"FSIMNumber": SIM card number,"FIMEI": IMEI number,"FCustomerID": device number,"FDescription": description}]

Response Example:

When it returns correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

When it returns an error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Explanation of response parameters:

Parameter Name	Type	Explanation

Note:

- More returned error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error
- 106: There is an empty device number.
- 107: There is a device ID that already exists.
- 108: A vehicle has been bound to the device.
- 109: There is an error in the device type.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body, JSON format, it's recommended to use an object to pass the
 parameters
String body = "{FAction:\"UpdateAdminAsset\",FTokenID:\"3acef045-d302-4032-
b40a-d9ee6c1519cd\",FAgentGUID:\"3acef045-d302-4032-b40a-d9ee6c1519cd\",FT_
AdminAssetList:\"[{"FVehicleName":"23532","FAssetID":"645342344","FAssetTyp
eID":701,"FSIMNumber":"","FIMEI":"","FCustomerID":"","FDescription":""},{"F
VehicleName":"d2123","FAssetID":"645342344","FAssetTypeID":701,"FSIMNumber"
:"","FIMEI":"","FCustomerID":"","FDescription":""}]";
URL realUrl = new URL(url);
// Set common attributes for request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request, must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream buffer
pw.flush();
// Define BufferedReader to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read URL response using BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is a JSON string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameter, in JSON format. It is recommended to pass the object
as a parameter.
string body = "{FAction:\"UpdateAdminAsset\",FTokenID:\"3acef045-d302-4032-
b40a-d9ee6c1519cd\",FAgentGUID:\"3acef045-d302-4032-b40a-d9ee6c1519cd\",FT_
AdminAssetList:\"[{"FVehicleName":"23532","FAssetID":"645342344","FAssetTyp
eID":701,"FSIMNumber":"","FIMEI":"","FCustomerID":"","FDescription":""},{"F
VehicleName":"d2123","FAssetID":"645342344","FAssetTypeID":701,"FSIMNumber"
:"","FIMEI":"","FCustomerID":"","FDescription":""}]";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Set general request properties
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
import json
from urllib import parse, request

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'UpdateAdminAsset',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FAgentGUID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FT_AdminAssetList': [{
        "FVehicleName": "9b3207",
        "FAssetID": "645342344",
        "FAssetTypeID": 701,
        "FSIMNumber": "",
        "FIMEI": "",
        "FCustomerID": "",
```

```
            "FDescription": ""
        }, {
            "FVehicleName": "9b32070e",
            "FAssetID": "645342344",
            "FAssetTypeID": 701,
            "FSIMNumber": "",
            "FIMEI": "",
            "FCustomerID": "",
            "FDescription": ""
        }]
    }
    # Convert data to JSON format
    data = json.dumps(data).encode('utf-8')
    headers = {
        'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
    (KHTML, like Gecko) '
                      r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.'
    }
    req = request.Request(url=url, data=data, headers=headers)
    with request.urlopen(req) as response:
        res = response.read().decode('utf-8')
        print(res)
```

Type of device

Description:

- Get all device types

API Version:

Version number	Author	Establishment date	Revision date
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryAdminAssetType)
FAgentGUID	Yes	string	Company unique identifier

Return Example:

Successful return:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FAssetTypeID": 1120,
            "FOfflineTime": 86400,
            "FAssetTypeName": "AnyTrack",
            "FSystemAssetTypeName": "AnyTrack",
            "FClassify": 6,
            "FGateway": "47.112.122.222",
            "FPort": 10120
        },
        {
            "FAssetTypeID": 1150,
            "FOfflineTime": 86400,
            "FAssetTypeName": "AOVX-A/G",
            "FSystemAssetTypeName": "AOVX-A/G",
            "FClassify": 9,
            "FGateway": "47.112.122.222",
            "FPort": 6608
        }
    ]
}
```


Error return:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return Parameters:

Parameter name	Type	Description
FAssetTypeID	Int	Device type
FOfflineTime	String	Device offline duration (in seconds)
FAssetTypeName	String	Device type name (customized)
FSystemAssetTypeName	String	Device type name

FClassify	Int	Device classification (1: electronic lock; 2: GP series; 3: departmental standard; 4: container monitoring series; 5: tire temperature and pressure series products; 6: other (can be used as basic positioning equipment); 7: Bluetooth lock; 8: lead seal lock; 9: Zuohuobao series; 10: mortar tank series)
FGateway	String	Gateway IP
FPort	Int	Gateway port

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
String body = "{FAction:\"QueryAdminAssetType\",FTokenID:\"3acef045-d302-40
32-b40a-d9ee6c1519cd\",FAgentGUID:\"3acef045-d302-4032-b40a-d9ee6c1519cd\"}
";
URL realUrl = new URL(url);
// Set common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// POST requests must be set as follows
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Sending request parameters
pw.print(body);
```

```
// flush output buffer
pw.flush();
// Define BufferedReader to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, JSON format parameters, it is recommended to pass in
 objects
string body = "{FAction:\"QueryAdminAssetType\",FTokenID:\"3acef045-d302-40
32-b40a-d9ee6c1519cd\",FAgentGUID:\"3acef045-d302-4032-b40a-d9ee6c1519cd\"}
";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method post/get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryAdminAssetType',
```

```
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FAgentGUID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Deleting a device

Brief description:

- Delete device

API Version:

Version number	Designer	Date of design	Date of revision
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (DeleteAdminAsset)
FGUIDs	Yes	string	Device unique identifier, multiple devices separated by English comma

Return Example:

Return correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

Return incorrectly:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return Parameter Description:

Parameter name	Type	Explanation

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System anomaly
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in.
String body = "{FAction:\"DeleteAdminAsset\",FTokenID:\"3acef045-d302-4032-
b40a-d9ee6c1519cd\",FGUIDs:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752-
2ca7-4c4e-909f-7030cefbb72a\"}";
URL realUrl = new URL(url);
// Set the properties of the general request
URLConnection conn = realUrl.openConnection();
```

```
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Sending request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the URL response using a BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The return value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in.
string body = "{FAction:\"DeleteAdminAsset\",FTokenID:\"3acef045-d302-4032-
b40a-d9ee6c1519cd\",FGUIDs:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752-
2ca7-4c4e-909f-7030cefbb72a\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method: post/get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
```

```
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
      'FAction': 'DeleteAdminAsset',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs': '5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752-2ca7-4c4e-90
9f-7030cefbb72a'
       }
data = parse.urlencode(data).encode('utf-8')
headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Device Details

Brief description:

- Get details of a single device

API Version:

Version number	Designer	Date of design	Date of revision
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryAdminAssetByFGUID)
FGUID	Yes	string	Device unique identifier

Response Example:

Success response:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "b8ac068d-b9c2-428f-ac52-5df88d069e5e",
            "FAssetID": "2690929719",
            "FAssetTypeID": 200,
            "FDescription": "",
            "FSIMNumber": "89860410102170005799",
            "FIMEI": "89860410102170005799",
            "FAgentGUID": "042032ac-6382-43b6-974f-7ec7f2c0fdfb",
            "FAgentName": "柯力二部",
            "FCreateTime": "2022-05-31T02:08:11.873",
            "FVehicleGUID": "d30bd042-f69a-4f81-ad64-bac303c70980",
            "FVehicleName": "2690929719",
            "FCustomerID": "",
            "FAssetTypeName": "JT200KS"
        }
    ]
}
```


Failure response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return Parameter Description:

Parameter name	Type	Explanation
FGUID	String	Device unique identifier
FAssetID	String	Device ID
FAssetTypeID	Int	Device type ID
FAssetTypeName	String	Device type name
FDescription	String	Device description
FSIMNumber	String	SIM card number

FIMEI	String	IMEI number
FAgentGUID	String	Unique identifier of the company to which the device belongs
FAgentName	String	Name of the company to which the device belongs
FCreateTime	DateTime	Registration time (UTC)
FCustomerID	DateTime	Device number
FVehicleGUID	String	Unique identifier of the vehicle to which the device is installed
FVehicleName	String	License plate number

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System anomaly
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
//Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request body, in json format. We recommend passing it in as an object.
String body = "{FAction:\"QueryAdminAssetByFGUID\",FTokenID:\"3acef045-d302
-4032-b40a-d9ee6c1519cd\",FGUID:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a\"}";

URL realUrl = new URL(url);
// Set the common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines to send a POST request
conn.setDoOutput(true);
```

```
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send the request parameter
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL using a BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//The returned data is in JSON format
return result;
```

C#:

```
//Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request body, in json format. We recommend passing it in as an object.
string body = "{FAction:\"QueryAdminAssetByFGUID\",FTokenID:\"3acef045-d302
-4032-b40a-d9ee6c1519cd\",FGUID:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a\"}";

Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 //Request method: POST or GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //The returned data is in JSON format
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryAdminAssetByFGUID',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FGUID': '5f2d6752-2ca7-4c4e-909f-7030cefbb72a'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Device information

Brief description:

- Get basic information of the device

API version:

Version number	Creator	Creation date	Revision date
2.0.0	Lenny	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method:

- POST

Request header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method Name (QueryAdminAssetList)

Example Response:

Success:

```
{
```

```
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "10f47be0-fefc-4cc2-ae69-50a14bbfa55c",
            "FAssetID": "7560717002",
            "FAssetTypeID": 701,
            "FDescription": "",
            "FSIMNumber": "343343434",
            "FAgentGUID": "25a48ca5-a844-4732-8af4-afa2a9d5c6dc",
            "FAgentName": "测试",
            "FGroupGUID": null,
            "FGroupName": null,
            "FCreateTime": "2020-05-17T12:10:44.143"
        },
        {
            "FGUID": "983809d8-a894-43f8-8b52-37bab146fb13",
            "FAssetID": "868120231481844",
            "FAssetTypeID": 1010,
            "FDescription": "",
            "FSIMNumber": "868120231481844",
            "FAgentGUID": "4bfca45f-807d-45f4-bf4c-4ebabbf857ca",
            "FAgentName": "Concox测试",
            "FGroupGUID": null,
            "FGroupName": null,
            "FCreateTime": "2020-07-31T02:30:37.433"
        }
    ]
}
```


Error:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Return parameter description:

Parameter Name	Type	Description
FGUID	String	Device unique identifier

FAssetID	String	Device ID
FAssetTypeID	Int	Device type
FDescription	String	Device description
FSIMNumber	String	SIM card number
FAgentGUID	String	Unique identifier of the company to which the device belongs
FAgentName	String	Name of the company to which the device belongs
FGroupGUID	String	Unique identifier of the group to which the device belongs
FGroupName	String	Name of the group to which the device belongs
FCreateTime	DateTime	Registration time (UTC time)
FExpireTime	DateTime	Device expiration time (UTC time)

Note:

- More error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in
String body = "{FAction:\"QueryAdminAssetList\",FTokenID:\"3acef045-d302-40
32-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
```

```
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines for sending POST requests
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define a BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned result is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in
string body = "{FAction:\"QueryAdminAssetList\",FTokenID:\"3acef045-d302-40
32-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned result is a JSON string
    return reader.ReadToEnd();
```

```
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminAssetList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Assets(Vehicle/Container) management

Modifying the asset

Description:

- Modify Asset information

API Version:

Version	Author	Date	Revision
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (UpdateAdminVehicle)
FT_AdminVehicle	Yes	object	{"FGUID": Vehicle unique identifier,"FVehicleName":vehicle name,"FVIN":veh identification number,"FEngineNumber":engine number,"FVehicleTypeID":vehicle type,"FInsuDate":insurance date,"FPurchaseDate":purchase

			date,"FDescription":description,"FAgentGUID":com unique identifier"FVehicleImgType": Image type, optional; "FColorRGB": Color, optional; "FImage": E character image file, optional.}

FVehicleImgType type corresponding icon



Response Example:

Success:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

Error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Response Parameter:

Parameter	Type	Description

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error
- 107: There is an existing vehicle name

Request Example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, json format parameters, it is recommended to use obje
cts to pass in
String body = "{FAction:\"UpdateAdminVehicle\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FT_AdminVehicle:\"{"FGUID": "5f2d6752-2ca7-4c4e-909f-
7030cefbb72a","FVehicleName":"43564565343","FVIN":"","FEngineNumber":"","FV
ehicleTypeID":1,"FInsuDate":"2023-4-6 00:00:00","FPurchaseDate":"2023-4-6 0
0:00:00","FDescription":"4435","FAgentGUID":"661e7209-c77e-4a54-afb8-6d956f
962bdf"}";
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines when sending a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, use json format and recommend using an object to pas
s it in
string body = "{FAction:\"UpdateAdminVehicle\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FT_AdminVehicle:\"{"FGUID": "5f2d6752-2ca7-4c4e-909f-
7030cefbb72a","FVehicleName":"43564565343","FVIN":"","FEngineNumber":"","FV
ehicleTypeID":1,"FInsuDate":"2023-4-6 00:00:00","FPurchaseDate":"2023-4-6 0
0:00:00","FDescription":"4435","FAgentGUID":"661e7209-c77e-4a54-afb8-6d956f
962bdf"}\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a json string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'UpdateAdminVehicle',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FT_AdminVehicle': '{"FGUID": "5f2d6752-2ca7-4c4e-909f-7030cefbb72a","F
VehicleName":"43564565343","FVIN":"","FEngineNumber":"","FVehicleTypeID":1,
"FInsuDate":"2023-4-6 00:00:00","FPurchaseDate":"2023-4-6 00:00:00","FDescr
iption":"4435","FAgentGUID":"661e7209-c77e-4a54-afb8-6d956f962bdf"}'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
```

```
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Adding assets

Brief description:

- Add Assets(Vehicles/Containers)

API Version:

Version Number	Developer	Design Date	Revision Date
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Yes	string	Request type： application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (AddAdminVehicleBatch)
FAgentGUID	Yes	string	Company unique identifier
FT_AdminVehicleList	Yes	Object	[{“FVehicleName”:Vehicle Box number,”FAssetID”:DeviceID,”FAssetTypeID”:As Identification Number,”FEngineNumber”:Engir Number,”FVehicleTypeID”:Vehicle Type,”FInsuI

FT_AdminVehicleList	Yes	Object	Date,"FPurchaseDate":Purchase Date,"FDescription":Description,"FVehicleImgT "FColorRGB": Color, optional; "FImage": Base64 optional.},,,]

Note:
below three parameters must be inputed in FT_AdminVehicleList field.
"FVehicleName":Vehicle Box number,"FAssetID":DeviceID,"FAssetTypeID":AssetTypeID

FVehicleImgType type corresponding icon




```
e.g.
{
    'FAction': 'AddAdminVehicleBatch',
    'FTokenID': 'xxxxxx-4e0d-4df9-89c7-xxxxxxxxxxx',
    'FAgentGUID': 'xxxxxx-5b56-4eab-8254-xxxxxxxxxxx',
    'FT_AdminVehicleList':  [{"FVehicleName":"vehiclename8052401023","FAsse
tID":"8052401023","FAssetTypeID":"3701","FVIN":"","FEngineNumber":"","FVehi
cleTypeID":1,"FInsuDate":"2024-3-9 00:00:00","FPurchaseDate":"2024-3-9 00:0
0:00","FDescription":""}]
}
```

Device type：

ID	DeviceModel
100	JTR100
201	JT301A
400	GP4000
500	JT300B
501	JT704-04
502	JT300B-04

504	JT300D-04
551	JT300DB
552	GP2000
553	GP7000
600	GP6000
601	GP6000F
602	JT600C
700	JT700DT
701	JT701
702	JT702
703	JT703
704	JT704
705	JT705
706	JT706
707	JT707A
709	JT709
802	JT802
808	JT/T808
1002	RTCC
1010	ConcoxTrack
1011	ConcoxTrack(MQTT)
1020	Skycniot(GT60)
1021	Skycniot(TX60)
1030	MeiTrack

1030	MeiTrack
1040	Queclink
1050	Eelink
1060	EasyTrack
1070	CanTrack
1080	TopTen
1090	KHDTrack
1100	BiidiWatch
1110	SeeWord(S208)
1111	SeeWord(S112U)
1120	AnyTrack
1130	HCIOT
1140	JTS6SA
1150	AOVX-A/G
1151	AOVX-V
1160	Teltonika
1170	JT300T1
1200	MiWiTrack
1301	JT301B
1600	eLock
1701	JT701-TRA
1704	JT704H
1705	JT705A
1707	JT707B

1808	CB-2019
2000	UDP
2301	JT301C
2701	JT701D(MQTT)
2705	JT705A_RH
2707	JT707C
2709	JT709B
2808	JT/T 808-2019
3301	JT301D
3701	JT701D
3709	JT709C
4701	Vietnam701
4709	JT709C(DMP)
5701	JT701D_BLE
5709	JT709N
6701	JT701(HWIOT)
6709	JT709C(MQTT)

Response Example:

Returned correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

Returned incorrectly:

Returned incorrectly:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
{
    "Result": 107,
    "Message": "4564844 , 654564",
    "FObject": []
}
```

Return Parameter Description:

Parameter Name	Type	Description

Note:

- More returned error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error
- 106: There is an empty vehicle box number
- 107: There is a vehicle box number that already exists

Request Example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, json format parameters, it is recommended to use obje
cts to pass in
String body = "{FAction:\"AddAdminVehicleBatch\",FTokenID:\"3acef045-d302-4
032-b40a-d9ee6c1519cd\",FAgentGUID:\"3acef045-d302-4032-b40a-d9ee6c1519cd\"
,FT_AdminVehicleList:\"[{"FVehicleName":"43564565343","FAssetID":"805240909
8","FAssetTypeID":"3701","FVIN":"","FEngineNumber":"","FVehicleTypeID":1,"F
InsuDate":"2023-4-6 00:00:00","FPurchaseDate":"2023-4-6 00:00:00","FDescrip
tion":"4435"},...]";
URL realUrl = new URL(url);
```

