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# Ascent API

# Login

## Description :

- User authentication interface, get system Token

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2022-02-21       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/OpenApi/login>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                   |
|----------------|--------------|--------|--------------------------------|
| Content-Type   | Yes          | string | Request Type: application/json |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions       |
|----------------|--------------|--------|--------------------|
| FUserName      | Yes          | string | User Name          |
| FPassword      | Yes          | string | Password (MD5(32)) |

## Return Example:

### Return when correct:

```
{  
  "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"
    }]
  }
}

```

### Return on error:

```

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

```

Error message explanation: The passed parameter **object** is empty.

```

{
  "Result": 102,
  "Message": "parameters are error",
  "FObject": null
}

```

Error message explanation: The passed parameter **object** is empty.

```

{
  "Result": 106,
  "Message": "expiration time",
  "FObject": null
}

```

### Return Parameter Description:

| Parameter Name | Type     | Instructions                                                                  |
|----------------|----------|-------------------------------------------------------------------------------|
| FUserName      | String   | User Name                                                                     |
| FUserGUID      | String   | UserGUID                                                                      |
| FTokenID       | String   | TokenID（All subsequent request interfaces need to use this as authentication） |
| FExpireTime    | DateTime | Account expiration time (UTC time, it takes +8 hours to                       |

|             |          |                          |
|-------------|----------|--------------------------|
| FExpireTime | DateTime | convert to Beijing time) |
|-------------|----------|--------------------------|

## Request Example:

### Java:

```
String result = "";
//request url
String url = "http://cloud.assetscontrols.com:8092/OpenApi/login";
//request paramter,jsonString
String body = "{UserName:\"admin\",FPassword:\"E10ADC3949BA59ABBE56E057F20F883E\"}";
URL realUrl = new URL(url);
// Add configuration information
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; Windows 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);
// flush the buffering of the output stream
pw.flush();
BufferedReader bufReader = new BufferedReader(new InputStreamReader(conn.getInputStream()));
String line;
while ((line = bufReader.readLine()) != null) {
    result += line;
}
return result;
```

### C#(.NET):

```
//request url
string url = "http://cloud.assetscontrols.com:8092/OpenApi/login";
//request paramter,jsonString
string body = "{UserName:\"admin\",FPassword:\"E10ADC3949BA59ABBE56E057F20F883E\"}";
Encoding encoding = Encoding.UTF8;
```

```

HttpRequest request = (HttpRequest)WebRequest.Create(url);
//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))
{
    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;

```

# SaveBookingInformation

## Description :

- Save / Store Booking Information

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/SaveBookingInformation>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                   |
|----------------|--------------|--------|--------------------------------|
| Content-Type   | Yes          | string | Request Type: application/json |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions             |
|----------------|--------------|--------|--------------------------|
| Origin         | Yes          | string | the route of origin      |
| Destination    | Yes          | string | the route of destination |
| ContainerNo    | Yes          | string | container No.            |
| Type           | Yes          | Int    | 1:A 2:S                  |
| FTokenID       | Yes          | string | Token                    |
| RouteCode      | Yes          | string | the route of code        |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
  "Message": "success",
  "FObject": [
    {
      "TripID": "BOC-A-12312021-0001"
    }
  ]
}
```

### Return on error:

Error message explanation: The passed parameter object is empty.

```
{
  "Result": 105,
  "Message": "Fail:param is null",
  "FObject": null
}
```

Error message description: Failed to create/modify waybill

```
{
  "Result": 105,
  "Message": "Fail:no return data",
  "FObject": null
}
```

Error message explanation: No route with this name exists in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this route",
  "FObject": null
}
```

Error message explanation: Other undefined errors, need to contact Jointech.

```
{
  "Result": 105,
  "Message": "Fail:other error",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed

```

    out.
{
    "Result": 105,
    "Message": "Fail:token error or timeout",
    "FObject": null
}

```

## Return Parameter Description:

| Parameter Name | Type   | Instructions |
|----------------|--------|--------------|
| TripID         | String | Trip ID      |

## Request Example:

```

String result = "";
//request url
String url = "http://icloud.assetscontrols.com::8092/api/AscentPH/SaveBookin
gInformation";
//request paramter,jsonString
String jsonParam = "{Origin:"abc",Destination:"bcd",ContainerNo:"0169",Type:
1,Type:''}";
// httpPost request
HttpPost httpPost = new HttpPost(url);
// Add configuration information
httpPost.setConfig(config);
httpPost.setHeader("Content-Type", "application/json");
if(jsonParam.length()>0){
    httpPost.setEntity(new StringEntity(jsonParam,                ContentType.c
reate("application/json", "utf-8")));
    HttpResponse response = httpClient.execute(httpPost);
    if (response != null && response.getStatusLine().getStatusCode() == 200) {
        result = EntityUtils.toString(response.getEntity());
    }
}
return result;

```

## C# :

```

///request url
string url = "http://icloud.assetscontrols.com::8092/api/AscentPH/SaveBooki
ngInformation";
//request paramter ,jsonString

```

```

string body = "{Origin:\"abc\",Destination:\"bcd\",ContainerNo:\"0169\",FTokenID:
'DB7F20D9-84C3-44C3-B05A-06A9C392A189'}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
//request type 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))
{
    //return jsonString
    return reader.ReadToEnd();
}

```

## Python :

```

url = 'http://icloud.assetscontrols.com::8092/api/AscentPH/SaveBookingInfor
mation'
data = {
    'Origin': 'abc' ,
    'Destination': 'bcd' ,
    'ContainerNo': '0186' ,
    'Type': 1 ,
    'FTokenID': 'DB7F20D9-84C3-44C3-B05A-06A9C392A189'
}
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;

```

## Node.js:



# UpdateBookingInformation

## Description :

- Update / Store Booking Information

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2025-07-28       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/UpdateBookingInformation>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                   |
|----------------|--------------|--------|--------------------------------|
| Content-Type   | Yes          | string | Request Type: application/json |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions             |
|----------------|--------------|--------|--------------------------|
| TripID         | Yes          | string | trip id                  |
| Origin         | Yes          | string | the route of origin      |
| Destination    | Yes          | string | the route of destination |
| ContainerNo    | Yes          | string | container No.            |
| Type           | Yes          | Int    | 1:A 2:S                  |
| FTokenID       | Yes          | string | Token                    |
|                |              |        |                          |

|             |     |        |                          |
|-------------|-----|--------|--------------------------|
| Destination | Yes | string | the route of destination |
| FTokenID    | Yes | string | Token                    |
| RouteCode   | Yes | string | the route of code        |

## Return Example:

### Return when correct:

```

**Note: When the value of Type changes, the returned TripID will also change**
{
  "Result": 200,
  "Message": "success",
  "FObject": [
    {
      "TripID": "BOC-S-07292025-0001"
    }
  ]
}

```

### Return on error:

```

Error message explanation: The passed parameter object is empty.
{
  "Result": 105,
  "Message": "Fail:param is null",
  "FObject": null
}

Error message description: Failed to create/modify waybill
{
  "Result": 105,
  "Message": "Fail:no return data",
  "FObject": null
}

{
  "Result": 105,
  "Message": "Fail:The send dispatch request operation has been executed. Modification is prohibited. ",
  "FObject": null
}

```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this trip ID",
  "FObject": null
}
```

Error message explanation: No route with this name exists in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this route",
  "FObject": null
}
```

Error message explanation: Other undefined errors, need to contact Jointech.

```
{
  "Result": 105,
  "Message": "Fail:other error",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type   | Instructions |
|----------------|--------|--------------|
| TripID         | String | Trip ID      |

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com::8092/api/AscentPH/UpdateBookingInformation";
//request paramter,jsonString
```

```

String jsonParam = "{TripID:\"BOC-A-12312021-0002bc\",Origin:\"abc\",Destination
:\"bcd\",ContainerNo:\"0169\",Type:1,FTokenID:'DB7F20D9-84C3-44C3-B05A-06A9C392
A111'}";
// httpPost request
HttpPost httpPost = new HttpPost(url);
// Add configuration information
httpPost.setConfig(config);
httpPost.setHeader("Content-Type", "application/json");
if(jsonParam.length()>0){
    httpPost.setEntity(new StringEntity(jsonParam, ContentType.c
reate("application/json", "utf-8")));
    HttpResponse response = httpClient.execute(httpPost);
    if (response != null && response.getStatusLine().getStatusCode() == 200) {
        result = EntityUtils.toString(response.getEntity());
    }
}
return result;

```

**C# :**

```

///request url
string url = "http://icloud.assetscontrols.com::8092/api/AscentPH/UpdateBoo
kingInformation";
//request paramter ,jsonString
string body = "{Origin:\"abc\",Destination:\"bcd\",ContainerNo:\"0169\",FTokenID:
\"DB7F20D9-84C3-44C3-B05A-06A9C392A111\",TripID:\"BOC-A-12312021-0002bc\"}";
Encoding encoding = Encoding.UTF8;
HttpWebRequest request = (HttpWebRequest)WebRequest.Create(url);
//request type 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))
{
    //return jsonString
    return reader.ReadToEnd();
}

```

**Python :**

```

url = 'http://icloud.assetscontrols.com::8092/api/AscentPH/UpdateBookingInf
ormation'
data = {
  'TripID': 'BOC-A-12312021-0002bc' ,
  'Origin': 'abc' ,
  'Destination': 'bcd' ,
  'ContainerNo': '0186' ,
  'Type': 1 ,
  'FTokenID': 'DB7F20D9-84C3-44C3-B05A-06A9C392A111'
}
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;

```

### Node.js:

# AssignGPSToContainer

## Description :

- Assin / Bind GPS Lock to Container / Trip Infomation

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com::8092/api/AscentPH/AssignGPSToContainer>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| tripId         | Yes          | string | Trip ID      |
| gpsLockNo      | Yes          | string | asset id     |
| fTokenID       | Yes          | string | Token        |

## Return Example:

Return when correct:

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

**Return on error:**

Error message explanation: The passed parameter tripId or gpsLockNo is empty.

```
{
  "Result": 105,
  "Message": "Fail:tripId or gpsLockNo is null",
  "FObject": null
}
```

Error message explanation: The passed gpsLockNo(deviceID) cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this gps lock No.",
  "FObject": null
}
```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this trip ID",
  "FObject": null
}
```

Error message explanation: This waybill has already been successfully dispatched. Repeated calls to this interface are not allowed.

```
{
  "Result": 105,
  "Message": "Fail:repeat binding",
  "FObject": null
}
```

Error message explanation: Other undefined errors, need to contact Jointech.

```
{
  "Result": 105,
  "Message": "Fail:other error",
  "FObject": null
}
```

```
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com::8092/api/AscentPH/AssignGPSToContainer?tripId=BOC-A-12312021-0002&gpsLockNo=794011000931&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# RemoveGPSToContainer

## Description :

- Remove / UnBind GPS Lock to Container / Trip

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2022-06-10       |               |

## Request URL:

- <http://icloud.assetscontrols.com::8092/api/AscentPH/RemoveGPSToContainer>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| tripId         | Yes          | string | Trip ID      |
| fTokenID       | Yes          | string | Token        |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
```

```

    "Message": "success",
    "FObject": null
}

```

### Return on error:

Error message: This waybill **is not** bound to a device number **and is** prohibited **from** being dispatched.

```

{
    "Result": 105,
    "Message": "Fail:no device is bound to this trip ID",
    "FObject": null
}

```

Error message explanation: The passed tripId cannot be found **in** the database.

```

{
    "Result": 105,
    "Message": "Fail:without this trip ID",
    "FObject": null
}

```

Error message explanation: This waybill has been executed. Modification **is** prohibited.

```

{
    "Result": 105,
    "Message": "Fail:The send dispatch request operation has been executed. Modification is prohibited. ",
    "FObject": null
}

```

Error message explanation: Other **undefined** errors,need to contact Jointech.

```

{
    "Result": 105,
    "Message": "Fail:other",
    "FObject": null
}

```

Error message description: Incorrect token ID, **or** database connection timed out.

```

{
    "Result": 105,
    "Message": "Fail:token error or timeout",
    "FObject": null
}

```

Error message: This waybill **is not** bound to a device number **and is** prohibited from being dispatched.

```
{
  "Result": 105,
  "Message": "Fail:no device is bound to this trip ID",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com::8092/api/AscentPH/RemoveGPSToContainer?tripId=BOC-A-12312021-0002&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# SendDispatchRequest

## Description :

- Sends dispatch request using trip id

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/SendDispatchRequest>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| tripId         | Yes          | string | Trip ID      |
| fTokenID       | Yes          | string | Token        |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
```

```

    "Message": "success",
    "FObject": null
}

```

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```

{
    "Result": 105,
    "Message": "Fail:tripId is null",
    "FObject": null
}

```

Error message explanation: The passed tripId cannot be found in the database.

```

{
    "Result": 105,
    "Message": "Fail:without this trip ID",
    "FObject": null
}

```

Error message explanation: This waybill has already been successfully dispatched. Repeated calls to this interface are not allowed.

```

{
    "Result": 105,
    "Message": "Fail:repeat the send dispatch",
    "FObject": null
}

```

Error message explanation: Other undefined errors, need to contact Jointech.

```

{
    "Result": 105,
    "Message": "Fail:other error",
    "FObject": null
}

```

Error message description: Incorrect token ID, or database connection timed out.

```

{
    "Result": 105,
    "Message": "Fail:token error or timeout",
    "FObject": null
}

```

Error message: This waybill is not bound to a device number and is prohibit

ed from being dispatched.

```
{
  "Result": 105,
  "Message": "Fail:no device is bound to this trip ID",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url ="http://icloud.assetscontrols.com:8092/api/AscentPH/SendDispatchRequest?tripId=BOC-A-12312021-0002&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# GetTxnRouteHistory

## Description :

- request for alert notification and gps history of trip based on trip id

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/GetTxnRouteHistory>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions                                                                         |
|----------------|--------------|--------|--------------------------------------------------------------------------------------|
| tripId         | Yes          | string | Trip ID                                                                              |
| fTokenID       | Yes          | string | Token                                                                                |
| startTime      | Yes          | string | Start Time (Time is allowed to be empty, if not, it must be a string in time format) |
| endTime        | Yes          | string | End Time (Time is allowed to be empty, if not, it must be a string in time format)   |

## Return Example:

Return when correct:

```
{
  "Result": 200,
  "Message": "success",
  "FObject": {
    "ContainerNo": "1314",
    "AssetID": "207010199999",
    "TripID": "BOC-A-12242021-0001",
    "TrackInfoList": [
      {
        "Battery": 1,
        "Latitude": 22.5805062743706,
        "Longitude": 113.918000624462,
        "LocationType": 3,
        "LockStatus": 0,
        "GPSTime": "2021-12-20T06:08:36",
        "RecvTime": "2021-12-22T08:16:37",
        "Speed": 0,
        "Mileage": 0,
        "GPSSignal": 0,
        "GSMSignal": 99
      },
      {
        "Battery": 1,
        "Latitude": 22.5805062743706,
        "Longitude": 113.918000624462,
        "LocationType": 3,
        "LockStatus": 0,
        "GPSTime": "2021-12-20T08:40:02",
        "RecvTime": "2021-12-22T07:46:16",
        "Speed": 0,
        "Mileage": 0,
        "GPSSignal": 0,
        "GSMSignal": 99
      },
      {
        "Battery": 1,
        "Latitude": 22.5805062743706,
        "Longitude": 113.918000624462,
        "LocationType": 3,
        "LockStatus": 0,
        "GPSTime": "2021-12-20T18:08:36",
        "RecvTime": "2021-12-22T08:16:45",
```

```

    "Speed": 0,
    "Mileage": 0,
    "GPSSignal": 0,
    "GSMSignal": 99
  },
  {
    "Battery": 1,
    "Latitude": 22.5805062743706,
    "Longitude": 113.918000624462,
    "LocationType": 3,
    "LockStatus": 0,
    "GPSTime": "2021-12-20T20:40:05",
    "RecvTime": "2021-12-22T07:46:16",
    "Speed": 0,
    "Mileage": 0,
    "GPSSignal": 0,
    "GSMSignal": 99
  },
  {
    "Battery": 1,
    "Latitude": 22.5805062743706,
    "Longitude": 113.918000624462,
    "LocationType": 3,
    "LockStatus": 0,
    "GPSTime": "2021-12-21T06:08:39",
    "RecvTime": "2021-12-22T08:16:47",
    "Speed": 0,
    "Mileage": 0,
    "GPSSignal": 0,
    "GSMSignal": 99
  },
  {
    "Battery": 1,
    "Latitude": 22.5805062743706,
    "Longitude": 113.918000624462,
    "LocationType": 3,
    "LockStatus": 0,
    "GPSTime": "2021-12-21T08:40:07",
    "RecvTime": "2021-12-22T07:46:24",
    "Speed": 0,
    "Mileage": 0,
    "GPSSignal": 0,
    "GSMSignal": 99
  },
  {
    "Battery": 1,

```

```

        "Latitude": 22.5805062743706,
        "Longitude": 113.918000624462,
        "LocationType": 3,
        "LockStatus": 1,
        "GPSTime": "2021-12-21T09:11:01",
        "RecvTime": "2021-12-22T07:46:36",
        "Speed": 0,
        "Mileage": 0,
        "GPSSignal": 0,
        "GSMSignal": 99
    }
],
"AlarmInfoList": [
    {
        "DataType": 40,
        "DateTime": "2021-12-21T09:11:01",
        "Longitude": 0.0,
        "Latitude": 0.0,
        "Speed": 0,
        "Mileage": 0
    }
]
}
}

```

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```

{
    "Result": 105,
    "Message": "Fail:tripId is null",
    "FObject": null
}

```

Error message explanation: The passed tripId cannot be found in the database.

```

{
    "Result": 105,
    "Message": "Fail:without this trip ID",
    "FObject": null
}

```

Error message description: Incorrect token ID, or database connection timed out.

```

{

```

```

    "Result": 105,
    "Message": "Fail:token error or timeout",
    "FObject": null
}

```

## Return Parameter Description:

### TrackInfoList

| Parameter Name | Type     | Instructions                                              |
|----------------|----------|-----------------------------------------------------------|
| Battery        | Int      | Battery                                                   |
| Latitude       | Float    | Latitude                                                  |
| Longitude      | Float    | Longitude                                                 |
| LocationType   | Int      | LocationType 1:Satellite 2:LBS 3:Cell 4:Phone 0:Unlocated |
| LockStatus     | Int      | LockStatus (1: open; 0: close)                            |
| GPSTime        | DateTime | Satellite Time(UTC)                                       |
| RecvTime       | DateTime | Receive Time(UTC)                                         |
| Speed          | Int      | Speed                                                     |
| Mileage        | Int      | Mileage                                                   |
| GPSSignal      | Int      | GPS Signal                                                |
| GSMSignal      | Int      | GSM Signal                                                |
| Direction      | Int      | Direction 1: N 2:NE 3:E 4:SE 5:S 6:SW 7:W 8:NW Other:N    |
| Address        | String   | Address                                                   |

### AlarmInfoList

| Parameter Name | Type     | Instructions       |
|----------------|----------|--------------------|
| Latitude       | Float    | Latitude           |
| Longitude      | Float    | Longitude          |
| DateTime       | DateTime | DateTime Time(UTC) |

|          |        |            |
|----------|--------|------------|
| Speed    | Int    | Speed      |
| Mileage  | Int    | Mileage    |
| DataType | Int    | Alarm Type |
| Address  | String | Address    |

## Alarm Type :

| Alarm Type | Alarm Type Name                 |
|------------|---------------------------------|
| 1          | Speeding Alarm                  |
| 2          | Fatigue driving                 |
| 3          | Danger warningv                 |
| 9          | Terminal LCD or display failure |
| 10         | TTS module failure              |
| 11         | Camera fault                    |
| 12         | IC card module failure          |
| 15         | Power failure                   |
| 19         | Overtime parking                |
| 23         | Route deviation alarm           |
| 24         | Vehicle VSS failure             |
| 26         | Vehicle theft                   |
| 27         | Illegal vehicle ignition        |
| 28         | Illegal vehicle displacement    |
| 29         | Collision warning               |
| 30         | Rollover warning                |
| 31         | Illegal door opening alarm      |
|            |                                 |

|    |                                                 |
|----|-------------------------------------------------|
| 32 | Video signal loss alarm                         |
| 33 | Video signal blocking alarm                     |
| 34 | Storage unit failure alarm                      |
| 35 | Other video equipment fault alarm               |
| 36 | Passenger train overload alarm                  |
| 37 | Abnormal driving behavior alarm                 |
| 38 | Video recording reaches storage threshold alarm |
| 40 | Lock 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                                |
| 50 | Enable backup battery                           |
| 51 | SOS                                             |
| 52 | Towing alarm                                    |
| 54 | Fuel level change alarm                         |
| 55 | Enter hot spot alarm                            |
| 56 | Exit hot spot alarm                             |
| 57 | Access road alarm                               |
|    |                                                 |

|     |                                              |
|-----|----------------------------------------------|
| 58  | Exit road alarm                              |
| 63  | Temperature and humidity alarm               |
| 160 | Safety belt alarm                            |
| 161 | Emergency brake alarm                        |
| 162 | Neutral skating                              |
| 163 | GPRS reconnection                            |
| 164 | Dispatching panel connection                 |
| 165 | Dispatch panel disconnected                  |
| 166 | CANbus disconnection alarm                   |
| 167 | CANbus fault code upload alarm               |
| 168 | Limit start-up alarm                         |
| 180 | Host dismantling                             |
| 190 | Damage of upper cover                        |
| 191 | GPS antenna interference                     |
| 192 | Low power sleep 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                     |
| 316 | Light alarm                                  |
| 400 | Idling alarm                                 |
| 402 | Fence stop alarm                             |
|     |                                              |

|     |                         |
|-----|-------------------------|
| 403 | Out fence unlock        |
| 404 | Departure delay warning |
| 405 | Departure delay alarm   |
| 406 | Late warning            |
| 407 | Late alarm              |