```
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream cache
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
return result;
```

C# :

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format. It is recommended to pass in an obje
ct.
string body = "{FAction:\"AddAdminVehicleBatch\",FTokenID:\"3acef045-d302-4
032-b40a-d9ee6c1519cd\",FAgentGUID:\"3acef045-d302-4032-b40a-d9ee6c1519cd\"
,FT_AdminVehicleList:\"[{"FVehicleName":"43564565343","FAssetID":"805240909
8","FAssetTypeID":"3701","FVIN":"","FEngineNumber":"","FVehicleTypeID":1,"F
InsuDate":"2023-4-6 00:00:00","FPurchaseDate":"2023-4-6 00:00:00","FDescrip
tion":"4435"},...]\"";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method - post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
```

```
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The response is a JSON string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'AddAdminVehicleBatch',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FAgentGUID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FT_AdminVehicleList': '[{"FVehicleName":"43564565343","FAssetID":"8052
409098","FAssetTypeID":"3701","FVIN":"","FEngineNumber":"","FVehicleTypeID"
:1,"FInsuDate":"2023-4-6 00:00:00","FPurchaseDate":"2023-4-6 00:00:00","FDe
scription":"4435"},...]'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Type of asset

Brief description:

- Get all asset types

API Version：

Version Number	Developer	Date of Formulation	Date of Revision
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Yes	string	Request Type： application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryAdminVehicleType)
FGUID	Yes	string	Vehicle unique identifier

Return Example:

Returned correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FVehicleTypeID": 1,
            "FVehicleTypeName": "货车",
            "FEnTypeName": "Truck"
        },
        {
            "FVehicleTypeID": 2,
            "FVehicleTypeName": "小型客车",
            "FEnTypeName": "Minibus"
        },
        {
            "FVehicleTypeID": 3,
            "FVehicleTypeName": "出租车",
            "FEnTypeName": "Taxi"
        },
        {
            "FVehicleTypeID": 4,
            "FVehicleTypeName": "大型客车",
            "FEnTypeName": "Bus"
        },
        {
            "FVehicleTypeID": 5,
            "FVehicleTypeName": "集装箱",
            "FEnTypeName": "Container"
        },
        {
            "FVehicleTypeID": 6,
            "FVehicleTypeName": "冷箱车",
            "FEnTypeName": "Truck-R"
        },
        {
            "FVehicleTypeID": 7,
            "FVehicleTypeName": "厢式货车",
            "FEnTypeName": "VAN"
        },
        {
            "FVehicleTypeID": 8,
            "FVehicleTypeName": "拖车",
            "FEnTypeName": "Trailer"
        },
        {
            "FVehicleTypeID": 9,
```

Type of asset

```
            "FVehicleTypeName": "小汽车",
            "FEnTypeName": "Car"
        },
        {
            "FVehicleTypeID": 10,
            "FVehicleTypeName": "摩托车",
            "FEnTypeName": "Motorcycle"
        },
        {
            "FVehicleTypeID": 11,
            "FVehicleTypeName": "冷库",
            "FEnTypeName": "Cold Store"
        }
    ]
}
```

Returned incorrectly:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return Parameters Description:

Parameter Name	Type	Description
FEnTypeName	String	Vehicle type name (English)
FVehicleTypeName	String	Vehicle type name (Chinese)
FVehicleTypeID	Int	Vehicle type

Remarks:

- More return error codes are as follows:
- 104: Token error or expiration
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
//request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//request body, json format, it's recommended to use an object to pass in t
he parameters
String body = "{FAction:\"QueryAdminVehicleType\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// set general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// send POST request, must set these two lines of code
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// define a BufferedReader object to read the response from the url
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// read the response line by line
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// the returned string is in json format
return result;
```

C# :

```
//request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//request body, json format, it's recommended to use an object to pass in t
he parameters
string body = "{FAction:\"QueryAdminVehicleType\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
```

```
 //request method: post or get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // the returned string is in json format
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminVehicleType',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # the returned string is in json format
      return page;
```

Deleting assets

Brief Description:

- Delete assets

API Version:

Version number	Developer	Date of development	Date of revision
2.0.0	Lenny	2023-04-07	-

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Explanation
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter Name	Required	Type	Explanation
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (DeleteAdminVehicle)
FGUIDs	Yes	string	Unique identifier of the vehicle, multiple vehicles separated by commas

Return Example:

Returned correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

Returned with an error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return Parameters Description:

Parameter Name	Type	Explanation

Note:

- More return error codes are as follows:
- 104: Token error or expiration
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
//Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, in json format. It is recommended to use an object to
 pass the parameters.
String body = "{FAction:\"DeleteAdminVehicle\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FGUIDs:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d675
2-2ca7-4c4e-909f-7030cefbb72a\"}";
URL realUrl = new URL(url);
// Set the general request properties
URLConnection conn = realUrl.openConnection();
```

```
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request, must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send the request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define a BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a json string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, use JSON format and pass in an object
string body = "{FAction:\"DeleteAdminVehicle\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\",FGUIDs:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d675
2-2ca7-4c4e-909f-7030cefbb72a\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method (POST or GET)
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
```

```
 Encoding.UTF8))
{
    // Returns a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'DeleteAdminVehicle',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FGUIDs': '5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752-2ca7-4c4e-909f
-7030cefbb72a'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Asset information

Brief description:

- Get basic information of a asset

API version:

Version number	Made by	Date of formulation	Date of revision
2.0.0	lenny	2020-06-20	2020-06-20

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method:

- POST

Request header:

Parameter Name	Mandatory	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter Name	Mandatory	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryAdminVehicleList)

Example Response:

Success:

```
{
```

```
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "4b0be13f-4703-4629-93d2-b51f632344dc",
            "FVehicleName": "视频机816",
            "FAssetGUID": "066cd9b2-b64b-44f5-9f19-b6e7dc974140",
            "FAssetID": "6165016816",
            "FAssetTypeID": 808,
            "FVehicleCode": "816",
            "FVehicleTypeID": 1,
            "FDescription": "",
            "FOperateType": "",
            "FVIN": "",
            "FAgentGUID": "903ba776-b329-474e-86b1-3a922c54f821",
            "FAgentName": "部标测试",
            "FGroupGUID": "0b887ae3-e190-42a2-81f3-81f6127c8aa1",
            "FGroupName": "视频机测试",
            "FMainDriverGUID": "778572c1-7ca4-44a9-ab2d-6c4f9cfed800",
            "FDriverName": "Jhon",
            "FDriverPhoneNumber": "18362985485",
            "FCreateTime": "2020-07-20T06:13:37.613",
             "FColorRGB": null,
            "FVehicleImgType": 0,
            "FImage": null
        },
        {
            "FGUID": "9154a616-038e-40da-91b4-87b7faccc15f",
            "FVehicleName": "粤B45678",
            "FAssetGUID": null,
            "FAssetID": null,
            "FAssetTypeID": null,
            "FVehicleCode": "",
            "FVehicleTypeID": 1,
            "FDescription": "粤B45678",
            "FOperateType": "1",
            "FVIN": "",
            "FAgentGUID": "4b3dd67a-00af-4118-87bf-fa9583a83b25",
            "FAgentName": "Joint测试",
            "FGroupGUID": "b595f14b-e8a7-49b3-b26c-4687ebfcb33f",
            "FGroupName": "JT702/JT705",
            "FMainDriverGUID": "00000000-0000-0000-0000-000000000000",
            "FDriverName": null,
            "FDriverPhoneNumber": null,
            "FCreateTime": "2020-08-04T09:27:21.127",
             "FColorRGB": null,
```

```
                "FVehicleImgType": 0,
                "FImage": null
            }
        }
    ]
}
```

Error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Response Parameters:

Parameter Name	Type	Description
FGUID	String	Vehicle unique identifier
FVehicleName	String	Vehicle name
FAssetGUID	String	Equipment unique identifier
FAssetID	String	Equipment ID
FAssetTypeID	Int	Equipment type
FVehicleCode	String	Vehicle code
FVehicleTypeID	Int	Vehicle type
FDescription	String	Description
FOperateType	String	Operation type (1: self-support; 2: leasing)
FVIN	String	Vehicle identification number
FAgentGUID	String	Unique identifier of the company to which the equipment belongs
FAgentName	String	Name of the company to which the equipment belongs
FGroupGUID	String	Unique identifier of the group to which the

FGroupGUID	String	equipment belongs
FGroupName	String	Name of the group to which the equipment belongs
FMainDriverGUID	String	Unique identifier of the main driver
FDriverName	String	Name of the main driver
FDriverPhoneNumber	String	Phone number of the main driver
FCreateTime	DateTime	Registration time (UTC time)
FColorRGB	String	Color RGB
FVehicleImgType	Int	Vehicle Img Type
FImage	String	asset image url

Remarks:

- More error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameter, in json format, it is recommended to pass in as an ob
ject
String body = "{FAction:\"QueryAdminVehicleList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set the general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
```

```
// Sending a POST request requires setting the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Sending request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the URL response using the BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameter, in json format, it is recommended to pass in as an ob
ject
string body = "{FAction:\"QueryAdminVehicleList\",FTokenID:\"3acef045-d302-
4032-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
import urllib
from urllib import request, parse

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryAdminVehicleList',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Asset details

Brief description:

- Get details of a single asset.

API Version:

Version number	Developer	Date created	Last updated
2.0.0	Lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Name of the method (QueryAdminVehicleByFGUID)
FGUID	Yes	string	Vehicle unique identifier

Response Example:

Successful response:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "b8ac068d-b9c2-428f-ac52-5df88d069e5e",
            "FAssetID": "2690929719",
            "FAssetTypeID": 200,
            "FDescription": "",
            "FVehicleCode": "89860410102170005799",
            "FVIN": "89860410102170005799",
            "FAgentGUID": "042032ac-6382-43b6-974f-7ec7f2c0fdfb",
            "FAgentName": "柯力二部",
            "FCreateTime": "2022-05-31T02:08:11.873",
            "FVehicleGUID": "d30bd042-f69a-4f81-ad64-bac303c70980",
            "FVehicleName": "2690929719",
            "FVehicleTypeID": "1",
            "FEngineNumber": "64688",
            "FInsuDate": "2023-04-07",
            "FPurchaseDate": "2023-04-07",
             "FColorRGB": null,
            "FVehicleImgType": 0,
            "FImage": null
        }
    ]
}
```


Error response:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Response Parameters:

Parameter name	Type	Description
FGUID	String	Vehicle unique identifier
FAssetGUID	String	Device unique identifier

FAssetID	String	Device ID
FAssetTypeID	Int	Device type
FVehicleCode	String	Vehicle number
FDescription	String	Description
FSIMNumber	String	SIM card number
FVIN	String	VIN
FEngineNumber	String	Engine number
FAgentGUID	String	Company unique identifier
FAgentName	String	Name of the company it belongs to
FCreateTime	DateTime	Registration time (UTC time)
FInsuDate	String	Insurance date
FPurchaseDate	String	Purchase date
FVehicleTypeID	Int	License plate type
FColorRGB	String	Color RGB
FVehicleImgType	Int	Vehicle Img Type
FImage	String	asset image url

Remarks:

- More error codes returned are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
```

```
// Request parameters, in json format, it is recommended to use an object t
o pass in
String body = "{FAction:\"QueryAdminVehicleByFGUID\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FGUID:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a\"}
";
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define a BufferedReader input stream to read the response from the URL
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a json string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in json format, it is recommended to use an object t
o pass in
string body = "{FAction:\"QueryAdminVehicleByFGUID\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FGUID:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a\"}
";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method: post / get
```

```
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a json string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
        'FAction': 'QueryAdminVehicleByFGUID',
        'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
        'FGUID': '5f2d6752-2ca7-4c4e-909f-7030cefbb72a'
       }
data = parse.urlencode(data).encode('utf-8')
headers = {
            'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit
/537.36 (KHTML, like Gecko) '
                          r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.
0.3',
            'Connection': 'keep-alive'
          }
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Bind / Unbind Device to Asset(Vehicle/Container)

Description

- Bind or unbind a device to/from a Asset(Vehicle/Container)

API Version

Version	Author	Created	Revised
2.0.1	liu	2026-10-08	

Request URL

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Method

- POST

Request Headers

Parameter	Required	Type	Description
Content-Type	Yes	string	Content Type: application/json

Request Parameters

Parameter	Required	Type	Description
FAction	Yes	string	Method name (UpdateAdminVehicleBindAsset)
FTokenID	Yes	string	
FVehicleGUID	Yes	string	Vehicle unique identifier
FAssetGUID	Yes	string	Device unique identifier
FType	Yes	string	1: bind; 2: unbind

Request Parameters Example

```
{
    "FAction": "UpdateAdminVehicleBindAsset",
    "FTokenID": "3acef045-d302-4032-b40a-d9ee6c1519cd",
    "FVehicleGUID": "b13c61f2-adf2-4d5b-9b29-eb42600ce64b",
    "FAssetGUID": "bd1538d4-4e26-49e2-aea2-425deb5e0237",
    "FType": 1
}
```

Response Example

Success Response:

```
{
    "Result": 200,
    "Message": "success",
    "FObject": {
        "43564565343": "e6ce12a3-0d7b-485b-8d85-e11748516992"
    }
}
```

Error Response:

```
{
    "Result": 102,
    "Message": "param is error",
    "FObject": []
}
```

Error Code Description:

Code	Message	Description
102	Invalid parameters	Invalid parameters
104	Token invalid or expired	Token invalid or expired
105	System error	System error

Request Example

JavaC#Python

```
String result = "";
//Request URL
String url = "https://cloud.assetscontrols.com:3443/OpenApi/Admin";
//Request parameters, JSON format, recommended to pass as an object
String body = "{\"FAction\":\"UpdateAdminVehicleBindAsset\",\"FTokenID\":\"
3acef045-d302-4032-b40a-d9ee6c1519cd\",\"FVehicleGUID\":\"b13c61f2-adf2-4d5
b-9b29-eb42600ce64b\",\"FAssetGUID\":\"bd1538d4-4e26-49e2-aea2-425deb5e0237
\",\"FType\":1}";
URL realUrl = new URL(url);
// Set common request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// The following two lines must be set for POST requests
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// Flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
//Returns a JSON string
return result;
```

```
//Request URL
string url = "https://cloud.assetscontrols.com:3443/OpenApi/Admin";
//Request parameters, JSON format, recommended to pass as an object
string body = "{\"FAction\":\"UpdateAdminVehicleBindAsset\",\"FTokenID\":\"
3acef045-d302-4032-b40a-d9ee6c1519cd\",\"FVehicleGUID\":\"b13c61f2-adf2-4d5
b-9b29-eb42600ce64b\",\"FAssetGUID\":\"bd1538d4-4e26-49e2-aea2-425deb5e0237
\",\"FType\":1}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
```

```
 //Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    //Returns a JSON string
    return reader.ReadToEnd();
}
```

```
import json
from urllib import parse, request

url = 'https://cloud.assetscontrols.com:3443/OpenApi/Admin'
data = {
    'FAction': 'UpdateAdminVehicleBindAsset',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FVehicleGUID': 'b13c61f2-adf2-4d5b-9b29-eb42600ce64b',
    'FAssetGUID': 'bd1538d4-4e26-49e2-aea2-425deb5e0237',
    'FType': 1
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
    }
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
print(page)
```

Transfer Asset/ Device To Another Commpany

Description:

- Transferring Devices or Assets(Vehicle/Container) to another company

API Version:

Version number	Author	Establishment date	Revision date
2.0.0	lenny	2024-12-19	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (TransferAssetByFGUIDs)
FNewAgentGUID	Yes	string	Company unique identifier
FGUIDs	Yes	string	Unique identifier of the Device or Asset, multiple identifiers are separated by commas.
FSelectType	Yes	int	0: transfer by Device 1: transfer by Asset; Default 0: transfer by Device

FStatus	Yes	int	Whether to transfer the bound Asset or Device (1: transfer; 0: do not transfer)

Return Example:

Successful return:

```
{
    "Result": 200,
    "Message": "succeed",
    "FObject": []
}
```

Error return:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return Parameters:

Parameter name	Type	Description

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, JSON format parameters, it is recommended to pass in
objects
```

```
String body = "{"FAction":"TransferAssetByFGUIDs","FGUIDs":"08c75b42-e80a-4
1ef-9c38-0bc4fd28cbe1,d2204050-7314-491a-a77f-87bce7ee9593","FNewAgentGUID"
:"0d1cada4-430c-4823-ba96-5ab4913d4019","FStatus":0,"FSelectType":1,"FToken
ID":"ec51d691-d9a7-4f74-95a8-1856be2ae741","FTimeDifferent":28800,"FLanguag
e":"1"}";
URL realUrl = new URL(url);
// Set common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// POST requests must be set as follows
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Sending request parameters
pw.print(body);
// flush output buffer
pw.flush();
// Define BufferedReader to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, JSON format parameters, it is recommended to pass in
 objects
string body = "{"FAction":"TransferAssetByFGUIDs","FGUIDs":"08c75b42-e80a-4
1ef-9c38-0bc4fd28cbe1,d2204050-7314-491a-a77f-87bce7ee9593","FNewAgentGUID"
:"0d1cada4-430c-4823-ba96-5ab4913d4019","FStatus":0,"FSelectType":1,"FToken
ID":"ec51d691-d9a7-4f74-95a8-1856be2ae741","FTimeDifferent":28800,"FLanguag
e":"1"}";
Encoding encoding = Encoding.UTF8;
```

```
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method post/get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'TransferAssetByFGUIDs',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs':'08c75b42-e80a-41ef-9c38-0bc4fd28cbe1,d2204050-7314-491a-a77
f-87bce7ee9593'
      'FNewAgentGUID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FStatus': 0,
      'FSelectType': 0
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Routes management

Start and end supervision(Delivery List)

Brief Description:

- Start analysis of supervision: the waybill starts to be analyzed, and the vehicle status is monitored (the vehicle will become “already started” when it leaves the starting point fence)
- Start supervision: after the Waybil is dispatched, start supervision analysis, that is, the status of the waybill becomes “already started”
- End supervision: end the start-up supervision analysis, that is, the status of the waybill directly becomes “completed”