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/GetTxnRouteHistory?tripId=BOC-A-12312021-0002&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# GetCurrentDeviceInfo

## Description :

- Get current battery status,date and time,latitude and longitude

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/GetCurrentDeviceInfo>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| gpsLockNo      | Yes          | string | asset ID     |
| fTokenID       | Yes          | string | Token        |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
```

```

    "Message": null,
    "FObject": {
      "GPSLockNo": "207010199999",
      "Battery": 57,
      "Latitude": 22.580979,
      "Longitude": 113.916719,
      "LocationType": 1,
      "LockStatus": 1,
      "GPSTime": "2021-08-23T02:09:39",
      "RecvTime": "2021-08-23T02:10:01.4764541Z",
      "Speed": 0,
      "Direction": 0,
      "Address": "创业二路, Bao'an District, Shenzhen City, Guangdong, 518
100, PRC"
    }
  }
}

```

#### Return on error:

```

{
  "Result": 105,
  "Message": "Fail:tripId is null",
  "FObject": null
}

```

Error message explanation: The passed tripId cannot be found in the database.

```

{
  "Result": 105,
  "Message": "Fail:without this trip ID",
  "FObject": null
}

```

Error message description: Incorrect token ID, or database connection timed out.

```

{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}

```

## Return Parameter Description:

### TrackInfoList

| Parameter Name | Type     | Instructions                                              |
|----------------|----------|-----------------------------------------------------------|
| GPSLockNo      | String   | Asset ID                                                  |
| Battery        | Int      | Battery                                                   |
| Latitude       | Float    | Latitude                                                  |
| Longitude      | Float    | Longitude                                                 |
| LocationType   | Int      | LocationType 1:Satellite 2:LBS 3:Cell 4:Phone 0:Unlocated |
| LockStatus     | Int      | LockStatus (1: open; 0: close)                            |
| GPSTime        | DateTime | Satellite Time(UTC)                                       |
| RecvTime       | DateTime | Receive Time(UTC)                                         |
| Speed          | Int      | Speed                                                     |
| Direction      | Int      | Direction 1: N 2:NE 3:E 4:SE 5:S 6:SW 7:W 8:NW Other:N    |
| Address        | String   | Address                                                   |

## Request Example:

```

String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/GetCurrentDeviceInfo?gpsLockNo=207010199999&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;

```



# GetRouteList

## Description :

- List of fences and routes created for origin to destinations

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/GetRouteList>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| fTokenID       | Yes          | string | Token        |

## Return Example:

### Return when correct:

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

```

"Table": [
  {
    "FFenceGUID": "db0bad4e-cc48-4841-9df2-9f7336863807",
    "FFenceName": "88",
    "FPath": "[{\"lat\":23.9271048366717,\"lng\":114.05607095556945},{\"lat\":22.722045882869455,\"lng\":113.38133668694186},{\"lat\":22.696250588153077,\"lng\":113.44635714507058},{\"lat\":22.619667945473353,\"lng\":113.57056862439482}]",
    "FRadius": 0.0,
    "FCenterLon": 113.61256581063105,
    "FCenterLat": 22.991476484485613,
    "FFenceTypeName": null
  },
  {
    "FFenceGUID": "6c7022e9-a613-44b7-9d12-bb43f3786c53",
    "FFenceName": "侧石",
    "FPath": "[{\"lat\":22.773718634735911,\"lng\":113.96213628008041},{\"lat\":22.745890645897884,\"lng\":113.94292645318862},{\"lat\":22.744702746065332,\"lng\":113.9970798775344},{\"lat\":22.747757345457504,\"lng\":114.00970347799708}]",
    "FRadius": 0.0,
    "FCenterLon": 113.97796226156125,
    "FCenterLat": 22.753019561384196,
    "FFenceTypeName": null
  },
  {
    "FFenceGUID": "4377a8a1-210f-4309-a96a-f6184bd3470c",
    "FFenceName": "ANDEY",
    "FPath": "[{\"lat\":22.581380168222417,\"lng\":113.91681428270935},{\"lat\":22.581121549462281,\"lng\":113.91824146082685},{\"lat\":22.579749098358036,\"lng\":113.91753578298305}]",
    "FRadius": 0.0,
    "FCenterLon": 113.91753050930542,
    "FCenterLat": 22.580750273064634,
    "FFenceTypeName": "公司"
  }
],
"Table1": [
  {
    "FRouteGUID": "fa98eec9-7364-4304-9459-085c4f59956f",
    "FNameCode": "5555",
    "FRouteCode": "20201117094004",
    "FStartFenceName": "留仙",
    "FEndFenceName": "留仙公园",
    "FRoadPoints": "[{\"lat\":22.577597388105065,\"lng\":113.92186605243623},{\"lat\":22.577747682418476,\"lng\":113.92199557518418},{\"la

```

```
t\":22.577987637502936,\"lng\":113.92209510953124},{\"lat\":22.579316677954
93,\"lng\":113.92263461907531},{\"lat\":22.57961577269332,\"lng\":113.92275
507470549},{\"lat\":22.579925844242666,\"lng\":113.9228745300557},{\"lat\":
22.581275560576206,\"lng\":113.92341417206319},{\"lat\":22.5820347930808,\"
lng\":113.92379469714002},{\"lat\":22.5824543966742,\"lng\":113.92387423066
02},{\"lat\":22.58258419347696,\"lng\":113.92385420140181},{\"lat\":22.5827
1446464571,\"lng\":113.92377432505363},{\"lat\":22.583035442552283,\"lng\":
113.92344398025185},{\"lat\":22.58333571811096,\"lng\":113.92315455675104},
{\"lat\":22.58413605181788,\"lng\":113.9223751781957},{\"lat\":22.584136051
81788,\"lng\":113.9223751781957},{\"lat\":22.5842458304414,\"lng\":113.9223
5517302463},{\"lat\":22.584356499715348,\"lng\":113.92242492609277},{\"lat\
\":22.58441576319153,\"lng\":113.92255454681109},{\"lat\":22.584505312292126
,\"lng\":113.92292451603558},{\"lat\":22.584505312292126,\"lng\":113.922924
51603558},{\"lat\":22.5844956924286,\"lng\":113.92296441582408},{\"lat\":22
.584424787040216,\"lng\":113.92329458850983},{\"lat\":22.584395340613344,\"
lng\":113.92346416446333},{\"lat\":22.584385152460165,\"lng\":113.923553938
36435},{\"lat\":22.58435473158716,\"lng\":113.92384421190947},{\"lat\":22.5
84344515335335,\"lng\":113.92393398951008},{\"lat\":22.555226568441086,\"ln
g\":113.94239785409903},{\"lat\":22.58458324117094,\"lng\":113.924873532937
54}}],
```

```
    "FDuration": null
```

```
  },
```

```
  {
```

```
    "FRouteGUID": "972a2554-7059-49fd-a880-18f8a7a5c3d7",
```

```
    "FNameCode": "14",
```

```
    "FRouteCode": "20201104203548",
```

```
    "FStartFenceName": "留仙",
```

```
    "FEndFenceName": "庭威产业园",
```

```
    "FRoadPoints": "[{\"lat\":22.577597388105065,\"lng\":113.92
186605243623},{\"lat\":22.577747682418476,\"lng\":113.92199557518418},{\"la
t\":22.577987637502936,\"lng\":113.92209510953124},{\"lat\":22.579316677954
93,\"lng\":113.92263461907531},{\"lat\":22.57961577269332,\"lng\":113.92275
507470549},{\"lat\":22.579925844242666,\"lng\":113.9228745300557},{\"lat\":
22.581275560576206,\"lng\":113.92341417206319},{\"lat\":22.5820347930808,\"
lng\":113.92379469714002},{\"lat\":22.5824543966742,\"lng\":113.92387423066
02},{\"lat\":22.5808631026382,\"lng\":113.91629715808021},{\"lat\":22.58079
310052482,\"lng\":113.91636698494823},{\"lat\":22.58079310052482,\"lng\":11
3.91636698494823},{\"lat\":22.58072223544781,\"lng\":113.91644678136936},{\
\"lat\":22.580662238982786,\"lng\":113.9165175991719},{\"lat\":22.5804527839
84118,\"lng\":113.91669717946144},{\"lat\":22.580452783984118,\"lng\":113.9
1669717946144}]",
```

```
    "FDuration": null
```

```
  },
```

```
  {
```

```
    "FRouteGUID": "3583ebed-e8eb-45ca-b742-271514fd1101",
```

```
    "FNameCode": "美生",
```

```

    "FRouteCode": "20201030115147",
    "FStartFenceName": null,
    "FEndFenceName": "庭威产业园",
    "FRoadPoints": "[{\\"lat\\":22.58029949452471,\\\"lng\\":113.92305892406162},{\\"lat\\":22.580051203179707,\\\"lng\\":113.9229153311602},{\\"lat\\":22.579615416771812,\\\"lng\\":113.92271817301989},{\\"lat\\":22.579063342211096,\\\"lng\\":113.92259392008019},{\\"lat\\":22.57837792658728,\\\"lng\\":113.92243288463068},{\\"lat\\":22.57782429391128,\\\"lng\\":113.92205734443738},{\\"lat\\":22.577535352462338,\\\"lng\\":113.92157390866244},{\\"lat\\":22.578079838843916,\\\"lng\\":113.92098212231667},{\\"lat\\":22.578970876812438,\\\"lng\\":113.92012088950244},{\\"lat\\":22.579728313208783,\\\"lng\\":113.91933263283501},{\\"lat\\":22.580272763933827,\\\"lng\\":113.91881279065957},{\\"lat\\":22.581028796536522,\\\"lng\\":113.91796982408064},{\\"lat\\":22.580667413684438,\\\"lng\\":113.91711073237423},{\\"lat\\":22.580638519162854,\\\"lng\\":113.917168032464}]",
    "FDuration": null
  },
  {
    "FRouteGUID": "fead6478-c95e-4323-93f5-2c43b416a030",
    "FNameCode": "TingWei-TCL",
    "FRouteCode": "20210810135916",
    "FStartFenceName": "庭威产业园",
    "FEndFenceName": "中兴",
    "FRoadPoints": "[{\\"lat\\":22.580572246307955,\\\"lng\\":113.91709684214686},{\\"lat\\":22.580301967501203,\\\"lng\\":113.91736719048782},{\\"lat\\":22.57990199755677,\\\"lng\\":113.91773733278696},{\\"lat\\":22.57990199755677,\\\"lng\\":113.91773733278696},{\\"lat\\":22.580130752274894,\\\"lng\\":113.91802727637558},{\\"lat\\":22.580130752274894,\\\"lng\\":113.91802727637558},{\\"lat\\":22.57986081749037,\\\"lng\\":113.9183365280803},{\\"lat\\":22.58008021039809,\\\"lng\\":113.9186065503572},{\\"lat\\":22.58006071969548,\\\"lng\\":113.9186464439405},{\\"lat\\":22.58009021611469,\\\"lng\\":113.91868630240437},{\\"lat\\":22.580170463526727,\\\"lng\\":113.91878694157711},{\\"lat\\":22.580170463526727,\\\"lng\\":113.91878694157711},{\\"lat\\":22.580120100281032,\\\"lng\\":113.918836827794},{\\"lat\\":22.579920630387193,\\\"lng\\":113.91903637417985},{\\"lat\\":22.579189899131045,\\\"lng\\":113.91978669670272},{\\"lat\\":22.578398668470435,\\\"lng\\":113.92052616617171},{\\"lat\\":22.57804879029214,\\\"lng\\":113.92088641802985},{\\"lat\\":22.57750788907901,\\\"lng\\":113.92143531610735},{\\"lat\\":22.57600425282899,\\\"lng\\":113.93184871039169},{\\"lat\\":22.57581368278766,\\\"lng\\":113.93213843953309},{\\"lat\\":22.575743802590257,\\\"lng\\":113.93222836757191},{\\"lat\\":22.57557219598385,\\\"lng\\":113.93261795349399},{\\"lat\\":22.57549235307889,\\\"lng\\":113.93284770057298},{\\"lat\\":22.57537150219399,\\\"lng\\":113.93337708996975},{\\"lat\\":22.57537150219399,\\\"lng\\":113.93337708996975},{\\"lat\\":22.575320278237882,\\\"lng\\":113.93403629596078},{\\"lat\\":22.575300170296106,\\\"lng\\":113.93418613166104},{\\"lat\\":22.575370151414308,\\\"lng\\":113.93418606885712},{\\"lat\\":22.575390259362603,\\\"lng\\":113.93403623320081},{\\"lat\\":22.575390259362603,\\\"lng\\":113.93403623320081},{\\"lat\\":22.575420412030784,\\\"lng\\":113.93373658042493},{\\"lat\\":22.57543147732913,\\\"lng\\":113.93347690507

```

```

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  },
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    "FRouteGUID": "9497f6f9-c1a6-4838-aeaa-2d7710a96c84",
    "FNameCode": "test2",
    "FRouteCode": "20201104095338",
    "FStartFenceName": "庭威产业园",
    "FEndFenceName": null,
    "FRoadPoints": "[{\"lat\":22.580572246307955,\"lng\":113.91
709684214686},{\"lat\":22.580301967501203,\"lng\":113.91736719048782},{\"la
t\":22.57990199755677,\"lng\":113.91773733278696},{\"lat\":22.5799019975567
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lng\":113.9186065503572},{\"lat\":22.58006071969548,\"lng\":113.91864644394
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:113.92164581460057},{\"lat\":22.577597388105065,\"lng\":113.92186605243623}
,{\"lat\":22.577747682418476,\"lng\":113.92199557518418},{\"lat\":22.577987
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lat\":22.579925844242666,\"lng\":113.9228745300557}}],
    "FDuration": null
  },
  {
    "FRouteGUID": "927c07f1-a5e4-4dbe-b22c-c6e76d253b7b",
    "FNameCode": "庭威",
    "FRouteCode": "20201030115059",
    "FStartFenceName": "庭威产业园",
    "FEndFenceName": "留仙",
    "FRoadPoints": "[{\"lat\":22.580572246307955,\"lng\":113.91
709684214686},{\"lat\":22.580301967501203,\"lng\":113.91736719048782},{\"la
t\":22.57990199755677,\"lng\":113.91773733278696},{\"lat\":22.5799019975567
7,\"lng\":113.91773733278696},{\"lat\":22.580130752274894,\"lng\":113.91802
727637558},{\"lat\":22.580130752274894,\"lng\":113.91802727637558},{\"lat\"
:22.57986081749037,\"lng\":113.9183365280803},{\"lat\":22.58008021039809,\"
lng\":113.9186065503572},{\"lat\":22.58006071969548,\"lng\":113.91864644394
05},{\"lat\":22.58009021611469,\"lng\":113.91868630240437},{\"lat\":22.5801
70463526727,\"lng\":113.91878694157711},{\"lat\":22.580170463526727,\"lng\"
:113.91878694157711},{\"lat\":22.580120100281032,\"lng\":113.918836827794},

```