API Version:

Version	Author	Date	Revision
1.0.0	lenny	2022-10-14	2020-10-14

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Headers:

Parameter Name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (SendCommandToRouteAnalysis)

FAssetID	Yes	string	Device number
FType	Yes	int	0: analysis of supervision start 1: start supervision 2: end supervision

Response Example:

Correct response example:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": null
}
```

Error response example:

```
//indicates that the input parameter is incorrect
{
    "Result": 102,
    "Message": "param is error",
    "FObject": null
}
//indicates that there is an exception error, and the message will be diffe
rent depending on the parameter condition
{
    "Result": 105,
    "Message": "start analysis task fail" / "start analysis fail" / "check
fail",
    "FObject": null
}
//indicates that the device cannot be found
{
    "Result": 106,
    "Message": "device does not exist",
    "FObject": null
}
//indicates that the waybill associated with the device cannot be found
{
    "Result": 121,
    "Message": "no task found",
    "FObject": null
}
//indicates that the analysis has already started or the supervision has st
```

```
arted, no need to start again
{
    "Result": 135,
    "Message": "task started",
    "FObject": null
}
//indicates that the task cannot be found during the analysis, and you need
 to wait for the analysis program to initialize
{
    "Result": 134,
    "Message": "task is being initialized",
    "FObject": null
}
//indicates that analysis needs to be started before starting supervision
{
    "Result": 136,
    "Message": "analysis task is not started",
    "FObject": null
}
```

Notes:

- More error codes are as follows:
- 103: incorrect username or password
- 102: request parameter error
- 105: indicates that there is an exception error
- 106: indicates that the device number cannot be found
- 121: indicates that the waybill associated with the device cannot be found
- 134: indicates that the task cannot be found during analysis, and you need to wait for the analysis program to initialize
- 135: indicates that the analysis has already started or the supervision has started, no need to start again
- 136: indicates that analysis needs to be started before starting supervision

Request Example:

Java:

```
String result = "";
// Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in json format, it is recommended to use an object t
o pass in
String body = "{FAction:\"SendCommandToRouteAnalysis\",FTokenID:\"3acef045-
d302-4032-b40a-d9ee6c1519cd\",FAssetID:\"13301781203\",FType: 0}";
```

```
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define a BufferedReader input stream to read the response from the URL
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a json string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in json format, it is recommended to use an object t
o pass in
string body = "{FAction:\"SendCommandToRouteAnalysis\",FTokenID:\"3acef045-
d302-4032-b40a-d9ee6c1519cd\",FAssetID:\"13301781203\",FType: 0}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
```

```
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a json string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'SendCommandToRouteAnalysis',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FAssetID':'13301781203',
    'FType':'0',
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Waybill Dispatching(Vehicle Dispatch)

Brief description:

- Route Dispatch is used for waybill tasks to vehicles.

Interface version:

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Required	string	Token ID
FAction	Required	string	Method Name (AddPublicRouteDeparture)
FName	Optional	string	Company Name, if this field is empty, it defaults to the current user's company.
FListRouteDeparture	Required	List	Waybill content, can be dispatched.

MT_RouteDeparture Object Description:

Parameter Name	Required	Type	Description
FVehicleName	Required	string	License Plate Number
FAssetID	Required	string	Device number
FRouteName	Required	string	Route Name
FPlanStartTime	Required	DateTime	Planned Start Time (UTC)
FPlanEndTime	Required	DateTime	Planned End Time (UTC)
FWaybill	Required	string	Order Number
FGoods	Required	string	Name of Goods
FCarrier	Required	string	Carrier
FDriverName	Required	string	Driver's name
FContainerNo	Required	string	Cargo box
FCargoDescribe	Required	string	Cargo Description
FWaybill	Required	string	Order number
FConsignee	Required	string	Consignee
FFinishType	Required	int	Completion Rule 0: Completed Outside Destination, 1: Arrived at Destination, 2: Unlocked within Destination 5:Return to the starting point and complete.
FDepartureType	Required	int	Waybill Type 0: Normal 1: Plan
FPlannedDuration	Required	int	Plan Duration (minutes)
FIsLbsAnalysis	Optional	string	Whether to enable base station positioning analysis. 1: Enable. 0: Do not enable. It is enabled by default.

Return Example:

When correct, it returns:

```
{
```

```
    "Result": 200,
    "Message":"success",
    "FObject":  [
        {
            "RowNo": 0,  //Corresponding to the serial number of the incomi
ng object (FListRouteDeparture)
            "FWaybillGUID": "d0ddcad6-c5d6-4876-8174-f97e3956f72e" //The un
ique identifier of the waybill
        }
    ]
}
```

Error returns:

```
// Indicates that the incoming object is empty, which should be due to inco
rrect data format
{
    "Result": 102,
    "Message": "FListRouteDeparture is null",
    "FObject": null
}
// Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
// Indicates that the license plate number or device number in the incoming
 data is empty
{
    "Result": 106,
    "Message": "FVehicleName or FAssetID has empty data",
    "FObject": null
}

// Indicates duplicate license plate numbers in the incoming data
{
    "Result": 107,
    "Message": "FVehicleName has duplicate data:" + duplicated license plat
e numbers separated by commas,
    "FObject": null
}
// Indicates duplicate device numbers in the incoming data
{
    "Result": 108,
```

```
    "Message": "FVehicleName has duplicate data:" + duplicated device numbe
rs separated by commas,
    "FObject": null
}

// Indicates that the company cannot be found under the current user, pleas
e log in to the platform to check
{
    "Result": 109,
    "Message": "FAgentName has no exists data:"  + company name,
    "FObject": null
}
// Indicates that these device numbers do not exist or are not under the co
mpany, it is recommended to confirm on the platform
{
    "Result": 110,
    "Message": "FAssetID has no exists data:" + non-existent device numbers
 separated by commas,
    "FObject": null
}
// Indicates that there are some device numbers in execution, it is recomme
nded to end the task on the platform before dispatching
{
    "Result": 111,
    "Message": "FAssetID has running data:" + device numbers in execution s
eparated by commas,
    "FObject": null
}
// Indicates that there are some license plate numbers in execution, it is
recommended to end the task on the platform before dispatching
{
    "Result": 112,
    "Message": "FVehicleName has running data:" + license plate numbers in
execution separated by commas,
    "FObject": null
}
// Indicates that these route names do not exist or are not under the compa
ny, it is recommended to confirm on the platform
{
    "Result": 113,
    "Message": "FRouteName has no exists data:" + non-existent route names
separated by commas,
    "FObject": null
}
```

Remarks:

- More error codes returned are as follows:
- 103: Username or password is incorrect
- 102: Request parameter error
- 105: Indicates an exception error
- 106: Indicates that the license plate number or device number in the incoming data is empty
- 107: Indicates duplicate license plate numbers in the incoming data
- 108: Indicates duplicate device numbers in the incoming data
- 109: Indicates that the company cannot be found under the current user, please log in to the platform to check
- 110: Indicates that these device numbers do not exist or are not under the company, it is recommended to confirm on the platform
- 111: Indicates that there are some device numbers in execution, it is recommended to end the task on the platform before dispatching
- 112: Indicates that there are some license plate numbers in execution, it is recommended to end the task on the platform before dispatching
- 113: Indicates that these route names do not exist or are not under the company, it is recommended to confirm on the platform

Request Example:

Java:

```
String result = "";
//Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, in JSON format, it is suggested to pass in an object
String body = "{FAction:\"AddPublicRouteDeparture\",FTokenID:\"3acef045-d30
2-4032-b40a-d9ee6c1519cd\",\"FListRouteDeparture\":\"[{\"FVehicleName\":\"1330
1781203\",\"FWaybill\":\"6757787\",\"FGoods\":\"223434\",\"FAssetID\":\"133
01781203\",\"FRouteGUID\":\"42bfae96-cbed-4d2e-8e9f-c1cd4ad0d5df\",\"FRoute
Name\":\"43534\",\"FCarrier\":\"656546\",\"FDriverGUID\":\"\",\"FDriverName
\":\"435435\",\"FDriverPhone\":\"6546\",\"FPlanStartTime\":\"2022-09-22 16:
00:00\",\"FPlanEndTime\":\"2022-09-22 16:00:00\",\"FAgentGUID\":\"d6de6745-
9b7b-42cd-b624-b4659f5f5ce5\",\"FRouteCode\":\"20220622103851\",\"FVehicleT
ypeID\":\"\",\"FVehicleImgType\":\"0\",\"FContainerNo\":\"6422f\",\"FCargoD
escribe\":\"gfdgd\",\"FConsignee\":\"retgfd\",\"FFinishType\":1},{\"FVehicl
eName\":\"13301781203\",\"FWaybill\":\"6757787\",\"FGoods\":\"223434\",\"FA
ssetID\":\"13301781203\",\"FRouteGUID\":\"42bfae96-cbed-4d2e-8e9f-c1cd4ad0d
5df\",\"FRouteName\":\"43534\",\"FCarrier\":\"656546\",\"FDriverGUID\":\"\"
,\"FDriverName\":\"435435\",\"FDriverPhone\":\"6546\",\"FPlanStartTime\":\"
2022-09-22 16:00:00\",\"FPlanEndTime\":\"2022-09-22 16:00:00\",\"FAgentGUID
\":\"d6de6745-9b7b-42cd-b624-b4659f5f5ce5\",\"FRouteCode\":\"20220622103851
\",\"FVehicleTypeID\":\"\",\"FVehicleImgType\":\"0\",\"FContainerNo\":\"642
```

```
2f\",\"FCargoDescribe\":\"gfdgd\",\"FConsignee\":\"retgfd\",\"FFinishType\"
:1}]}";
URL realUrl = new URL(url);
// Set general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines to send a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send Request Parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to pass in an obje
ct
string body = "{FAction:\"AddPublicRouteDeparture\",FTokenID:\"3acef045-d30
2-4032-b40a-d9ee6c1519cd\",\"FListRouteDeparture\":\"[{\"FVehicleName\":\"1330
1781203\",\"FWaybill\":\"6757787\",\"FGoods\":\"223434\",\"FAssetID\":\"133
01781203\",\"FRouteGUID\":\"42bfae96-cbed-4d2e-8e9f-c1cd4ad0d5df\",\"FRoute
Name\":\"43534\",\"FCarrier\":\"656546\",\"FDriverGUID\":\"\",\"FDriverName
\":\"435435\",\"FDriverPhone\":\"6546\",\"FPlanStartTime\":\"2022-09-22 16:
00:00\",\"FPlanEndTime\":\"2022-09-22 16:00:00\",\"FAgentGUID\":\"d6de6745-
9b7b-42cd-b624-b4659f5f5ce5\",\"FRouteCode\":\"20220622103851\",\"FVehicleT
ypeID\":\"\",\"FVehicleImgType\":\"0\",\"FContainerNo\":\"6422f\",\"FCargoD
```

```
escribe\":\"gfdgd\",\"FConsignee\":\"retgfd\",\"FFinishType\":1},{\"FVehicl
eName\":\"13301781203\",\"FWaybill\":\"6757787\",\"FGoods\":\"223434\",\"FA
ssetID\":\"13301781203\",\"FRouteGUID\":\"42bfae96-cbed-4d2e-8e9f-c1cd4ad0d
5df\",\"FRouteName\":\"43534\",\"FCarrier\":\"656546\",\"FDriverGUID\":\"\"
,\"FDriverName\":\"435435\",\"FDriverPhone\":\"6546\",\"FPlanStartTime\":\"
2022-09-22 16:00:00\",\"FPlanEndTime\":\"2022-09-22 16:00:00\",\"FAgentGUID
\":\"d6de6745-9b7b-42cd-b624-b4659f5f5ce5\",\"FRouteCode\":\"20220622103851
\",\"FVehicleTypeID\":\"\",\"FVehicleImgType\":\"0\",\"FContainerNo\":\"642
2f\",\"FCargoDescribe\":\"gfdgd\",\"FConsignee\":\"retgfd\",\"FFinishType\"
:1}]}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method POST / GET
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'AddPublicRouteDeparture',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
    'FListRouteDeparture': '[{\"FVehicleName\":\"13301781203\",\"FWaybill\"
:\"6757787\",\"FGoods\":\"223434\",\"FAssetID\":\"13301781203\",\"FRouteGUI
D\":\"42bfae96-cbed-4d2e-8e9f-c1cd4ad0d5df\",\"FRouteName\":\"43534\",\"FCa
rrier\":\"656546\",\"FDriverGUID\":\"\",\"FDriverName\":\"435435\",\"FDrive
rPhone\":\"6546\",\"FPlanStartTime\":\"2022-09-22 16:00:00\",\"FPlanEndTime
\":\"2022-09-22 16:00:00\",\"FAgentGUID\":\"d6de6745-9b7b-42cd-b624-b4659f5
f5ce5\",\"FRouteCode\":\"20220622103851\",\"FVehicleTypeID\":\"\",\"FVehicl
eImgType\":\"0\",\"FContainerNo\":\"6422f\",\"FCargoDescribe\":\"gfdgd\",\"
FConsignee\":\"retgfd\",\"FFinishType\":1},{\"FVehicleName\":\"13301781203\
",\"FWaybill\":\"6757787\",\"FGoods\":\"223434\",\"FAssetID\":\"13301781203
\",\"FRouteGUID\":\"42bfae96-cbed-4d2e-8e9f-c1cd4ad0d5df\",\"FRouteName\":\
```

```
"43534\",\"FCarrier\":\"656546\",\"FDriverGUID\":\"\",\"FDriverName\":\"435
435\",\"FDriverPhone\":\"6546\",\"FPlanStartTime\":\"2022-09-22 16:00:00\",
\"FPlanEndTime\":\"2022-09-22 16:00:00\",\"FAgentGUID\":\"d6de6745-9b7b-42c
d-b624-b4659f5f5ce5\",\"FRouteCode\":\"20220622103851\",\"FVehicleTypeID\":
\"\",\"FVehicleImgType\":\"0\",\"FContainerNo\":\"6422f\",\"FCargoDescribe\
":\"gfdgd\",\"FConsignee\":\"retgfd\",\"FFinishType\":1}]'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Check the list of company Waybill(Delivery List)

Brief description:

- Query the Delivery List of company waybill schedules

API Version:

Version	Author	Date Created	Date Updated
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryDepartureListByFAgentGUID)
FAgentGUID	No	string	Company unique identifier
FStatus	Yes	int	Waybill status (0: No departure(not shipped); 1: Departure(shipped); 2: Reached(Arrived); 3: Dispatch Schedule List(Plan))
FPageSize	No	int	Page size for pagination

FPageIndex	No	int	Current page number for pagination

Example Response:

When the request is successful:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FTotalCount": 2,
                "FPlanCount": 0,
                "FWaitingCount": 2,
                "FRunningCount": 0,
                "FFinishCount": 0
            }
        ],
        "Table1": [
            {
                "FGUID": "58a297aa-0703-41f4-95c2-d41440d4631d",
                "FVehicleGUID": "c6d3ca9d-ec2f-4ce9-8e54-9c3b1ade194b",
                "FVehicleName": "791011001167",
                "FWaybill": "20230316-001",
                "FGoods": "Daily necessities",
                "FAssetGUID": "c4b7730e-f74b-4dee-833b-0128bf5dd7f4",
                "FAssetID": "791011001167",
                "FRouteGUID": "c5ed320f-5eb8-4e89-91ab-f480060bd427",
                "FCarrier": "JT",
                "FDriverGUID": "00000000-0000-0000-0000-000000000000",
                "FDriverName": "xx",
                "FDriverPhone": "885252522",
                "FPlanStartTime": "2023-03-16T23:00:00",
                "FActualStartTime": null,
                "FPlanEndTime": "2023-03-17T00:00:00",
                "FActualEndTime": null,
                "FContainerNo": "20230316-001",
                "FConsignee": "Huo Wanqing",
                "FVehicleTypeID": 1,
                "FCargoDescribe": "",
                "FVehicleImgType": 0,
                "FFinishType": 1,
                "FDepartureType": 1,
```

```
                    "FPlannedDuration": 30,
                    "FLocationStatus": 1,
                    "RowNo": 2,
                    "FRouteName": "JT-TEST Waybill 02",
                    "FRouteCode": "20230314-02",
                    "FAssetTypeID": 1709
                }]
        }
}
```

Error Responses:

```
//Indicates that the unique identifier of the company passed in is empty, w
hich should be a data format issue.
{
    "Result": 102,
    "Message": "FAgentGUID is null",
    "FObject": []
}
//Indicates token expiration or error.
{
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
//Indicates a general error.
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
```

Note:

- More error codes are returned as follows:
- 106: Account expired.
- 103: Incorrect username or password.
- 102: Request parameter error.
- 104: Token expired or error.
- 105: General error.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body - JSON format, it's recommended to pass in an object
String body = "{\"FAction\": \"QueryDepartureListByFAgentGUID\", \"FPageSiz
e\": 50, \"FPageIndex\": 0, \"FStatus\": 0, \"FAgentGUID\": \"661E7209-C77E
-4A54-AFB8-6D956F962BDF\", \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2a
e741\", \"FTimeDifferent\": 28800, \"FLanguage\": \"1\"}";
URL realUrl = new URL(url);
// Set the general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// A POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream buffer
pw.flush();
// Read URL response using BufferedReader input stream
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read URL response line by line
String line;
while ((line = bufReader.readLine()) != null) {
    result += line;
}
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body - JSON format, it's recommended to pass in an object
string body = "{\"FAction\": \"QueryDepartureListByFAgentGUID\", \"FPageSiz
e\": 50, \"FPageIndex\": 0, \"FStatus\": 0, \"FAgentGUID\": \"661E7209-C77E
-4A54-AFB8-6D956F962BDF\", \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2a
e741\", \"FTimeDifferent\": 28800, \"FLanguage\": \"1\"}";
```