```
{
  "lat": 22.579920630387193,
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  "lat": 22.579189899131045,
  "lng": 113.91978669670272,
  "lat": 22.578398668470435,
  "lng": 113.92052616617171,
  "lat": 22.57804879029214,
  "lng": 113.92088641802985,
  "lat": 22.57750788907901,
  "lng": 113.92143531610735,
  "lat": 22.57750788907901,
  "lng": 113.92143531610735,
  "lat": 22.577437660140813,
  "lng": 113.92150617701628,
  "lat": 22.577357629788786,
  "lng": 113.92159599420957,
  "lat": 22.57740814125793,
  "lng": 113.92164581460057,
  "lat": 22.57740814125793,
  "lng": 113.92164581460057,
  "lat": 22.57751746793316,
  "lng": 113.92177536719159,
  "lat": 22.57751746793316,
  "lng": 113.92177536719159
},
{
  "FDuration": null
}
]
}
```

Return on error:

```
{
  "code": 1,
  "message": "Fence not found"
}
```

## Return Parameter Description:

Table(Fence List)

| Parameter Name | Type   | Instructions                                                                                        |
|----------------|--------|-----------------------------------------------------------------------------------------------------|
| FFenceGUID     | String | Fence GUID                                                                                          |
| FFenceName     | String | Fence Name                                                                                          |
| FPath          | String | Collection points (jsonstring) , This field has been deleted by default, meaning its value is empty |
| FRadius        | Int    | Radius                                                                                              |
| FCenterLon     | String | Center Longitude                                                                                    |
| FCenterLat     | String | Center Latitude                                                                                     |
| FFenceTypeName | String | Fence Type Name                                                                                     |
| FDescription   | String | Description                                                                                         |
| Address        | String | Address                                                                                             |

Table1(Route List)

| Parameter Name | Type   | Instructions                                                                                      |
|----------------|--------|---------------------------------------------------------------------------------------------------|
| FRouteGUID     | String | Route GUID                                                                                        |
| FRouteName     | String | Rote Name                                                                                         |
| FRouteCode     | String | Route Code                                                                                        |
| StartFenceName | String | Start Fence Name                                                                                  |
| EndFenceName   | String | End Fence Name                                                                                    |
| FRoadPoints    | String | Collection points (jsonstring),This field has been deleted by default, meaning its value is empty |
| FDuration      | Int    | Transportation time (Sencod)                                                                      |
| FDescription   | String | Description                                                                                       |
| Address        | String | Address                                                                                           |

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/GetRouteList&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# SendRequestDisableEnableFenceAlarm

## Description :

- Request to disable /enable corridor alert for trip

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestDisableEnableFenceAlarm>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions        |
|----------------|--------------|--------|---------------------|
| tripId         | Yes          | string | Trip ID             |
| status         | Yes          | Int    | 1:enable 0: disable |
| fTokenID       | Yes          | string | Token               |

## Return Example:

Return when correct:

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

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```
{
  "Result": 105,
  "Message": "Fail:tripId is null",
  "FObject": null
}
```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this trip ID",
  "FObject": null
}
```

Error message explanation: Other undefined errors

```
{
  "Result": 105,
  "Message": "Fail:other",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

Error message: This waybill is not bound to a device number and is prohibited from being dispatched.

```
{
  "Result": 105,
  "Message": "Fail:no device is bound to this trip ID",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestDisableEnableFenceAlarm?tripId=BOC-A-12312021-0002&status=1&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# SendRequestRemoteUnlock

## Description :

- Request for remote un-lock

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestRemoteUnlock>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions  |
|----------------|--------------|--------|---------------|
| tripId         | Yes          | string | Trip ID       |
| name           | Yes          | string | unlock person |
| fTokenID       | Yes          | string | Token         |

## Return Example:

Return when correct:

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

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```
{
  "Result": 105,
  "Message": "Fail:tripId is null",
  "FObject": null
}
```

Error message explanation: The device is not in the unlocking area; unlocking is prohibited.

```
{
  "Result": 105,
  "Message": "Fail:no unlocking outside the fence",
  "FObject": null
}
```

Error message description: The unlocking command for this device is not integrated.

```
{
  "Result": 105,
  "Message": "Fail:device not supported",
  "FObject": null
}
```

Error message: This device is offline and unlocking is prohibited.

```
{
  "Result": 105,
  "Message": "Fail:the device is offline",
  "FObject": null
}
```

Error message: The device bound to this waybill could not be found in the database; the unlock command failed to be sent.

```
{
  "Result": 105,
  "Message": "Fail:instruction sending failure",
  "FObject": null
}
```

Error message: The unlock command failed to be sent.

```
{
  "Result": 105,
  "Message": "Fail:send instruction error",
  "FObject": null
}
```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this trip ID",
  "FObject": null
}
```

Error message: This waybill is not bound to a device number and is prohibited from being dispatched.

```
{
  "Result": 105,
  "Message": "Fail:no device is bound to this trip ID",
  "FObject": null
}
```

Error message explanation: Other undefined errors

```
{
  "Result": 105,
  "Message": "Fail:other",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestRemoteUnlock?tripId=BOC-A-12312021-0002&name='liu'&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# SendRequestOutRemoteUnlock

## Description :

- Request for remote un-lock out of the fence

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestOutRemoteUnlock>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions  |
|----------------|--------------|--------|---------------|
| tripId         | Yes          | string | Trip ID       |
| name           | Yes          | string | unlock person |
| fTokenID       | Yes          | string | Token         |

## Return Example:

Return when correct:

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

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```
{
  "Result": 105,
  "Message": "Fail:tripId is null",
  "FObject": null
}
```

Error message description: The unlocking command for this device is not integrated.

```
{
  "Result": 105,
  "Message": "Fail:device not supported",
  "FObject": null
}
```

Error message: This device is offline and unlocking is prohibited.

```
{
  "Result": 105,
  "Message": "Fail:the device is offline",
  "FObject": null
}
```

Error message: The device bound to this waybill could not be found in the database; the unlock command failed to be sent.

```
{
  "Result": 105,
  "Message": "Fail:instruction sending failure",
  "FObject": null
}
```

Error message: The unlock command failed to be sent.

```
{
  "Result": 105,
  "Message": "Fail:send instruction error",
  "FObject": null
}
```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this trip ID",
  "FObject": null
}
```

Error message explanation: Other undefined errors, need to contact Jointech.

```
{
  "Result": 105,
  "Message": "Fail:other",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestOutRemoteUnlock?tripId=BOC-A-12312021-0002&name='liu'&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```



# QueryLockStatus

## Description :

- Query whether remote unlocking is successful

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2022-05-27       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/QueryLockStatus>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| gpsLockNo      | Yes          | string | asset ID     |
| fTokenID       | Yes          | string | Token        |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
```

```

    "Message": "success",
    "FObject": null
}

## If it returns 109, call again every 2 seconds for a total of 10

{
    "Result": 109,
    "Message": "opening",
    "FObject": null
}

```

### Return on error:

Error message explanation: The passed parameter gpsLockNo(deviceID) is empty.

```

{
    "Result": 105,
    "Message": "Fail:gpsLockNo is null",
    "FObject": null
}

```

Error message explanation: The passed tripId cannot be found in the database.

```

{
    "Result": 105,
    "Message": "Fail:without this trip ID",
    "FObject": null
}

```

Error message: This device is offline and unlocking is prohibited.

```

{
    "Result": 105,
    "Message": "Fail:asset offline",
    "FObject": null
}

```

Error message explanation: The waybill device is not activated.

```

{
    "Result": 105,
    "Message": "Fail:the device not found",
    "FObject": null
}

```

Error message explanation: The waybill device is not activated.

```

{
    "Result": 105,

```

```

    "Message": "Fail:the asset inactivated",
    "FObject": null
}

```

Error message explanation: Other undefined errors

```

{
    "Result": 105,
    "Message": "Fail:other error",
    "FObject": null
}

```

Error message description: Incorrect token ID, or database connection timed out.

```

{
    "Result": 105,
    "Message": "Fail:token error or timeout",
    "FObject": null
}

```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```

String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/QueryLockStatus?gpsLockNo=207010199999&&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189"
;
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;

```



# Start/Stop Analysis service / Start supervision

## Description :

- Start supervision: After the train is dispatched, start the supervision analysis, that is, the status of the waybill changes directly to the dispatched;
- Stop Analysis service: End start supervision analysis, that is, the status of the waybill changes directly to closed.

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2022-02-07       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestDisableEnableRouteAnalysis>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions                                       |
|----------------|--------------|--------|----------------------------------------------------|
| tripId         | Yes          | string | Trip ID                                            |
| status         | Yes          | int    | 1: Start Analysis service 2: Stop Analysis service |
| fTokenID       | Yes          | string | Token                                              |

## Return Example:

### Return when correct:

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

### Return on error:

Error message explanation: The passed parameter tripId is empty or parameter status is wrong.

```
{
  "Result": 105,
  "Message": "Fail:tripId is null or status is wrong",
  "FObject": null
}
```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:without this tripId",
  "FObject": null
}
```

Error message description: Background analysis program failed to start.

```
{
  "Result": 105,
  "Message": "Fail:start analysis fail",
  "FObject": null
}
```

Error message: This waybill is not bound to a device number and is prohibited from being dispatched.

```
{
  "Result": 105,
  "Message": "Fail:no device is bound to this trip ID",
  "FObject": null
}
```

Error message explanation: Other undefined errors, need to contact Jointech.

```
{
```

```

    "Result": 105,
    "Message": "Fail:other",
    "FObject": null
  }

```

Error message description: Incorrect token ID, or database connection timed out.

```

{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}

```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```

String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/SendRequestDisableEnableRouteAnalysis?tripId=BOC-A-12312021-0002&status=1&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;

```

# CheckDeviceInGeoFence

## Description :

- Check if the device is inside the designated fence

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2023-06-19       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/CheckDeviceInGeoFence>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| gpsLockNo      | Yes          | string | device no    |
| geoFence       | Yes          | string | fence guid   |
| fTokenID       | Yes          | string | Token        |

## Return Example:

Return when correct:

```
{
  "Result": 200,
  "Message": "inside the fence",
  "FObject": null
}
```

#### Return on error:

Error message explanation: The passed parameter gpsLockNo or geoFence is empty.

```
{
  "Result": 105,
  "Message": "Fail:gpsLockNo or geoFence is null",
  "FObject": null
}
```

```
{
  "Result": 105,
  "Message": "outside the fence",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

#### Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

#### Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/CheckDeviceInGeoFence?gpsLockNo=8041602692&geoFence=dfd0d889-7a01-4cd4-b8ed-88825c5fb72b&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
```

```
CloseableHttpClient client = HttpClients.createDefault();  
//Start the execution request and get the return value  
HttpResponse response = client.execute(post);  
//Get the returned entity object  
HttpEntity entity = response.getEntity();  
//Convert entity object to string  
String result = EntityUtils.toString(entity, "UTF-8");  
return result;
```

# GetFenceDetail

## Description :

- List of fence detail information

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/GetFenceDetail>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| fTokenID       | Yes          | string | Token        |
| fenceGuid      | Yes          | string | fence guid   |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
```

```

    "Message": null,
    "FObject": [
      {
        "FFenceGUID": "2a95877f-2e08-4ab8-b347-00341bf6ff7f",
        "FFenceName": "D08252002",
        "FPath": "[{\"lat\":14.23630678,\"lng\":121.13384147},{\"lat\":14.23603127,\"lng\":121.13302357},{\"lat\":14.2355568,\"lng\":121.13317377},{\"lat\":14.23587918,\"lng\":121.13405938}]",
        "FRadius": 0.0,
        "FCenterLon": 121.133523,
        "FCenterLat": 14.235939,
        "FFenceTypeName": "CONDEMNED",
        "FDescription": "DON AL ENTERPRISES"
      }
    ]
  }
}

```

#### Return on error:

```

{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}

```

## Return Parameter Description:

### FObject(Fence List)

| Parameter Name | Type   | Instructions                   |
|----------------|--------|--------------------------------|
| FFenceGUID     | String | Fence GUID                     |
| FFenceName     | String | Fence Name                     |
| FPath          | String | Collection points (jsonstring) |
| FRadius        | Int    | Radius                         |
| FCenterLon     | String | Center Longitude               |
| FCenterLat     | String | Center Latitude                |
| FFenceTypeName | String | Fence Type Name                |
|                |        |                                |

|              |        |             |
|--------------|--------|-------------|
| FDescription | String | Description |
| Address      | String | Address     |

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/GetRouteList&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189&fenceGuid=2a95877f-2e08-4ab8-b347-00341bf6ff7f";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# GetRouteDetail

## Description :

- List of route detail information

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/GetRouteDetail>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| fTokenID       | Yes          | string | Token        |
| routeGuid      | Yes          | string | route guid   |