```
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method - POST / GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryDepartureListByFAgentGUID',
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae741',
    'FAgentGUID':'661E7209-C77E-4A54-AFB8-6D956F962BDF',
    'FStatus':0,
    'FPageSize':50,
    'FPageIndex':0,
    'FTimeDifferent':28800,
    'FLanguage':1
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Waybill Detail

Brief description:

- Query the waybill detail

API Version:

Version	Author	Date Created	Date Updated
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryDepartureInfoByFGUID)
FGUID	Yes	string	Waybill unique identifier

Example Response:

When the request is successful:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FGUID": "258dbdb5-1c01-495c-98f5-6165e9fa8b4c",
            "FVehicleGUID": "9e527040-b78c-4d88-8740-a2a90690a701",
            "FVehicleName": "796506000001",
            "FWaybill": "",
            "FGoods": "",
            "FAssetGUID": "cd72f9fe-1508-41b5-9457-81568890d447",
            "FAssetID": "796506000001",
            "FRouteGUID": "04d48d4b-dc20-4592-bf9d-ebd0271020f5",
            "FCarrier": "",
            "FDriverName": "",
            "FDriverPhone": "",
            "FPlanStartTime": "2025-07-31T06:36:08",
            "FActualStartTime": "2025-07-31T07:01:38.1",
            "FPlanEndTime": "2025-07-31T07:36:08",
            "FActualEndTime": null,
            "FContainerNo": "",
            "FConsignee": "",
            "FAgentGUID": "661e7209-c77e-4a54-afb8-6d956f962bdf",
            "FCargoDescribe": "",
            "FStatus": 4,
            "FCreateTime": "2025-07-31T06:43:01.583",
            "FFinishTime": "2025-07-31T08:43:24.773",
            "FFinishType": 1,
            "FRouteName": "01",
            "FRouteCode": "001",
            "FStartFence": "5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d",
            "FEndFence": "1b1fe658-01b9-4c9d-81fb-c879974173ff",
            "FAssetTypeID": 1709,
            "FStartFenceName": "hugu",
            "FEndFenceName": "tain",
            "FAssetTypeName": "JT709A",
            "FAgentName": "soft"
        }
    ]
}
```


Error Responses:

```
//Indicates that the unique identifier of the company passed in is empty, w
hich should be a data format issue.
```

```
{
    "Result": 102,
    "Message": "FAgentGUID is null",
    "FObject": []
}
//Indicates token expiration or error.
{
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
//Indicates a general error.
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
```

Note:

- More error codes are returned as follows:
- 106: Account expired.
- 103: Incorrect username or password.
- 102: Request parameter error.
- 104: Token expired or error.
- 105: General error.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body - JSON format, it's recommended to pass in an object
String body = "{\"FAction\": \"QueryDepartureInfoByFGUID\", \"FGUID\": \"66
1E7209-C77E-4A54-AFB8-6D956F962BDF\", \"FTokenID\": \"ec51d691-d9a7-4f74-95
a8-1856be2ae741\"}";
URL realUrl = new URL(url);
// Set the general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
```

```
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// A POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream buffer
pw.flush();
// Read URL response using BufferedReader input stream
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read URL response line by line
String line;
while ((line = bufReader.readLine()) != null) {
    result += line;
}
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body - JSON format, it's recommended to pass in an object
string body = "{\"FAction\": \"QueryDepartureInfoByFGUID\", \"FGUID\": \"66
1E7209-C77E-4A54-AFB8-6D956F962BDF\", \"FTokenID\": \"ec51d691-d9a7-4f74-95
a8-1856be2ae741\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method - POST / GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
```

```
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryDepartureInfoByFGUID',
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae741',
    'FGUID':'661E7209-C77E-4A54-AFB8-6D956F962BDF'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Delete Waybill number

Brief description:

- Delete waybill schedule

API Version：

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (DeleteRouteDepartureByFGUIDs)
FGUIDs	Yes	string	List of unique identifiers for waybill schedules, separated by commas (e.g. “aaf42ad9-5b26-4a79-ac1b-be9f1d53423d,aaf42ad9-5b26-4a79-ac1b-be9f1d53423d”)

Response Example:

Success:

```
{
    "Result": 200,
    "Message": "succeed",
    "FObject": []
}
```

Error:

```
// Empty list of unique identifiers for train schedules provided. This may
be due to incorrect data format.
{
    "Result": 102,
    "Message": "FGUIDs is null",
    "FObject": []
}
// Indicates that the token has expired
{
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
// Indicates that an exception has occurred
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
```

Remarks:

- Additional error codes are as follows:
- 106: Account has expired
- 103: Incorrect username or password
- 102: Incorrect request parameters
- 104: Token has expired
- 105: Indicates that an exception has occurred.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use an object to
 pass the parameter
String body = "{
    \"FAction\": \"DeleteRouteDepartureByFGUIDs\",
    \"FGUIDs\": \"aaf42ad9-5b26-4a79-ac1b-be9f1d53423d\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set the common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request requires the following two lines to be set
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send the request parameters
pw.print(body);
// Flush output stream buffer
pw.flush();
// Define BufferedReader to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL using the BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is in the form of a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use an object to
```

```
 pass the parameter
string body = "{
    \"FAction\": \"DeleteRouteDepartureByFGUIDs\",
    \"FGUIDs\": \"aaf42ad9-5b26-4a79-ac1b-be9f1d53423d\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The response is in the form of a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'DeleteRouteDepartureByFGUIDs',
    'FGUIDs': 'aaf42ad9-5b26-4a79-ac1b-be9f1d53423d',
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
    'FTimeDifferent': 28800,
    'FLanguage': '1'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
```

```
page = page.decode('utf-8')
# The response is in the form of a JSON string
# json_array = json.loads(page)
return page;
```

Modify the Waybill information

Brief description:

- Modify the information of a waybill trip.

API Version：

Version number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method：

- POST

Request header：

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (UpdateRouteDepartureByFGUID)
FT_RouteDeparture	Yes	FT_RouteDeparture	Waybill content

FT_RouteDeparture Object description:

Parameter name	Required	Type	Description

FGUID	Yes	string	Unique identification of waybill
FVehicleName	Yes	string	License plate number
FAssetGUID	Yes	string	Unique identification of equipment
FAssetID	Yes	string	Device number
FRouteGUID	Yes	string	Unique identification of route
FAgentGUID	Yes	string	Unique identification of company
FPlanStartTime	Yes	DateTime	Planned start time (UTC time)
FPlanEndTime	Yes	DateTime	Planned end time (UTC time)
FRouteName	Yes	string	Route name
FWaybill	Yes	string	Order number
FGoods	Yes	string	Name of goods
FCarrier	Yes	string	Carrier
FDriverName	Yes	string	Driver name
FContainerNo	Yes	string	Cargo container
FCargoDescribe	Yes	string	Description of goods
FConsignee	Yes	string	Consignee
FFinishType	Yes	int	Completion rule 0: completion at destination, 1: arrival at destination, 2: opening lock within destination 5:Return to the starting point and complete
FDepartureType	Yes	int	Waybill type 0: ordinary, 1: planned
FPlannedDuration	Yes	int	Planned lead time (minutes)
FIsLbsAnalysis	Yes	string	Whether to enable base station positioning analysis. 1: Enable. 0: Do not enable. It is enabled by default.

Response Example:

Return 200 when success:

```
{
    "Result": 200,
    "Message": "Succeed",
    "FObject": []
}
```

Return error messages when there are errors:

```
// indicate that the input object is empty, which might be caused by incorr
ect data format
{
    "Result": 102,
    "Message": "Parameters are error",
    "FObject": null
}
// indicate there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}

// indicate there is an error with the plan start time of the waybill
{
    "Result": 126,
    "Message": "plan start time error" ,
    "FObject": null
}
```

Remarks:

- More error codes are listed below:
- 106: account is expired
- 103: username or password is incorrect
- 102: request parameters are incorrect
- 105: indicate there is an exception error
- 126: indicates an error with the input waybill start time.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format, it is recommended to use an object to
 pass in the parameters
String body = "{
    \"FAction\": \"UpdateRouteDepartureByFGUID\",
    \"FT_RouteDeparture\": {
        \"FGUID\": \"58a297aa-0703-41f4-95c2-d41440d4631d\",
        \"FVehicleName\": \"791011001167\",
        \"FAssetGUID\": \"c4b7730e-f74b-4dee-833b-0128bf5dd7f4\",
        \"FAssetID\": \"791011001167\",
        \"FRouteGUID\": \"c5ed320f-5eb8-4e89-91ab-f480060bd427\",
        \"FAgentGUID\": \"661E7209-C77E-4A54-AFB8-6D956F962BDF\",
        \"FPlanStartTime\": \"2023-03-16T23:00:00\",
        \"FPlanEndTime\": \"2023-03-17T00:00:00\"
    },
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set the common request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request and set the output stream to true
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send the request parameter
pw.print(body);
// flush the output stream's buffer
pw.flush();
// Define a BufferedReader input stream to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define a BufferedReader input stream to read the response from the URL
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
```

```
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format, it is recommended to use an object to
 pass in the parameters
string body = "{
    \"FAction\": \"UpdateRouteDepartureByFGUID\",
    \"FT_RouteDeparture\": {
        \"FGUID\": \"58a297aa-0703-41f4-95c2-d41440d4631d\",
        \"FVehicleName\": \"791011001167\",
        \"FAssetGUID\": \"c4b7730e-f74b-4dee-833b-0128bf5dd7f4\",
        \"FAssetID\": \"791011001167\",
        \"FRouteGUID\": \"c5ed320f-5eb8-4e89-91ab-f480060bd427\",
        \"FAgentGUID\": \"661E7209-C77E-4A54-AFB8-6D956F962BDF\",
        \"FPlanStartTime\": \"2023-03-16T23:00:00\",
        \"FPlanEndTime\": \"2023-03-17T00:00:00\"
    },
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Set the request method to POST/GET
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
// Write the request parameters to the output stream
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'UpdateRouteDepartureByFGUID',
    'FT_RouteDeparture': {
        'FGUID': '58a297aa-0703-41f4-95c2-d41440d4631d',
        'FVehicleName': '791011001167',
        'FAssetGUID': 'c4b7730e-f74b-4dee-833b-0128bf5dd7f4',
        'FAssetID': '791011001167',
        'FRouteGUID': 'c5ed320f-5eb8-4e89-91ab-f480060bd427',
        'FAgentGUID': '661E7209-C77E-4A54-AFB8-6D956F962BDF',
        'FPlanStartTime': '2023-03-16T23:00:00',
        'FPlanEndTime': '2023-03-17T00:00:00'
    },
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
    'FTimeDifferent': 28800,
    'FLanguage': '1'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Query Route Plan information

Brief description:

- Query route plan information.

Interface version:

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Required	string	Token ID
FAction	Required	string	Method Name (QueryRoutePlanList)

Object Description:

Parameter Name	Required	Type	Description
FAgentGUID	String	Company unique identifier	

FAgentName	String	Company Name	
FRouteGUID	String	Route unique identifier	
FRouteName	String	Route Name	
FRouteCode	String	Route Code	

Return Example:

When correct, it returns:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": [
        {
            "FRouteGUID": "794270c9-c74c-40c6-8e3f-00754ff5a28f",
            "FRouteName": "test",
            "FRouteCode": "20231023163308",
            "FAgentGUID": "661e7209-c77e-4a54-afb8-6d956f962bdf",
            "FAgentName": "test"
        },
        {
            "FRouteGUID": "8bcf571b-ea0a-4cc7-a674-0326d9b6887a",
            "FRouteName": "test1",
            "FRouteCode": "22222",
            "FAgentGUID": "661e7209-c77e-4a54-afb8-6d956f962bdf",
            "FAgentName": "test2"
        }
        ]
    }
}
```

Error returns:

```
// Indicates that the incoming object is empty, which should be due to inco
rrect data format
{
    "Result": 102,
    "Message": "FParma is null",
    "FObject": null
}
//Indicates token expiration or error.
{
```

```
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
// Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
```

Remarks:

- More error codes returned are as follows:
- 102: Request parameter error.
- 104: Token expired or error.
- 105: General error.

Request Example:

Java:

```
String result = "";
//Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, in JSON format, it is suggested to pass in an object
String body = "{FAction:\"QueryRoutePlanList\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines to send a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send Request Parameters
pw.print(body);
// flush output stream buffer
pw.flush();
```

```
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to pass in an obje
ct
string body = "{FAction:\"QueryRoutePlanList\",FTokenID:\"3acef045-d302-403
2-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method POST / GET
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryRoutePlanList',
    'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd'
}
data = parse.urlencode(data).encode('utf-8')
```

```
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Query specific information of a single route

Brief description:

- Query specific information of a single route

Interface version:

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2024-12-24	2024-12-24

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method Name (QueryRoutePlanByFGUID)
FGUID	Yes	string	Route unique identifier-FRouteGUID

Return Example:

When correct, it returns:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FGUID": "e286fe13-2034-45eb-9da2-d929e8a2558a",
                "FName": "8789746",
                "FCode": "20200830145345",
                "FStartFence": "5b81e7f0-1e4c-4e4e-a4ba-32a7138caf03",
                "FStartFenceName": "Sea Valley Fence Test",
                "FStartFormType": 1,
                "FStartTypeName": "Test",
                "FStartPath": "[{\"lat\":22.67071837531768,\"lng\":113.9109
9242249336},{\"lat\":22.66875631707885,\"lng\":113.90927486128945},{\"lat\"
:22.66580899152102,\"lng\":113.91246440413853},{\"lat\":22.666602014375645,
\"lng\":113.91647473726114},{\"lat\":22.669011541033097,\"lng\":113.9171537
2235394},{\"lat\":22.671964991193125,\"lng\":113.91618420544815},{\"lat\":2
2.671898164421865,\"lng\":113.91389170362235}]",
                "FStartRadius": 0.0,
                "FStartCenterLon": 113.91365407695481,
                "FStartCenterLat": 22.668931600149243,
                "FEndFence": "38978700-bdc9-4857-bb0b-9826b59e83e4",
                "FEndFenceName": "Testfence2",
                "FEndFormType": 1,
                "FEndTypeName": "Test",
                "FEndPath": "[{\"lat\":24.70994521713008,\"lng\":113.575092
78388251},{\"lat\":24.70994521713008,\"lng\":113.57657521611749},{\"lat\":2
4.711750782978523,\"lng\":113.57657521611749},{\"lat\":24.711750782978523,\
"lng\":113.57509278388251}]",
                "FEndRadius": 0.0,
                "FEndCenterLon": 113.575834,
                "FEndCenterLat": 24.710848,
                "FRoadPoints": "[{\"lat\":22.66885928808014,\"lng\":113.913
63220848557},{\"lat\":22.668999470705682,\"lng\":113.91294237794823},{\"lat
\":22.669019771511334,\"lng\":113.91277192775806},{\"lat\":22.6696096144012
78,\"lng\":113.91290200213997},...,{\"lat\":24.70851446100423,\"lng\":113.5
7876801084377}]",
                "FRemark": ""
            }
        ],
        "Table1": [
            {
```

```
                "FRouteGUID": "e286fe13-2034-45eb-9da2-d929e8a2558a",
                "FPassFenceGUID": "added96f-c1d2-4965-b425-06e83e72acfc",
                "FName": "Testfence1",
                "FFormType": 1,
                "FTypeName": "Test",
                "FPath": "[{\"lat\":22.84764017,\"lng\":114.1301658},{\"lat
\":22.84764024,\"lng\":114.13065303},{\"lat\":22.84899473,\"lng\":114.13065
304},{\"lat\":22.84899466,\"lng\":114.13016582}]",
                "FRadius": 0.0,
                "FCenterLon": 114.13065303,
                "FCenterLat": 22.84831749 ,
                "FIndex": 1
            },
            {
                "FRouteGUID": "e286fe13-2034-45eb-9da2-d929e8a2558a",
                "FPassFenceGUID": "fe09bedb-aae1-43b6-90fb-d2b64e1f4796",
                "FName": "test002",
                "FFormType": 1,
                "FTypeName": "Test",
                "FPath": "[{\"lat\":24.316466141381518,\"lng\":113.30286794
457346},{\"lat\":24.316466141381518,\"lng\":113.30311424787654},{\"lat\":24
.31782038639906,\"lng\":113.30311424787654},{\"lat\":24.31782038639906,\"ln
g\":113.30286794457346}]",
                "FRadius": 0.0,
                "FCenterLon": 113.302991096225,
                "FCenterLat": 24.3171432638601,
                "FIndex": 2
            }
        ]
    }
}
    }
}
```


Error returns:

```
// Indicates that the incoming object is empty, which should be due to inco
rrect data format
{
    "Result": 102,
    "Message": "FParam is null",
    "FObject": []
}
//Indicates token expiration or error.
{
```

```
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
//Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
```

Return parameter Table description:

Parameter Name	Type	Description
FAgentGUID	String	Unique company identifier
FGUID	String	Route unique identifier-
FName	String	Route Name
FCode	String	Route Code
FStartFence	String	Starting Fence Unique identifier
FStartFenceName	String	Starting fence name
FStartFormType	int	Starting fence type 1: Polygon 2: Circle
FStartTypeName	String	Starting fence type name
FStartPath	String	Starting fence point set, Json string
FStartRadius	double	Starting Fence Radius
FStartCenterLon	String	Starting fence center point longitude
FStartCenterLat	String	Starting fence center point latitude
FEndFence	String	End fence unique identifier
FEndFenceName	String	End fence Name
FEndFormType	int	End Fence Type 1: Polygon 2: Circle
FEndTypeName	String	End Fence Type Name

FEndPath	String	End fence point set, Json string
FEndRadius	double	End Fence Radius
FEndCenterLon	String	End fence center point longitude
FEndCenterLat	String	End fence center point latitude
FRoadPoints	String	A collection of all points on the route, a Json string
FRemark	String	Route Description

Return parameter Table1 Description: All Check Point fences. If null, it means that the route does not Check Point fence.

Parameter name	Type	Description
FRouteGUID	String	Unique identifier of the route
FPassFenceGUID	String	Unique identifier of Check Point fence
FName	String	Check Point fence name
FFormType	int	Fence Type 1: Polygon 2: Circle
FTypeName	String	Fence Type Name
FPath	String	Fence point collection, Json string
FRadius	double	Starting Fence Radius
FCenterLon	String	Start fence center point longitude
FCenterLat	String	Start fence center point Latitude
FIndex	int	Check Point fence index

Remarks:

- Additional error codes are as follows:
- 102: Incorrect request parameters
- 104: Token has expired
- 105: Indicates that an exception has occurred.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use an object to
 pass the parameter
String body = "{"FAction":"QueryRoutePlanByFGUID","FGUID":"e286fe13-2034-45
eb-9da2-d929e8a2558a",  \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae74
1\"}";
URL realUrl = new URL(url);
// Set the common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request requires the following two lines to be set
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send the request parameters
pw.print(body);
// Flush output stream buffer
pw.flush();
// Define BufferedReader to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL using the BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is in the form of a JSON string
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use an object to
 pass the parameter
string body = "{"FAction":"QueryRoutePlanByFGUID","FGUID":"e286fe13-2034-45
```

```
eb-9da2-d929e8a2558a",  \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae74
1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
     // The response is in the form of a JSON string
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
        'FAction': 'QueryDepartureListByFAgentGUID',
        'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae741',
        'FGUID': 'e286fe13-2034-45eb-9da2-d929e8a2558a'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Transportation Report

Brief description：

- Query Transportation reports by DeviceID or Asset(VehicleName)

Interface version：

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2024-12-03	2024-12-03

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method：

- POST

Request Header：

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Required	string	Token ID
FAction	Required	string	Method Name (QueryReportRouteDepartureListByFGUIDs)
FGUIDs	Required	string	Vehicle/Device(separate multiple with commas)
FSelectType	Required	int	1：by Vehicle；0：by Device

FStatus	Required	int	Waybill Status(-2:All； -1：voided；0:Unfinished；1:Completed 2:Expired (Actual arrival time is greater than planned completion time, indicating expiration) 3：Intend(Plan))
FStartTime	Required	datetime	Start time (UTC time)
FEndTime	Required	datetime	End time (UTC time)
FTimeDifferent	Required	int	Time difference in sec. UTC+3 3*3600=10800
FKey	Optional	string	Fuzzy query by waybill number (Declaration No.)
FPageSize	Optional	int	Pagination query Number of records per page
FPageIndex	Optional	int	Pagination query Current page number

Return Example:

When correct, it returns:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FTotalCount": 2
            }
        ],
        "Table1": [
            {
                "FGUID": "fa7cc011-21d5-4c78-bca1-b02871122314",
                "FVehicleGUID": "d7ca53d2-eb4c-4ab9-ba1a-9477becd4563",
                "FVehicleName": "KAA111A",
                "FWaybill": "",
                "FGoods": "",
                "FAssetGUID": "ac305cdc-24d0-4b2b-9581-69bf53fc1235",
                "FAssetID": "3454354353",
                "FRouteGUID": "7ed92857-8770-4351-9904-0d66d0933452",
                "FCarrier": "",
                "FDriverGUID": "00000000-0000-0000-0000-000000000000",
                "FDriverName": "",
                "FDriverPhone": "",
```

```
                    "FPlanStartTime": "2024-12-03T06:02:00",
                    "FActualStartTime": "2024-12-03T06:01:13.937",
                    "FPlanEndTime": "2024-12-03T21:00:00",
                    "FActualEndTime": null,
                    "FStatus": 4,
                    "FFinishTime": "2024-12-03T06:02:59.903",
                    "FAgentGUID": "0f0f2e76-4733-4388-9242-9ed7db004562",
                    "FCreateTime": "2024-12-03T06:00:54.07",
                    "FContainerNo": "",
                    "FCargoDescribe": "",
                    "FConsignee": "",
                    "FFinishType": 2,
                    "FDepartureType": 0,
                    "FPlannedDuration": 30,
                    "RowNo": 1,
                    "FRouteName": "a-c",
                    "FRouteCode": "20241017094717",
                    "FAgentName": "KPM Tech Solution",
                    "TransportationTime": "451",
                    "TransportationMileage": "0",
                    "ViewDetails": ""
                }
            ]
        }
    }
```


Error returns:

```
//The unique identifier of the company(FGUIDs) passed in is empty, which ma
y be due to incorrect data format.
{
    "Result": 102,
    "Message": "FGUIDs is null",
    "FObject": []
}
//Indicates that the token has expired.
{
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
//Indicates an abnormal error
{
    "Result": 105,
    "Message": "fail",
```

```
    "FObject": null
}
```

Return Table parameter description:

Parameter Name	Type	Description
FTotalCount	int	Total number of pages

Return to Table1 parameter description:

Parameter Name	Type	Description
FGUID	string	Unique waybill identifier
FVehicleGUID	String	Vehicle unique identification
FVehicleName	string	Vehicle Name(Vehicle License plate number)
FAssetGUID	string	Unique device identifier
FAssetID	string	DeviceID
FRouteGUID	string	Route unique identifier
FRouteName	string	Route Name
FRouteCode	string	Route code
FAgentGUID	string	Unique company identifier
FAgentName	string	Company Name
FPlanStartTime	DateTime	PlanStartTime（UTC time）
FPlanEndTime	DateTime	PlanEndTime（UTC time）
FActualStartTime	DateTime	ActualStartTime（UTC time）
FActualEndTime	DateTime	ActualEndTime （UTC time）
FFinishTime	DateTime	FinishTime（UTC time）
FCreateTime	DateTime	CreateTime（UTC time）
FWaybill	string	Waybill Number (Declaration No.)

FGoods	string	Goods Name
FCarrier	string	Carrier
FDriverName	string	DriverName
FDriverPhone	string	DriverPhone
FContainerNo	string	ContainerNo
FCargoDescribe	string	CargoDescribe
FConsignee	string	Consignee
FFinishType	int	Completion Rules 0：Complete(Leave destination) 1：Complete(Reach destination) 2：Complete(Unlock in destination) 5:Return to the starting point and complete
FDepartureType	int	Dispatch Type 0：Regular Dispatch 1：Planned Dispatch
FPlannedDuration	int	Planned order lead time (minutes)
FStatus	int	Waybill Status(-1：Voided；0:Unfinished；1:Auto-completed 2:Expired 3：Intend(Plan) 4:Manual completion)
TransportationTime	string	Transportation Time(Total Trip time) .Unit in Seconds
TransportationMileage	string	Transportation Mileage(Total Trip Mileage) Unit in KM
ViewDetails	string	Waybill Details Link

Remarks:

- More error codes returned are as follows：
- 106：Account Expired
- 103：Wrong username or password
- 102：Request parameter error
- 104：Token expired exception error
- 105：Indicates an abnormal error

Request Example:

Java:

```
String result = "";
//Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, in JSON format, it is suggested to pass in an object
String body = "{\"FAction\": \"QueryReportRouteDepartureListByFGUIDs\", \"F
PageSize\": 50, \"FPageIndex\": 1, \"FStatus\": 0, \"FGUIDs\": \"661E7209-C
77E-4A54-AFB8-6D956F962BDF\",FSelectType:\"1\",FStartTime:\"2020-08-18 16:0
0:00\",FEndTime:\"2020-08-25 15:59:59\", \"FTokenID\": \"ec51d691-d9a7-4f74
-95a8-1856be2ae741\", \"FTimeDifferent\": 28800, \"FLanguage\": \"1\"}";
URL realUrl = new URL(url);
// Set general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines to send a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send Request Parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
```

```
// Request parameters, in JSON format, it is recommended to pass in an obje
ct
string body = "{\"FAction\": \"QueryReportRouteDepartureListByFGUIDs\", \"F
PageSize\": 50, \"FPageIndex\": 1, \"FStatus\": 0, \"FGUIDs\": \"661E7209-C
77E-4A54-AFB8-6D956F962BDF\",FSelectType:\"1\",FStartTime:\"2020-08-18 16:0
0:00\",FEndTime:\"2020-08-25 15:59:59\", \"FTokenID\": \"ec51d691-d9a7-4f74
-95a8-1856be2ae741\", \"FTimeDifferent\": 28800, \"FLanguage\": \"1\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method POST / GET
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
        'FAction': 'QueryReportRouteDepartureListByFGUIDs',
        'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae741',
        'FGUIDs':'BE2A1E27-B36E-4301-B2C8-465A62AD215F,FE0BDE75-4A30-4B9C-A
D2E-66D8A4F44F5E',
          'FSelectType':1,
          'FStartTime':'2020-08-05 16:00:00',
         'FEndTime':'2020-08-12 15:59:59',
        'FStatus':0,
        'FPageSize':50,
        'FPageIndex':1,
        'FTimeDifferent':28800,
        'FLanguage':1
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
```

```
36 (KHTML, like Gecko) '
                      r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
        'Connection': 'keep-alive'
        }
       req = request.Request(url, headers=headers, data=data)
       page = request.urlopen(req).read()
       page = page.decode('utf-8')
       # json_array = json.loads(page)
       return page;
```

Query information of a single route,include brach

Brief description:

- Query specific information of a single route,include collection of branch routes

Interface version:

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2024-12-24	2024-12-24

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method Name (QueryAllRoutePlanByFGUID)
FGUID	Yes	string	Route unique identifier-FRouteGUID

Return Example:

When correct, it returns:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FGUID": "1e8ea88a-60f3-42bc-8176-37c676b677d8",
                "FName": "3432",
                "FCode": "001",
                "FStartFence": "dfd0d889-7a01-4cd4-b8ed-88825c5fb72b",
                "FStartFenceName": "543543",
                "FStartFormType": 2,
                "FStartTypeName": "534534",
                "FStartPath": "[]",
                "FStartRadius": 500.0,
                "FStartCenterLon": 113.92131186,
                "FStartCenterLat": 22.67073578,
                "FEndFence": "a156ffcf-9285-4756-95f1-0cb830fdae2a",
                "FEndFenceName": "534546",
                "FEndFormType": 1,
                "FEndTypeName": "543543",
                "FEndPath": "[{\"lat\":22.54519516,\"lng\":113.89590926},{\
"lat\":22.53213027,\"lng\":113.89155722},{\"lat\":22.53244843,\"lng\":113.9
106911},{\"lat\":22.54478113,\"lng\":113.90775015}]",
                "FEndRadius": 0.0,
                "FEndCenterLon": 113.90137618,
                "FEndCenterLat": 22.53813873,
                "FRoadPoints": "[{\"lat\":22.67123239,\"lng\":113.92147994}
,{\"lat\":22.67109185,\"lng\":113.92189991},{\"lat\":22.67097135,\"lng\":11
3.92223909},{\"lat\":22.67084065,\"lng\":113.92266904},{\"lat\":22.67073004
,\"lng\":113.92301921}},{\"lat\":22.5381929,\"lng\":113.90218871}]",
                "FRemark": "",
                "FIsMainRoute": 1,
                "FRoutePassInfo": [
                    {
                        "FRouteGUID": "1e8ea88a-60f3-42bc-8176-37c676b677d8
",
                        "FPassFenceGUID": "6c19e0c2-b36c-48d3-a1be-cba35f0d
cc35",
                        "FName": "AEE",
                        "FArea": 785000.0,
                        "FFormType": 2,
                        "FTypeName": "343",
                        "FPath": "[]",
```

```
                        "FRadius": 500.0,
                        "FCenterLon": 113.91507376,
                        "FCenterLat": 22.65319852,
                        "FIndex": 1
                    }
                ]
            }
        ],
        "Table2": [
            {
                "FGUID": "f22a64b3-35fa-401a-b46d-12dea683326f",
                "FName": "534",
                "FCode": "20250728003",
                "FStartFence": "dfd0d889-7a01-4cd4-b8ed-88825c5fb72b",
                "FStartFenceName": "5345",
                "FStartFormType": 2,
                "FStartTypeName": "etre",
                "FStartPath": "[]",
                "FStartRadius": 500.0,
                "FStartCenterLon": 113.92131186,
                "FStartCenterLat": 22.67073578,
                "FEndFence": "a156ffcf-9285-4756-95f1-0cb830fdae2a",
                "FEndFenceName": "5435",
                "FEndFormType": 1,
                "FEndTypeName": "6546",
                "FEndPath": "[{\"lat\":22.54519516,\"lng\":113.89590926},{\
"lat\":22.53213027,\"lng\":113.89155722},{\"lat\":22.53244843,\"lng\":113.9
106911},{\"lat\":22.54478113,\"lng\":113.90775015}]",
                "FEndRadius": 0.0,
                "FEndCenterLon": 113.90137618,
                "FEndCenterLat": 22.53813873,
                "FRoadPoints": "[{\"lat\":22.67053234,\"lng\":113.92123008}
,{\"lat\":22.67044206,\"lng\":113.92149997},{\"lat\":22.67027167,\"lng\":11
3.92194974},{\"lat\":22.67023145,\"lng\":113.92214964},{\"lat\":22.67023145
,\"lng\":113.92214964}}]",
                "FRemark": "test",
                "FIsMainRoute": 0,
                "FRoutePassInfo": [
                    {
                        "FRouteGUID": "f22a64b3-35fa-401a-b46d-12dea683326f
",
                        "FPassFenceGUID": "cd599f34-a408-4c20-8aab-6a9f246a
fc6d",
                        "FName": "56423423",
                        "FArea": 8998000.0,
                        "FFormType": 1,
```

```
                        "FTypeName": "343243",
                        "FPath": "[{\"lat\":22.74129463,\"lng\":113.95127929},{\"lat\":22.7344746,\"lng\":113.94214189},{\"lat\":22.72191399,\"lng\":113.93294184},{\"lat\":22.71563635,\"lng\":113.95853057},{\"lat\":22.7350435,\"lng\":113.98881357}]",
                        "FRadius": 0.0,
                        "FCenterLon": 113.95822878,
                        "FCenterLat": 22.7290518,
                        "FIndex": 1
                    }
                ]
            }
        ]
    }
}
```


Error returns:

```
// Indicates that the incoming object is empty, which should be due to incorrect data format
{
    "Result": 102,
    "Message": "FParam is null",
    "FObject": []
}
//Indicates token expiration or error.
{
    "Result": 104,
    "Message": "token error or timeout",
    "FObject": []
}
//Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": null
}
```

Return parameter Table description:

Parameter Name	Type	Description
FAgentGUID	String	Unique company identifier
FGUID	String	Route unique identifier-

FName	String	Route Name
FCode	String	Route Code
FStartFence	String	Starting Fence Unique identifier
FStartFenceName	String	Starting fence name
FStartFormType	int	Starting fence type 1: Polygon 2: Circle
FStartTypeName	String	Starting fence type name
FStartPath	String	Starting fence point set, Json string
FStartRadius	double	Starting Fence Radius
FStartCenterLon	String	Starting fence center point longitude
FStartCenterLat	String	Starting fence center point latitude
FEndFence	String	End fence unique identifier
FEndFenceName	String	End fence Name
FEndFormType	int	End Fence Type 1: Polygon 2: Circle
FEndTypeName	String	End Fence Type Name
FEndPath	String	End fence point set, Json string
FEndRadius	double	End Fence Radius
FEndCenterLon	String	End fence center point longitude
FEndCenterLat	String	End fence center point latitude
FRoadPoints	String	A collection of all points on the route, a Json string
FRemark	String	Route Description
FIsMainRoute	int	Is main route 1:Yes 0:No
FRoutePassInfo	Object	All Check Point fences. If null, it means that the route does not Check Point fence

Return parameter FRoutePassInfo

Parameter name	Type	Description
FRouteGUID	String	Unique identifier of the route
FPassFenceGUID	String	Unique identifier of Check Point fence
FName	String	Check Point fence name
FFormType	int	Fence Type 1: Polygon 2: Circle
FTypeName	String	Fence Type Name
FPath	String	Fence point collection, Json string
FRadius	double	Starting Fence Radius
FCenterLon	String	Start fence center point longitude
FCenterLat	String	Start fence center point Latitude
FIndex	int	Check Point fence index

Return parameter Table1 is branch route, If null, it means that the route does not exist

Remarks:

- Additional error codes are as follows:
- 102: Incorrect request parameters
- 104: Token has expired
- 105: Indicates that an exception has occurred.

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use an object to
 pass the parameter
String body = "{"FAction":"QueryAllRoutePlanByFGUID","FGUID":"e286fe13-2034
-45eb-9da2-d929e8a2558a",  \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2a
e741\"}";
URL realUrl = new URL(url);
```

```
// Set the common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request requires the following two lines to be set
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send the request parameters
pw.print(body);
// Flush output stream buffer
pw.flush();
// Define BufferedReader to read the response from the URL
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL using the BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is in the form of a JSON string
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format. It is recommended to use an object to
 pass the parameter
string body = "{"FAction":"QueryAllRoutePlanByFGUID","FGUID":"e286fe13-2034
-45eb-9da2-d929e8a2558a",  \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2a
e741\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
```

```
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
     // The response is in the form of a JSON string
    return reader.ReadToEnd();
}
```

Python：

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
        'FAction': 'QueryAllRoutePlanByFGUID',
        'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae741',
        'FGUID': 'e286fe13-2034-45eb-9da2-d929e8a2558a'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Add RoutePlan

Brief description:

-Batch Add Route Plan

Interface version:

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- https://icloud.assetscontrols.com:3443/OpenApi/Admin
- https://cloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	YES	string	Token ID
FAction	YES	string	Action (AddRoutePlans)
FRoutePlanList	YES	List< MT_RoutePlan >	Route Information

Object Description:

Parameter Name	Required	Type	Description

FName	YES	string	Route Name
FCode	YES	string	Route Code
FStartFence	YES	string	Start Fence GUID
FEndFence	YES	string	End Fence GUID
FRemark	YES	string	Remark
FRouteType	YES	int	Route Type 0：has route points 1：no route points
FRoadPoints	YES	string	Collection of all points on the route, in Json format"[{"lat":22.67009126,"lng":113.92249915}, {"lat":22.67014155,"lng":113.9224293}, {"lat":22.67027207,"lng":113.92198938}, {"lat":22.67034136,"lng":113.92202024}, {"lat":22.6708117,"lng":113.92216942}]. **Note: When FRouteType = 0, this field is mandatory. When FRouteType = 1, it can be left blank.**
FDistance	YES	int	Total transportation mileage
FDuration	YES	int	Total transportation duration, in hours
FPassFenceGUIDs	YES	string	Unique identifier of the path barrier, multiple separated by commas in English

Return Example:

When correct, it returns:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": []
}
```

Error returns:

```
// Indicates that the input object is empty. This should be due to an incor
rect data format.
{
```

```
    "Result": 102,
    "Message": "FRoutePlanList is null",
    "FObject": []
}
// Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
//102 indicates that the input parameters do not conform to the rules. Plea
se refer to the Message for details.
{
    "Result": 102,
    "Message": {model.FName}:FStartFence or FEndFence is null,
    "FObject": []
}
```

Remarks:

- More error codes returned are as follows:
- 102: Request parameter error.
- 104: Token expired or error.
- 105: General error.

Request Example:

Java:

```
String result = "";
//Request URL
String url = "https://cloud.assetscontrols.com:3443/OpenApi/Admin";
//Request parameters, in JSON format, it is suggested to pass in an object
String body = "{
    \"FAction\": \"AddRoutePlans\",
    \"FRoutePlanList\": [
        {
            \"FName\": \"000154336\",
            \"FCode\": \"000154336\",
            \"FStartFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FEndFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FPassFenceGUIDs\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FRoadPoints\":\"[{\"lat\":22.67009126,\"lng\":113.92249915},{
\"lat\":22.67014155,\"lng\":113.9224293},{\"lat\":22.67027207,\"lng\":113.9
2198938},{\"lat\":22.67034136,\"lng\":113.92202024},{\"lat\":22.6708117,\"l
```

```
ng\":113.92216942},{\"lat\":22.67093116,\"lng\":113.92221918}]\",
            \"FRouteType\":0,
        }
    ],
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae742\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines to send a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send Request Parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to pass in an obje
ct
string body = "{
    \"FAction\": \"AddRoutePlans\",
    \"FRoutePlanList\": [
```

```
        {
            \"FName\": \"000154336\",
            \"FCode\": \"000154336\",
            \"FStartFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FEndFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FPassFenceGUIDs\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FRoadPoints\":\"[{\"lat\":22.67009126,\"lng\":113.92249915},{
\"lat\":22.67014155,\"lng\":113.9224293},{\"lat\":22.67027207,\"lng\":113.9
2198938},{\"lat\":22.67034136,\"lng\":113.92202024},{\"lat\":22.6708117,\"l
ng\":113.92216942},{\"lat\":22.67093116,\"lng\":113.92221918}]\",
            \"FRouteType\":0,
        }
    ],
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae742\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method POST / GET
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python：

```
url = 'https://cloud.assetscontrols.com:3443/OpenApi/Admin'
      data = {
        'FAction': 'AddRoutePlans',
        'FRoutePlanList': [
            {
            'FName': '000154336',
            'FCode': '000154336',
            'FStartFence':'5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d',
```

```
            'FEndFence':'5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d',
            'FPassFenceGUIDs':'5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d',
            'FRoadPoints':'[{\"lat\":22.67009126,\"lng\":113.92249915},{\"l
at\":22.67014155,\"lng\":113.9224293},{\"lat\":22.67027207,\"lng\":113.9219
8938},{\"lat\":22.67034136,\"lng\":113.92202024},{\"lat\":22.6708117,\"lng\
":113.92216942},{\"lat\":22.67093116,\"lng\":113.92221918}]',
            'FRouteType':0,
         }
         ],
         'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
         'FTimeDifferent': 28800,
         'FLanguage': '1'
        }
       data = parse.urlencode(data).encode('utf-8')
       headers = {
        'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
        'Connection': 'keep-alive'
        }
       req = request.Request(url, headers=headers, data=data)
       page = request.urlopen(req).read()
       page = page.decode('utf-8')
       # json_array = json.loads(page)
       return page;
```

Modify RoutePlan

Brief description:

-Modify Route Plan

Interface version:

Version Number	Developer	Date of Development	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- https://icloud.assetscontrols.com:3443/OpenApi/Admin
- https://cloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter Name	Required	Type	Description
Content-Type	Required	string	Request Type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	YES	string	Token ID
FAction	YES	string	Action (UpdateRoutePlan)
FT_RoutePlan	YES	object	Route Information

Object Description:

Parameter Name	Required	Type	Description

FGUID	YES	string	RouteGUID
FName	YES	string	Route Name
FCode	YES	string	Route Code
FStartFence	YES	string	Start Fence GUID
FEndFence	YES	string	End Fence GUID
FRemark	YES	string	Remark
FRouteType	YES	int	Route Type 0：has route points 1：no route points
FRoadPoints	YES	string	Collection of all points on the route, in Json format"[{"lat":22.67009126,"lng":113.92249915}, {"lat":22.67014155,"lng":113.9224293}, {"lat":22.67027207,"lng":113.92198938}, {"lat":22.67034136,"lng":113.92202024}, {"lat":22.6708117,"lng":113.92216942}]. **Note: When FRouteType = 0, this field is mandatory. When FRouteType = 1, it can be left blank.**
FDistance	YES	int	Total transportation mileage
FDuration	YES	int	Total transportation duration, in hours
FPassFenceGUIDs	YES	string	Unique identifier of the path barrier, multiple separated by commas in English

Return Example:

When correct, it returns:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": []
}
```

Error returns:

```
// Indicates that the input object is empty. This should be due to an incor
```

```
rect data format.
{
    "Result": 102,
    "Message": "FRoutePlanList is null",
    "FObject": []
}
// Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
//102 indicates that the input parameters do not conform to the rules. Plea
se refer to the Message for details.
{
    "Result": 102,
    "Message": {model.FName}:FStartFence or FEndFence is null,
    "FObject": []
}
```

Remarks:

- More error codes returned are as follows:
- 102: Request parameter error.
- 104: Token expired or error.
- 105: General error.

Request Example:

Java:

```
String result = "";
//Request URL
String url = "https://cloud.assetscontrols.com:3443/OpenApi/Admin";
//Request parameters, in JSON format, it is suggested to pass in an object
String body = "{
    \"FAction\": \"UpdateRoutePlan\",
    \"FT_RoutePlan\":
        {
            \"FGUID\": \"09cf2885-b998-4917-bb29-fc9dbbb054c8\",
            \"FName\": \"000154336\",
            \"FCode\": \"000154336\",
            \"FStartFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FEndFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FPassFenceGUIDs\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
```

```
            \"FRoadPoints\":\"[{\"lat\":22.67009126,\"lng\":113.92249915},{
\"lat\":22.67014155,\"lng\":113.9224293},{\"lat\":22.67027207,\"lng\":113.9
2198938},{\"lat\":22.67034136,\"lng\":113.92202024},{\"lat\":22.6708117,\"l
ng\":113.92216942},{\"lat\":22.67093116,\"lng\":113.92221918}]\",
            \"FRouteType\":0,
        }  ,
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae742\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines to send a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send Request Parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to pass in an obje
ct
string body = "{
```

```
    \"FAction\": \"UpdateRoutePlan\",
    \"FT_RoutePlan\":
        {
            \"FGUID\": \"09cf2885-b998-4917-bb29-fc9dbbb054c8\",
            \"FName\": \"000154336\",
            \"FCode\": \"000154336\",
            \"FStartFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FEndFence\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FPassFenceGUIDs\":\"5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d\",
            \"FRoadPoints\":\"[{\"lat\":22.67009126,\"lng\":113.92249915},{
\"lat\":22.67014155,\"lng\":113.9224293},{\"lat\":22.67027207,\"lng\":113.9
2198938},{\"lat\":22.67034136,\"lng\":113.92202024},{\"lat\":22.6708117,\"l
ng\":113.92216942},{\"lat\":22.67093116,\"lng\":113.92221918}]\",
            \"FRouteType\":0,
        }  ,
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae742\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method POST / GET
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'https://cloud.assetscontrols.com:3443/OpenApi/Admin'
      data = {
        'FAction': 'UpdateRoutePlan',
        'FT_RoutePlan':
            {
            'FGUID': '09cf2885-b998-4917-bb29-fc9dbbb054c8',
```

```
            'FName': '000154336',
            'FCode': '000154336',
            'FStartFence':'5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d',
            'FEndFence':'5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d',
            'FPassFenceGUIDs':'5ae45d8e-18bd-4eaa-ae4b-017ab7c3f36d',
            'FRoadPoints':'[{\"lat\":22.67009126,\"lng\":113.92249915},{\"l
at\":22.67014155,\"lng\":113.9224293},{\"lat\":22.67027207,\"lng\":113.9219
8938},{\"lat\":22.67034136,\"lng\":113.92202024},{\"lat\":22.6708117,\"lng\
":113.92216942},{\"lat\":22.67093116,\"lng\":113.92221918}]',
            'FRouteType':0,
         } ,
         'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
         'FTimeDifferent': 28800,
         'FLanguage': '1'
        }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

GeoFences management

Adding fences in bulk

Brief Description:

- Adding fences in bulk

API Version:

Version	Author	Date Created	Date Updated
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request Type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (AddGISFenceBatch)
FAgentGUID	Yes	string	Company unique identifier
FT_GISFenceList	Yes	List<MT_GISFence>	Fence info. list

MT_GISFence Object Description:

Parameter	Required	Type	Description
FName	Yes	string	Fence name
FFenceTypeName	Yes	string	Fence Group name
FNumber	No	string	FenceID
FRemark	No	string	Fence remark
FArea	No	double	Area
FFormType	No	int	Fence type（1：Polygon；2：Round）
FFenceTypeGUID	No	string	Fence group unique identifier
FPath	No	string	Fence latitude and longitude collection
FRadius	No	double	Radius
FCenterLon	No	double	Center point longitude
FCenterLat	No	double	Center point latitude
FAddress	No	string	Address

Response Example:

Successful Response:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": []
}
```

Error Response:

```
//It means that the object passed in is empty, and the data format should b
e incorrect.
{
    "Result": 102,
    "Message": "FT_GISFenceList is null",
    "FObject": []
}
```

```
//Indicates an exception error report
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
//Indicates that the incoming fence name is empty and an error is reported.
{
    "Result": 106,
    "Message": "",
    "FObject": []
}

//Indicates that the incoming fence group name is empty and an error is rep
orted.
{
    "Result": 107,
    "Message": "",
    "FObject": []
}
//Indicates that the incoming fence information is duplicated
{
    "Result": 108,
    "Message": "Duplicate fence name",
    "FObject": []
}
```

Remark:

- More return error codes are as follows:
- 102: Request parameter error
- 104: token expired
- 105: Indicates an exception error.
- 106: Indicates that the incoming fence name is empty
- 107: Indicates that the name of the incoming fence group is empty
- 108: Indicates that the incoming fence information is duplicated

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
```

```
// Request parameters, in JSON format, recommend to use an object to pass i
n
String body = "{
    \"FAction\": \"AddGISFenceBatch\",
    \"FAgentGUID\": \"c4b7730e-f74b-4dee-833b-0128bf5dd7f4\",
    \"FT_GISFenceList\": [
        {
            \"FName\": \"Myfence1\",
            \"FFenceTypeName\": \"Myfencetype1\"
        },
        {
            \"FName\": \"Myfence2\",
            \"FFenceTypeName\": \"Myfencetype2\"
        }
    ],
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set generic properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines when sending a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream buffer
pw.flush();
// Define BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is in JSON format
return result;
```

C# :

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, recommend to use an object to pass i
n
string body = "{
    \"FAction\": \"AddGISFenceBatch\",
    \"FAgentGUID\": \"c4b7730e-f74b-4dee-833b-0128bf5dd7f4\",
    \"FT_GISFenceList\": [
        {
            \"FName\": \"Myfence1\",
            \"FFenceTypeName\": \"Myfencetype1\"
        },
        {
            \"FName\": \"Myfence2\",
            \"FFenceTypeName\": \"Myfencetype2\"
        }
    ],
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is in JSON format
    return reader.ReadToEnd();
}
```

Python :

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
```

```
        'FAction': 'AddGISFenceBatch',
        'FAgentGUID': 'c4b7730e-f74b-4dee-833b-0128bf5dd7f4',
        'FT_GISFenceList': '[
            {
                \"FName\": \"Myfence1\",
                \"FFenceTypeName\": \"Myfencetype1\"
            },
            {
                \"FName\": \"Myfence2\",
                \"FFenceTypeName\": \"Myfencetype2\"
            }
        ]',
        'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
        'FTimeDifferent': 28800,
        'FLanguage': '1'
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Query all fences and fence grouping information

Brief Description:

- Query all fence and fence group information under the company

API Version:

Version	Author	Date Created	Date Updated
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request Type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryGISFenceByFAgentGUID)
FAgentGUID	Yes	string	Company unique identifier

Response Example:

Successful Response:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": [        {
            "FGUID": "ed86c973-07e3-4f0a-afed-00ad8c176db5",
            "FName": "GuanTian subway station",
            "FNumber": "04",
            "FRemark": "test",
            "FArea": 87313.54065700735,
            "FFormType": 1,
            "FFenceTypeGUID": "df0f8ab2-742e-448b-9c5e-088f88e996d5",
            "FPath": "[{\"lat\":22.68714446,\"lng\":113.94369331},{\"lat\":
22.68683927,\"lng\":113.94710827},{\"lat\":22.68504754,\"lng\":113.94646312
},{\"lat\":22.68561273,\"lng\":113.94355122},{\"lat\":22.6858369,\"lng\":11
3.94067669}]",
            "FRadius": 0,
            "FCenterLon": 113.94450032,
            "FCenterLat": 22.68618174,
            "FAddress": "47 meters near 18 XinYongFeng GuanTian Industrial
Zone, North Ring Road, Bao'an District, Shenzhen, Guangdong Province",
            "FCreateTime": "2023-02-23T02:42:04.87",
            "FAgentGUID": "661e7209-c77e-4a54-afb8-6d956f962bdf",
            "FAgentName": "Software Test Department",
            "FFenceTypeName": "Transportation Route"
        }]
}
```


Error Response:


```
// Indicates that the unique identifier of the company passed in is null, w
hich should be due to incorrect data format
{
    "Result": 102,
    "Message": "FAgentGUID is null",
    "FObject": []
}
// Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```


Response Parameter Description:

Parameter Name	Type	Description
FGUID	string	Unique identifier of the fence
FName	string	Name of the fence
FNumber	string	Fence number
FRemark	string	Remarks
FArea	string	Area
FFormType	int	Type (1: polygon; 2: circle)
FFenceTypeGUID	string	Unique identifier of the fence group
FPath	string	Point set
FRadius	int	Radius
FCenterLon	double	Longitude of the center point
FCenterLat	double	Latitude of the center point
FAddress	string	Address
FCreateTime	string	Creation time
FAgentGUID	string	Unique identifier of the company
FAgentName	string	Company name
FFenceTypeName	string	Name of the fence group

Note:

- More error codes are as follows:
- 102: Request parameter error
- 104: Token expired
- 105: Indicates that there is an exception error

Request Example:

Java:

```
String result = "";
```

```
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, recommend to use an object to pass i
n
String body = "{
    \"FAction\": \"QueryGISFenceByFAgentGUID\",
    \"FAgentGUID\": \"661e7209-c77e-4a54-afb8-6d956f962bdf\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set generic properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines when sending a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream buffer
pw.flush();
// Define BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
    result += line;
}
// The returned value is in JSON format
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, recommend to use an object to pass i
n
```

```
string body = "{
    \"FAction\": \"QueryGISFenceByFAgentGUID\",
    \"FAgentGUID\": \"661e7209-c77e-4a54-afb8-6d956f962bdf\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is in JSON format
    return reader.ReadToEnd();
}
```

Python:

```
import urllib.parse as parse
from urllib import request

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryGISFenceByFAgentGUID',
    'FAgentGUID': '661e7209-c77e-4a54-afb8-6d956f962bdf',
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
    'FTimeDifferent': 28800,
    'FLanguage': '1'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
```

```
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# The returned value is in JSON format
return page;
```

Modifying the fence

Brief description:

- Modify Fence

API Version：

Version number	Developer	Develop date	Revision date
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method:

- POST

Request header：

parameter name	Is it necessary	Type	Description
Content-Type	Yes	string	Request Type: application/json

Request parameter:

parameter name	Is it necessary	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (UpdateGISFence)

|FT_GISFence |Yes | FT_GISFence | Fence information |

FT_GISFence Object Description:

parameter name	Is it necessary	Type	Description

FGUID	Yes	string	Fence unique identifier
FAgentGUID	Yes	string	Company unique identifier
FName	Yes	string	Fence name
FNumber	No	string	Fence number
FRemark	No	string	Fence remark
FArea	No	double	Area
FFormType	No	int	Fence type (1: polygon; 2: circular)
FFenceTypeGUID	No	string	Fence group unique identifier
FPath	No	string	Fence longitude and latitude collection
FRadius	No	double	Radius
FCenterLon	No	double	Center point longitude
FCenterLat	No	double	Center point latitude
FAddress	No	string	Address

Return example:

Return when correct:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": []
}
```

Return when error:

```
//FT_GISFence is null, indicating that the passed object is empty, and the
data format should be incorrect
{
    "Result": 102,
    "Message": "FT_GISFence is null",
    "FObject": []
}
```

```
//Indicates an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}

//Indicates that the passed fence does not exist
{
    "Result": 107,
    "Message": "exists",
    "FObject": []
}
```

Note:

- More return error codes are as follows:
- 102: Request parameter error
- 104: Token expired
- 105: Indicates an exception error
- 107: Indicates that the passed fence does not exist

Request example:

Java:

```
String result = "";
// Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in json format, it is recommended to pass in an obje
ct
String body = "{
    \"FAction\": \"UpdateGISFence\",
    \"FT_GISFence\": {
        \"FGUID\": \"BB6999E9-8571-4D64-9C35-5D51C88F1133\",
        \"FName\": \"My Fence 3\",
        \"FNumber\": \"\",
        \"FRemark\": \"\",
        \"FArea\": 0,
        \"FFormType\": 1,
        \"FFenceTypeGUID\": \"\",
        \"FPath\": \"\",
        \"FRadius\": 0,
        \"FCenterLon\": 0,
```

```
        \"FCenterLat\": 0,
        \"FAddress\": \"\",
        \"FAgentGUID\": \"661E7209-C77E-4A54-AFB8-6D956F962BDF\"
    },
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set common properties for requests
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request requires setting the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// Flush output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL using a BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body, JSON format. It is recommended to pass in an object.
string body = "{
    \"FAction\": \"UpdateGISFence\",
    \"FT_GISFence\": {
        \"FGUID\": \"BB6999E9-8571-4D64-9C35-5D51C88F1133\",
```

```
            \"FName\": \"My fence 3\",
            \"FNumber\": \"\",
            \"FRemark\": \"\",
            \"FArea\": 0,
            \"FFormType\": 1,
            \"FFenceTypeGUID\": \"\",
            \"FPath\": \"\",
            \"FRadius\": 0,
            \"FCenterLon\": 0,
            \"FCenterLat\": 0,
            \"FAddress\": \"\",
            \"FAgentGUID\": \"661E7209-C77E-4A54-AFB8-6D956F962BDF\"
        },
        \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
        \"FTimeDifferent\": 28800,
        \"FLanguage\": \"1\"
    }";
    Encoding encoding = Encoding.UTF8;
    HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
    // Request method can be post or get
    request.Method = "post";
    request.Accept = "*/*";
    request.ContentType = "application/json";
    request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
    byte[] buffer = encoding.GetBytes(body);
    request.ContentLength = buffer.Length;
    request.GetRequestStream().Write(buffer, 0, buffer.Length);
    HttpWebResponse response = (HttpWebResponse)request.GetResponse();
    using (StreamReader reader = new StreamReader(response.GetResponseStream(),
     Encoding.UTF8))
    {
        // Return the JSON string
        return reader.ReadToEnd();
    }
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'UpdateGISFence',
    'FT_GISFence': {
        'FGUID': 'BB6999E9-8571-4D64-9C35-5D51C88F1133',
        'FName': 'My fence 3',
        'FNumber': '',
        'FRemark': '',
```

```
            'FArea': 0,
            'FFormType': 1,
            'FFenceTypeGUID': '',
            'FPath': '',
            'FRadius': 0,
            'FCenterLon': 0,
            'FCenterLat': 0,
            'FAddress': '',
            'FAgentGUID': '661E7209-C77E-4A54-AFB8-6D956F962BDF'
        },
        'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
        'FTimeDifferent': 28800,
        'FLanguage': '1'
    }
    data = parse.urlencode(data).encode('utf-8')
    headers = {
        'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
    (KHTML, like Gecko) '
                      r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
        'Connection': 'keep-alive'
    }
    req = request.Request(url, headers=headers, data=data)
    page = request.urlopen(req).read()
    page = page.decode('utf-8')
    # json_array = json.loads(page)
    return page;
```

Deleting fences in bulk

Brief description:

- Batch delete fence.

API Version：

Version	Author	Date	Revised
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method：

- POST

Request Headers：

Parameter Name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter Name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (DeleteGISFences)
FGUIDs	Yes	string	Unique identifier list of fence, multiple fence identifiers, separated by commas (e.g.:"BB6999E9-8571-4D64-9C35-5D51C88F1133,BB6999E9-8571-4D64-9C35-5D51C88F1133")

Response Example:

Successful Response:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": []
}
```

Error Response:

```
//Indicates error in the unique identifier of the fence passed in, probably
 due to wrong data format
{
    "Result": 102,
    "Message": "FGUIDs is  null",
    "FObject": []
}
//Indicates an exception/error occurred
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}

//Indicates the fence passed in has a starting point set for the route
{
    "Result": 125,
    "Message": "Fence Name",
    "FObject": []
}
//Indicates the fence passed in has an ending point set for the route
{
    "Result": 126,
    "Message": "Fence Name",
    "FObject": []
}
//Indicates the fence passed in has waypoints set for the route
{
    "Result": 127,
    "Message": "Fence Name",
    "FObject": []
}
//Indicates a vehicle is bound to the fence passed in
```

```
{
    "Result": 124,
    "Message": "Fence Name",
    "FObject": []
}
```

Note:

- More error codes are as follows:
- 102: Request parameter error
- 104: Token expired
- 105: Indicates an exception/error occurred
- 124: Indicates a vehicle is bound to the fence passed in
- 125: Indicates the fence passed in has a starting point set for the route
- 126: Indicates the fence passed in has an ending point set for the route
- 127: Indicates the fence passed in has waypoints set for the route

Request Example:

Java:

```
String result = "";
//Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format, recommended to use object to pass in
String body = "{
    \"FAction\": \"DeleteGISFences\",
    \"FGUIDs\": \"BB6999E9-8571-4D64-9C35-5D51C88F1133\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set the general request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
```

```
// Send request parameters
pw.print(body);
// Flush the output stream cache
pw.flush();
// Define the BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define the BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The return value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters in JSON format, recommended to use object to pass in
string body = "{
    \"FAction\": \"DeleteGISFences\",
    \"FGUIDs\": \"BB6999E9-8571-4D64-9C35-5D51C88F1133\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a JSON string
    return reader.ReadToEnd();
}
```

Python：

```
import urllib.request as request
from urllib import parse

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data ={
    'FAction':'DeleteGISFences',
    'FGUIDs': 'BB6999E9-8571-4D64-9C35-5D51C88F1133',
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
    'FTimeDifferent': 28800,
    'FLanguage': '1'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read().decode('utf-8')
# The return value is a JSON string
return page
```

Query all fence grouping information under the com

Brief description:

- Query all fence group information under the company

Interface version:

Version	Developer	Date of development	Date of revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method:

- POST

Request header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (QueryGISFenceType)
FAgentGUID	Yes	string	Company unique identifier

Return example:

Returned correctly:

```
{
    "Result": 200,
    "Message":"success",
    "FObject": [                {
            "FGUID": "df0f8ab2-742e-448b-9c5e-088f88e996d5",
            "FIcon": "6",
            "FName": "运输路线",
            "FStrokeColor": "rgba(53, 106, 195, 0.8)",
            "FFillColor": "rgba(53, 106, 195, 0.4)"
        }]
}
```

Returned incorrectly:

```
// Indicates that FAgentGUID is null, which should be a data format error
{
    "Result": 102,
    "Message": "FAgentGUID is null",
    "FObject": []
}
// Indicates that there is an exception error
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```

Response Parameters:

Parameter	Type	Description
FGUID	string	Fence group unique identifier
FIcon	string	Icon
FName	string	Fence group name
FStrokeColor	string	Border color
FFillColor	string	Fill color

Remarks:

- More error codes are as follows:
- 102: Request parameter error
- 104: Token expired
- 105: Indicates an exception error

Request Example:

Java:

```
String result = "";
//Request path
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, in JSON format, it is recommended to use object input
String body = "{
    \"FAction\": \"QueryGISFenceType\",
    \"FAgentGUID\": \"661e7209-c77e-4a54-afb8-6d956f962bdf\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
URL realUrl = new URL(url);
// Set common properties of the request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set these two lines to send a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define the BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define the BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
```

```
// The returned value is a JSON string
return result;
```

C#:

```
//Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
//Request parameters, in JSON format, it is recommended to use object input
string body = "{
    \"FAction\": \"QueryGISFenceType\",
    \"FAgentGUID\": \"661e7209-c77e-4a54-afb8-6d956f962bdf\",
    \"FTokenID\": \"ec51d691-d9a7-4f74-95a8-1856be2ae745\",
    \"FTimeDifferent\": 28800,
    \"FLanguage\": \"1\"
}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
//Request method: post/get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
    'FAction': 'QueryGISFenceType',
    'FAgentGUID': '661e7209-c77e-4a54-afb8-6d956f962bdf',
    'FTokenID': 'ec51d691-d9a7-4f74-95a8-1856be2ae745',
    'FTimeDifferent': 28800,
    'FLanguage': '1'
}
data = parse.urlencode(data).encode('utf-8')
headers = {
```

```
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (
KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
    'Connection': 'keep-alive'
}
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# The returned value is a JSON string.
return page;
```

Bind vehicles to fences

Description：

- Bind vehicles to fences

API Version：

Version	Author	Date of Creation	Date of Revision
1.0.0	lenny	2022-09-22	2020-09-22

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/GISServer
- https://icloud.assetscontrols.com:3443/OpenApi/GISServer

Request Method:

- POST

Request Headers:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (UpdateGISVihicleBindFen
FT_GISVihicleBindFence	Yes	FT_GISVihicleBindFence	Vehicle fence information

FT_GISVihicleBindFence Object Description:

Parameter	Required	Type	Description

FVehicleGUID	Yes	string	Vehicle unique identifier
FFenceGUID	Yes	string	Fence unique identifier.multiple fences are separated by commas.
FInAlarm	No	int	In-fence alarm
FOutAlarm	No	int	Out-of-fence alarm
FStopAlarm	No	int	In-fence timeout-stop alarm
FStopTime	No	int	In-fence stop-time threshold
FOutUnLockAlarm	No	int	Out-of-fence unlock alarm
FUnLockFence	No	int	In-fence unlocking (can only be unlocked in specific fences after being enabled)

Response Example:

When successful:

```
xmlCopy Code{
    "Result": 200,
    "Message":"success",
    "FObject": []
}
```

When error occurs:

```
xmlCopy Code//Indicates that the passed object is empty, which should be du
e to incorrect data format.
{
    "Result": 102,
    "Message": "FT_GISFenceList is null",
    "FObject": []
}
//Indicates that an exception occurred.
{
    "Result": 105,
    "Message": "fail",
    "FObject": []
}
```

Remarks:

- More error codes for return are as follows:
- 102: Request parameter error
- 104: Token expired
- 105: Indicates that an exception occurred.

Request Example:

Java:

```
Copy CodeString result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request body, recommended to use an object to pass parameters in JSON fo
rmat
String body = "{\r\n  \"FAction\": \"UpdateGISVihicleBindFence\",\r\n  \"FT
_GISVihicleBindFence\": {\r\n    \"FVehicleGUID\": \"36f13b9b-62f9-4de2-aa8
2-9c065cb97027\",\r\n    \"FFenceGUID\": \"32f30c76-a7ac-4f68-b384-230e1ac4
71c9,655179b6-0cd4-46d9-a8cc-5f8b793fedd4,46e70dbf-8e6b-431d-84c7-7f1eac1cb
603,6db5a322-b1c9-4fc0-b5eb-c962b0d8d610,fbdb37c1-bc4b-4433-8110-e1eb9bea8f
5e\",\r\n    \"FInAlarm\": 0,\r\n    \"FOutAlarm\": 0,\r\n    \"FStopAlarm\
": 0,\r\n    \"FStopTime\": 0,\r\n    \"FOverspeedAlarm\": 0,\r\n    \"FOve
rspeedValue\": 0,\r\n    \"FOutUnLockAlarm\": 0,\r\n    \"FUnLockFence\": 1
,\r\n    \"FOffline\": 0,\r\n  },\r\n  \"FTokenID\": \"ec51d691-d9a7-4f74-9
5a8-1856be2ae745\",\r\n  \"FTimeDifferent\": 28800,\r\n  \"FLanguage\": \"1
\"\r\n}";
URL realUrl = new URL(url);
// Set common request properties
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines for sending a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// Flush the output stream's buffer
pw.flush();
// Define BufferedReader to read the response from the URL
```

```
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the response from the URL
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The return value is a JSON string
return result;
```

C#:

```
Copy Code// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request body, recommended to use an object to pass parameters in JSON fo
rmat
string body =  "{\r\n  \"FAction\": \"UpdateGISVihicleBindFence\",\r\n  \"F
T_GISVihicleBindFence\": {\r\n    \"FVehicleGUID\": \"36f13b9b-62f9-4de2-aa
82-9c065cb97027\",\r\n    \"FFenceGUID\": \"32f30c76-a7ac-4f68-b384-230e1ac
471c9,655179b6-0cd4-46d9-a8cc-5f8b793fedd4,46e70dbf-8e6b-431d-84c7-7f1eac1c
b603,6db5a322-b1c9-4fc0-b5eb-c962b0d8d610,fbdb37c1-bc4b-4433-8110-e1eb9bea8
f5e\",\r\n    \"FInAlarm\": 0,\r\n    \"FOutAlarm\": 0,\r\n    \"FStopAlarm
\": 0,\r\n    \"FStopTime\": 0,\r\n    \"FOverspeedAlarm\": 0,\r\n    \"FOv
erspeedValue\": 0,\r\n    \"FOutUnLockAlarm\": 0,\r\n    \"FUnLockFence\":
1,\r\n    \"FOffline\": 0,\r\n  },\r\n  \"FTokenID\": \"ec51d691-d9a7-4f74-
95a8-1856be2ae745\",\r\n  \"FTimeDifferent\": 28800,\r\n  \"FLanguage\": \"
1\"\r\n}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
pythonCopy Codeimport urllib.request as request
import urllib.parse as parse

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data =  '{ "FAction": "UpdateGISVihicleBindFence", "FT_GISVihicleBindFence"
: { "FVehicleGUID": "36f13b9b-62f9-4de2-aa82-9c065cb97027", "FFenceGUID": "
32f30c76-a7ac-4f68-b384-230e1ac471c9,655179b6-0cd4-46d9-a8cc-5f8b793fedd4,4
6e70dbf-8e6b-431d-84c7-7f1eac1cb603,6db5a322-b1c9-4fc0-b5eb-c962b0d8d610,fb
db37c1-bc4b-4433-8110-e1eb9bea8f5e", "FInAlarm": 0, "FOutAlarm": 0, "FStopA
larm": 0, "FStopTime": 0, "FOverspeedAlarm": 0, "FOverspeedValue": 0, "FOut
UnLockAlarm": 0, "FUnLockFence": 1, "FOffline": 0, }, "FTokenID": "ec51d691
-d9a7-4f74-95a8-1856be2ae745", "FTimeDifferent": 28800, "FLanguage": "1" }'
data = parse.urlencode(data).encode('utf-8')
headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
 req = request.Request(url, headers=headers, data=data)
 page = request.urlopen(req).read()
 page = page.decode('utf-8')
 # The return value is a JSON string
 return page;
```

Driver Management

Add Driver Information

Summary:

- Add Driver Infomation

API Version:

Version	Developer	Date	Revised
2.0.0	lenny	2026-03-02	-

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (AddAdminDriver)
FT_AdminDriverParam	Yes	Object	{"FDriverName":Driver Name,"FLicenseNumb Number,"FIDNumber":Driver ID Card Number,"FDescription":Description,"FCountr Unique Identifier,"FHeadPortrait":"Avatar Bas Image (Base64)","FDrivingLicenseBack":"Drive

Explanation of FT_AdminDriverParam:

Parameter	Required	Type	Description
FDriverName	Yes	string	Driver Name
FLicenseNumber	Yes	string	Driver's License Number
FDriverPhone	Yes	string	Driver Phone Number
FIDNumber	Yes	string	Driver ID Card Number
FDescription	Yes	string	Description
FCountryResidenc	Yes	string	City
FDistrictRegion	Yes	string	Town
FHeadPortrait	No	string	Avatar Base64 Image
FDrivingLicenseFront	No	string	Driver's License Front Image (Base64)
FDrivingLicenseBack	No	string	Driver's License Back Image (Base64)
FAgentGUID	No	string	Company Unique Identifier. If this field is not passed, it defaults to the company where the current user is located

Response Example:

When it returns correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

When it returns an error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Explanation of response parameters:

Parameter Name	Type	Explanation

Note:

- More returned error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body, JSON format, it's recommended to use an object to pass the
 parameters
String body = "{\"FAction\":\"AddAdminDriver\",\"FTokenID\":\"3acef045-d302
-4032-b40a-d9ee6c1519cd\", \"FT_AdminDriverParam\":{ \"FDriverName\":\"1232
1\",  \"FLicenseNumber\":\"12321333\",        \"FDrivingType\":\"C\", \"FDr
iverPhone\":\"5481166\",  \"FDescription\":\"ddb\",        \"FIDNumber\":\"
323432543543\", \"FCountryResidenc\":\"322\",  \"FDistrictRegion\":\"211\",
        \"FHeadPortrait\":\"\", \"FDrivingLicenseFront\":\"\",  \"FDrivingL
icenseBack\":\"\"}}";
URL realUrl = new URL(url);
// Set common attributes for request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request, must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush the output stream buffer
```

```
pw.flush();
// Define BufferedReader to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read URL response using BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is a JSON string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameter, in JSON format. It is recommended to pass the object
as a parameter.
string body = "{\"FAction\":\"AddAdminDriver\",\"FTokenID\":\"3acef045-d302
-4032-b40a-d9ee6c1519cd\", \"FT_AdminDriverParam\":{ \"FDriverName\":\"1232
1\",  \"FLicenseNumber\":\"12321333\",        \"FDrivingType\":\"C\", \"FDr
iverPhone\":\"5481166\",  \"FDescription\":\"ddb\",        \"FIDNumber\":\"
323432543543\", \"FCountryResidenc\":\"322\",  \"FDistrictRegion\":\"211\",
        \"FHeadPortrait\":\"\", \"FDrivingLicenseFront\":\"\",  \"FDrivingL
icenseBack\":\"\"}}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Set general request properties
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```python
import json
from urllib import parse, request

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
      'FAction': 'AddAdminDriver',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FT_AdminDriverParam': '{
        'FDriverName':'12321',
        'FLicenseNumber':'12321333',
        'FDrivingType':'C',
        'FDriverPhone':'5481166',
        'FDescription':'ddb',
        'FIDNumber':'323432543543',
        'FCountryResidenc':'322',
        'FDistrictRegion':'211',
        'FHeadPortrait':'',
        'FDrivingLicenseFront':'',
        'FDrivingLicenseBack':''
    }'
# Convert data to JSON format
data = json.dumps(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.'
}
req = request.Request(url=url, data=data, headers=headers)
with request.urlopen(req) as response:
    res = response.read().decode('utf-8')
    print(res)
```

Update Driver Infomation

Summary:

- Modifying Driver Infomation

API Version:

Version	Developer	Date	Revised
2.0.0	lenny	2026-03-02	-

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (UpdateAdminDriver)
FT_AdminDriverParam	Yes	Object	{"FGUID":Driver Unique Identifier,"FDriverNa Number,"FDriverPhone":Driver Phone Numb Number,"FDescription":Description,"FCountr Unique Identifier,"FHeadPortrait":"Avatar Bas Image (Base64)","FDrivingLicenseBack":"Drive

Explanation of FT_AdminDriverParam:

Parameter	Required	Type	Description
FDriverName	Yes	string	Driver Name
FLicenseNumber	Yes	string	Driver's License Number
FDriverPhone	Yes	string	Driver Phone Number
FIDNumber	Yes	string	Driver ID Card Number
FDescription	Yes	string	Description
FCountryResidenc	Yes	string	City
FDistrictRegion	Yes	string	Town
FHeadPortrait	No	string	Avatar Base64 Image
FDrivingLicenseFront	No	string	Driver's License Front Image (Base64)
FDrivingLicenseBack	No	string	Driver's License Back Image (Base64)
FAgentGUID	No	string	Company Unique Identifier. If this field is not passed, it defaults to the company where the current user is located

Response Example:

When it returns correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

When it returns an error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Explanation of response parameters:

Parameter Name	Type	Explanation

Note:

- More returned error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request Body, JSON format, it's recommended to use an object to pass the
 parameters
String body = "{\"FAction\":\"UpdateAdminDriver\",\"FTokenID\":\"3acef045-d
302-4032-b40a-d9ee6c1519cd\", \"FT_AdminDriverParam\":{\"FGUID\":\"4d66002d
-5554-4be1-a55f-d6e9e01b6f8b\", \"FDriverName\":\"12321\",  \"FLicenseNumbe
r\":\"12321333\",        \"FDrivingType\":\"C\", \"FDriverPhone\":\"5481166
\",  \"FDescription\":\"ddb\",        \"FIDNumber\":\"323432543543\", \"FCo
untryResidenc\":\"322\",  \"FDistrictRegion\":\"211\",        \"FHeadPortra
it\":\"\", \"FDrivingLicenseFront\":\"\",  \"FDrivingLicenseBack\":\"\"}}";

URL realUrl = new URL(url);
// Set common attributes for request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Send POST request, must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
```

```
// flush the output stream buffer
pw.flush();
// Define BufferedReader to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read URL response using BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The response is a JSON string
return result;
```

C#:

```
// Request path
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameter, in JSON format. It is recommended to pass the object
as a parameter.
string body = "{\"FAction\":\"UpdateAdminDriver\",\"FTokenID\":\"3acef045-d
302-4032-b40a-d9ee6c1519cd\", \"FT_AdminDriverParam\":{\"FGUID\":\"4d66002d
-5554-4be1-a55f-d6e9e01b6f8b\", \"FDriverName\":\"12321\",  \"FLicenseNumbe
r\":\"12321333\",        \"FDrivingType\":\"C\", \"FDriverPhone\":\"5481166
\",  \"FDescription\":\"ddb\",        \"FIDNumber\":\"323432543543\", \"FCo
untryResidenc\":\"322\",  \"FDistrictRegion\":\"211\",        \"FHeadPortra
it\":\"\", \"FDrivingLicenseFront\":\"\",  \"FDrivingLicenseBack\":\"\"}}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
// Set general request properties
request.Method = "POST";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
import json
from urllib import parse, request

url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
      'FAction': 'UpdateAdminDriver',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FT_AdminDriverParam': '{
        'FGUID':'4d66002d-5554-4be1-a55f-d6e9e01b6f8b',
        'FDriverName':'12321',
        'FLicenseNumber':'12321333',
        'FDrivingType':'C',
        'FDriverPhone':'5481166',
        'FDescription':'ddb',
        'FIDNumber':'323432543543',
        'FCountryResidenc':'322',
        'FDistrictRegion':'211',
        'FHeadPortrait':'',
        'FDrivingLicenseFront':'',
        'FDrivingLicenseBack':''
    }'
# Convert data to JSON format
data = json.dumps(data).encode('utf-8')
headers = {
    'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36
(KHTML, like Gecko) '
                  r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.'
}
req = request.Request(url=url, data=data, headers=headers)
with request.urlopen(req) as response:
    res = response.read().decode('utf-8')
    print(res)
```

Delete Driver Infomation

Brief description:

- Delete driver infomation

API Version:

Version number	Designer	Date of design	Date of revision
2.0.0	lenny	2026-03-02	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (DeleteAdminDriver)
FGUIDs	Yes	string	Driver unique identifier, multiple devices separated by English comma

Return Example:

Return correctly:

```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": []
}
```

Return incorrectly:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return Parameter Description:

Parameter name	Type	Explanation

Remarks:

- More return error codes are as follows:
- 104: Token error or expired
- 105: System anomaly
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in.
String body = "{FAction:\"DeleteAdminDriver\",FTokenID:\"3acef045-d302-4032
-b40a-d9ee6c1519cd\",FGUIDs:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752
-2ca7-4c4e-909f-7030cefbb72a\"}";
URL realUrl = new URL(url);
// Set the properties of the general request
URLConnection conn = realUrl.openConnection();
```

```
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Sending a POST request must set the following two lines
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Sending request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Read the URL response using a BufferedReader input stream
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The return value is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in.
string body = "{FAction:\"DeleteAdminDriver\",FTokenID:\"3acef045-d302-4032
-b40a-d9ee6c1519cd\",FGUIDs:\"5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752
-2ca7-4c4e-909f-7030cefbb72a\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method: post/get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
```

```
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
data = {
      'FAction': 'DeleteAdminDriver',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FGUIDs': '5f2d6752-2ca7-4c4e-909f-7030cefbb72a,5f2d6752-2ca7-4c4e-90
9f-7030cefbb72a'
       }
data = parse.urlencode(data).encode('utf-8')
headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                     r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
req = request.Request(url, headers=headers, data=data)
page = request.urlopen(req).read()
page = page.decode('utf-8')
# json_array = json.loads(page)
return page;
```

Query Drvier Infomation List

Brief description:

- Get basic information of the driver

API version:

Version number	Creator	Creation date	Revision date
2.0.0	Lenny	2026-03-02	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request method:

- POST

Request header:

Parameter name	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request parameters:

Parameter name	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method Name (QueryAdminDriverList)
FPageSize	no	Int	Number per page,default 20 ,If you want to check for a larger quantity, the value here can be higher.
FPageIndex	no	Int	Page number,default 1
			Perform fuzzy search on the field. Search by driver's

FKey	No	string	name or driver's mobile phone number.
FAgentGUID	No	string	Company Unique Identifier. If this field is not passed, it defaults to the company where the current user is located

Example Response:

Success:


```
{
    "Result": 200,
    "Message": "check token success",
    "FObject": {
        "Table": [
            {
                "FTotalCount": 3   //Query total count
            }
        ],
        "Table1": [
            {
                "FGUID": "e7eb61fb-3e54-4f65-9748-cd6fde97086a",
                "FDriverName": "suly",
                "FLicenseNumber": "8542111",
                "FDrivingType": "A1",
                "FDriverPhone": "15625215199",
                "FDescription": "2024022823",
                "FAgentGUID": "661e7209-c77e-4a54-afb8-6d956f962bdf",
                "FCreateTime": "2024-02-20T05:51:57.733",
                "FCountryResidenc": "",
                "FDistrictRegion": "",
                "FIDNumber": "415252632122232233",
                "FDrivingLicenseFrontUrl": "http://120.25.245.20:8081/Pictu
re/Driver/2a325bf851584f7bb1365a86acc6a5fc.jpg",
                "FHeadPortraitUrl": "",
                "FDrivingLicenseBackUrl": "",
                "RowNo": 2,
                "FAgentName": "test"
            }
        ]
    }
}
```


Error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Return parameter description:

Parameter Name	Type	Description
FGUID	string	Driver Unique Identifier
FDriverName	string	Driver Name
FLicenseNumber	string	Driver's License Number
FDriverPhone	string	Driver Phone Number
FIDNumber	string	Driver ID Card Number
FDescription	string	Description
FCountryResidenc	string	City
FDistrictRegion	string	Town
FHeadPortrait	string	Avatar Base64 Image
FDrivingLicenseFront	string	Driver's License Front Image (Base64)
FDrivingLicenseBack	string	Driver's License Back Image (Base64)
FAgentGUID	string	Company Unique Identifier. If this field is not passed, it defaults to the company where the current user is located
FAgentName	string	Company name

Note:

- More error codes are as follows:
- 104: Token error or expired
- 105: System exception
- 102: Request parameter error

Request Example:

Java:

```
String result = "";
// Request URL
String url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
pass in
String body = "{\"FAction\":\"QueryAdminDriverList\",\"FAgentGUID\":\"\",\"
FKey\":\"su\",\"FPageIndex\":1,\"FPageSize\":50,\"FTokenID\":\"3acef045-d30
2-4032-b40a-d9ee6c1519cd\"}";
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines for sending POST requests
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// Flush the output stream buffer
pw.flush();
// Define a BufferedReader input stream to read the URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define a BufferedReader input stream to read the URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned result is a JSON string
return result;
```

C#:

```
// Request URL
string url = "http://cloud.assetscontrols.com:8092/OpenApi/Admin";
// Request parameters, in JSON format, it is recommended to use objects to
```

```
pass in
string body = "{\"FAction\":\"QueryAdminDriverList\",\"FAgentGUID\":\"\",\"
FKey\":\"su\",\"FPageIndex\":1,\"FPageSize\":50,\"FTokenID\":\"3acef045-d30
2-4032-b40a-d9ee6c1519cd\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method: post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The returned result is a JSON string
    return reader.ReadToEnd();
}
```

Python:

```
url = 'http://cloud.assetscontrols.com:8092/OpenApi/Admin'
      data = {
      'FAction': 'QueryAdminDriverList',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FKey': 'su',
       'FPageIndex': 1
        'FPageSize': 20
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```

Video Monitoring

Real-time Video Monitoring

Stop Video Monitoring

Real-time Video Monitoring

Description：

- Send a stream-pulling command and return the stream-pulling address.

API Version:

Version	Author	Date	Revision
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method:

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (RealTimeVideoPlay)
FAssetGUID	Yes	string	Unique Device Identifier
FChannel	No	Int	Playback channel; defaults to channel 1 if not specified.
FInterval	No	Int	Stream pulling duration (in seconds; default is 1 minute; supports a range of 0–10 minutes)

Response Example:

Success:


```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": {
        "flv": "http://media.assetscontrols.com:8111/rtp/804250900031/1.liv
e.flv",
        "https_flv": "https://media.assetscontrols.com:7443/rtp/80425090003
1/1.live.flv",
        "ws_flv": "ws://media.assetscontrols.com:8111/rtp/804250900031/1.li
ve.flv",
        "wss_flv": "wss://media.assetscontrols.com:7443/rtp/804250900031/1.
live.flv",
        "rtmp": "rtmp://media.assetscontrols.com:8935/rtp/804250900031/1",
        "rtsp": "rtsp://media.assetscontrols.com:8554/rtp/804250900031/1"
    }
}
```


Error:


```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```


Response Parameter:

Parameter	Type	Description
flv	string	FLV-format HTTP stream URL
https_flv	string	FLV-format Https stream URL
ws_flv	string	FLV-format WebSocket stream URL
wss_flv	string	FLV-format WSS stream URL
rtmp	string	rtmp stream URL

rtsp	string	rtsp stream URL

Remarks:

- Additional error codes are as follows:
- 102: Parameter error
- 105: System exception
- 108: Exception in sending command
- 122: Monitoring server not configured for the device
- 123: Not supported by the device
- 111: Device is offline or in sleep mode

Request Example::

Java:

```
String result = "";
//Request path
String url = "https://cloud.assetscontrols.com:3443/OpenApi/Monitor";
//Request parameters, json format parameters, it is recommended to use obje
cts to pass in
String body = "{FAction:\"RealTimeVideoPlay\",FTokenID:\"3acef045-d302-4032
-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\",FC
hannel:1,FInterval:60}";
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines when sending a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
```

```
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request URL
string url = "https://cloud.assetscontrols.com:3443/OpenApi/Monitor";
// Request parameters, use json format and recommend using an object to pas
s it in
string body = "{FAction:\"RealTimeVideoPlay\",FTokenID:\"3acef045-d302-4032
-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c\",FC
hannel:1,FInterval:60}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a json string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'https://cloud.assetscontrols.com:3443/OpenApi/Monitor'
      data = {
      'FAction': 'RealTimeVideoPlay',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd',
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c',
      'FChannel':1,
      'FInterval':60
       }
      data = parse.urlencode(data).encode('utf-8')
```

```
        headers = {
         'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
 36 (KHTML, like Gecko) '
                       r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
         'Connection': 'keep-alive'
         }
        req = request.Request(url, headers=headers, data=data)
        page = request.urlopen(req).read()
        page = page.decode('utf-8')
        # json_array = json.loads(page)
        return page;
```

Stop Video Monitoring

Description：

- Send command to stop stream pulling

API Version:

Version	Author	Date	Revision
2.0.0	lenny	2023-04-07	

Request URL:

- http://icloud.assetscontrols.com:8092/OpenApi/Admin
- https://icloud.assetscontrols.com:3443/OpenApi/Admin

Request Method：

- POST

Request Header:

Parameter	Required	Type	Description
Content-Type	Yes	string	Request type: application/json

Request Parameters:

Parameter	Required	Type	Description
FTokenID	Yes	string	Token ID
FAction	Yes	string	Method name (RealTimeVideoPlayControl)
FAssetGUID	Yes	string	Unique Device Identifier
FChannel	No	Int	Playback channel; defaults to channel 1 if not specified.

Response Example:

Success:

```
{
    "Result": 200,
    "Message": "ins send ok",
    "FObject": []
}
```

Error:

```
{
    "Result": 102,
    "Message": "Action is error",
    "FObject": []
}
```

Response Parameter:

Parameter	Type	Description

Remarks:

- Additional error codes are as follows:
- 102: Parameter error
- 105: System exception
- 108: Exception in sending command
- 122: Monitoring server not configured for the device
- 123: Not supported by the device
- 111: Device is offline or in sleep mode

Request Example:

Java:

```
String result = "";
//Request path
String url = "https://cloud.assetscontrols.com:3443/OpenApi/Monitor";
//Request parameters, json format parameters, it is recommended to use obje
cts to pass in
String body = "{FAction:\"RealTimeVideoPlayControl\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a
3c\",FChannel:1}";
```

```
URL realUrl = new URL(url);
// Set the properties of the common request
URLConnection conn = realUrl.openConnection();
conn.setRequestProperty("accept", "*/*");
conn.setRequestProperty("connection", "keep-Alive");
conn.setRequestProperty("Content-Type", "application/json");
conn.setRequestProperty("user-agent", "Mozilla/4.0 (compatible; MSIE 6.0; W
indows NT 5.1;SV1)");
conn.setRequestProperty("method", "post");
// Must set the following two lines when sending a POST request
conn.setDoOutput(true);
conn.setDoInput(true);
PrintWriter pw = new PrintWriter(conn.getOutputStream());
// Send request parameters
pw.print(body);
// flush output stream buffer
pw.flush();
// Define BufferedReader input stream to read URL response
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.ge
tInputStream()));
// Define BufferedReader input stream to read URL response
String line;
while ((line = bufReader.readLine()) != null) {
     result += line;
 }
// The returned value is a JSON string
return result;
```

C# :

```
// Request URL
string url = "https://cloud.assetscontrols.com:3443/OpenApi/Monitor";
// Request parameters, use json format and recommend using an object to pas
s it in
string body = "{FAction:\"RealTimeVideoPlayControl\",FTokenID:\"3acef045-d3
02-4032-b40a-d9ee6c1519cd\",FAssetGUID:\"7f6b94c8-abda-48aa-9eec-9e2d8c5f6a
3c\",FChannel:1}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
 // Request method post / get
request.Method = "post";
request.Accept = "*/*";
request.ContentType = "application/json";
request.UserAgent = "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)";
byte[] buffer = encoding.GetBytes(body);
```

```
request.ContentLength = buffer.Length;
request.GetRequestStream().Write(buffer, 0, buffer.Length);
HttpWebResponse response = (HttpWebResponse)request.GetResponse();
using (StreamReader reader = new StreamReader(response.GetResponseStream(),
 Encoding.UTF8))
{
    // The return value is a json string
    return reader.ReadToEnd();
}
```

Python :

```
url = 'https://cloud.assetscontrols.com:3443/OpenApi/Monitor'
      data = {
      'FAction': 'RealTimeVideoPlayControl',
      'FTokenID': '3acef045-d302-4032-b40a-d9ee6c1519cd' ,
      'FAssetGUID':'7f6b94c8-abda-48aa-9eec-9e2d8c5f6a3c' ,
      'FChannel':1
       }
      data = parse.urlencode(data).encode('utf-8')
      headers = {
       'User-Agent': r'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.
36 (KHTML, like Gecko) '
                    r'Chrome/45.0.2454.85 Safari/537.36 115Browser/6.0.3',
       'Connection': 'keep-alive'
       }
      req = request.Request(url, headers=headers, data=data)
      page = request.urlopen(req).read()
      page = page.decode('utf-8')
      # json_array = json.loads(page)
      return page;
```