## Return Example:

### Return when correct:

```
{  
  "Result": 200,
```

```

"Message": null,
"FObject": [
  {
    "FRouteGUID": "9e97803e-00ff-42f5-8e5f-ed9fdf86b60b",
    "FRouteName": "P02B-004052102",
    "FRouteCode": "P02B-004052102",
    "FStartFenceName": "P02B",
    "FEndFenceName": "004052102",
    "FRoadPoints": "[{\"lat\":14.59595,\"lng\":120.95042},{\"lat\":14.59579,\"lng\":120.9492},{\"lat\":14.59569,\"lng\":120.94846},{\"lat\":14.59549,\"lng\":120.94686},{\"lat\":14.59557,\"lng\":120.94836},{\"lat\":14.59564,\"lng\":120.94891},{\"lat\":14.59591,\"lng\":120.95107},{\"lat\":14.59614,\"lng\":120.95282},{\"lat\":14.59635,\"lng\":120.95447},{\"lat\":14.59648,\"lng\":120.95559}]",
    "FDuration": 0,
    "FDescription": "P02B-004052102",
    "FSubRoutes":[
      {
        "FRouteGUID": "9e97803e-00ff-42f5-8e5f-ed9fdf86b603",
        "FRouteName": "P02B-004052103",
        "FRouteCode": "P02B-004052103",
        "FStartFenceName": "P02B",
        "FEndFenceName": "004052103",
        "FRoadPoints": "[{\"lat\":14.59595,\"lng\":120.95042},{\"lat\":14.59579,\"lng\":120.9492},{\"lat\":14.59569,\"lng\":120.94846},{\"lat\":14.59549,\"lng\":120.94686},{\"lat\":14.59557,\"lng\":120.94836},{\"lat\":14.59564,\"lng\":120.94891},{\"lat\":14.59591,\"lng\":120.95107},{\"lat\":14.59614,\"lng\":120.95282},{\"lat\":14.59635,\"lng\":120.95447},{\"lat\":14.59648,\"lng\":120.95559}]",
        "FDuration": 0,
        "FDescription": "P02B-004052103"
      }
    ]
  }
]
}

```

#### Return on error:

```

{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}

```

## Return Parameter Description:

### FObject(Route List)

| Parameter Name | Type   | Instructions                   |
|----------------|--------|--------------------------------|
| FRouteGUID     | String | Route GUID                     |
| FRouteName     | String | Route Name                     |
| FRouteCode     | String | Route Code                     |
| StartFenceName | String | Start Fence Name               |
| EndFenceName   | String | End Fence Name                 |
| FRoadPoints    | String | Collection points (jsonstring) |
| FDuration      | Int    | Transportation time (Sencod)   |
| FDescription   | String | Description                    |
| FSubRoutes     | Ojbect | Collection of branch routes    |

### FSubRoutes(Route List)

| Parameter Name | Type   | Instructions                   |
|----------------|--------|--------------------------------|
| FRouteGUID     | String | Route GUID                     |
| FRouteName     | String | Route Name                     |
| FRouteCode     | String | Route Code                     |
| StartFenceName | String | Start Fence Name               |
| EndFenceName   | String | End Fence Name                 |
| FRoadPoints    | String | Collection points (jsonstring) |
| FDuration      | Int    | Transportation time (Sencod)   |
| FDescription   | String | Description                    |

## Request Example:

```
String result = "";  
//request url  
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/GetRouteList&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189&fenceGuid=2a95877f-2e08-4ab8-b347-00341bf6ff7f";  
//Create post request object  
HttpPost post = new HttpPost(url);  
CloseableHttpClient client = HttpClients.createDefault();  
//Start the execution request and get the return value  
HttpResponse response = client.execute(post);  
//Get the returned entity object  
HttpEntity entity = response.getEntity();  
//Convert entity object to string  
String result = EntityUtils.toString(entity, "UTF-8");  
return result;
```

# StartTrip

## Description :

- Request for start trip

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/StartTrip>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions |
|----------------|--------------|--------|--------------|
| tripId         | Yes          | string | Trip ID      |
| fTokenID       | Yes          | string | Token        |

## Return Example:

### Return when correct:

```
{
  "Result": 200,
```

```

    "Message": "success",
    "FObject": null
}

```

### Return on error:

Error message explanation: The passed parameter tripId is empty.

```

{
    "Result": 105,
    "Message": "Fail:tripId is null",
    "FObject": null
}

```

Error message description: Incorrect token ID, or database connection timed out.

```

{
    "Result": 105,
    "Message": "Fail:token error or timeout",
    "FObject": null
}

```

Error message: This waybill is not bound to a device number and is prohibited from being dispatched.

```

{
    "Result": 105,
    "Message": "Fail:GetCurrentDeviceInfo- no device is bound to this trip ID",
    "FObject": null
}

```

Error message: This waybill device is unlocked, forbid to start trip.

```

{
    "Result": 105,
    "Message": "Fail:GetCurrentDeviceInfo- device is unlocked, forbid to start trip",
    "FObject": null
}

```

Error message: This device is offline and unlocking is prohibited.

```

{
    "Result": 105,
    "Message": "Fail:GetCurrentDeviceInfo- asset offline",
    "FObject": null
}

```

Error message explanation: The passed tripId cannot be found in the database.

```
{
  "Result": 105,
  "Message": "Fail:GetCurrentDeviceInfo- without this trip ID",
  "FObject": null
}
```

Error message description: Background analysis program failed to start.

```
{
  "Result": 105,
  "Message": "Fail:StartJourney- start analysis fail",
  "FObject": null
}
```

Error message explanation: Other `undefined` errors, need to contact Jointech.

```
{
  "Result": 105,
  "Message": "Fail:other",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/StartTrip?tripId=B0C-A-12312021-0002&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```



# EndTrip

## Description :

- Request for end trip

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/EndTrip>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions  |
|----------------|--------------|--------|---------------|
| tripId         | Yes          | string | Trip ID       |
| name           | Yes          | string | unlock person |
| fTokenID       | Yes          | string | Token         |

## Return Example:

Return when correct:

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

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```
{
  "Result": 105,
  "Message": "Fail:tripId is null",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

Error message: This waybill is not bound to a device number and is prohibited from being dispatched.

```
{
  "Result": 105,
  "Message": "Fail:GetCurrentDeviceInfo- no device is bound to this trip ID",
  "FObject": null
}
```

Error message: This waybill device is unlocked, forbid to end trip.

```
{
  "Result": 105,
  "Message": "Fail:GetCurrentDeviceInfo- device is unlocked, forbid to end trip",
  "FObject": null
}
```

Error message: This device is offline and unlocking is prohibited.

```
{
  "Result": 105,
  "Message": "Fail:GetCurrentDeviceInfo- asset offline",
  "FObject": null
}
```

EndTrip

```
}
```

Error message description: Background analysis program failed to start.

```
{
```

```
    "Result": 105,
```

```
    "Message": "Fail:EndJourney- start analysis fail",
```

```
    "FObject": null
```

```
}
```

Error message explanation: Other `undefined` errors, need to contact Jointech.

```
{
```

```
    "Result": 105,
```

```
    "Message": "Fail:other",
```

```
    "FObject": null
```

```
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url = "http://icloud.assetscontrols.com:8092/api/AscentPH/EndTrip?tripId=BOC-A-12312021-0002&name='liu'&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```

# UpdateGpsLockStatus

## Description :

- Update gps lock status

## Version :

| Ver.  | Maker | Established Date | Revision Date |
|-------|-------|------------------|---------------|
| 1.0.0 | lenny | 2021-12-31       |               |

## Request URL:

- <http://icloud.assetscontrols.com:8092/api/AscentPH/UpdateGpsLockStatus>

## Request Method :

- POST

## Request Header :

| Parameter Name | Whether Must | Type   | Instructions                        |
|----------------|--------------|--------|-------------------------------------|
| Content-Type   | Yes          | string | Request Type: x-www-form-urlencoded |

## Request Parameter:

| Parameter Name | Whether Must | Type   | Instructions    |
|----------------|--------------|--------|-----------------|
| status         | Yes          | int    | 0:Off 1:On      |
| gpsLockNo      | Yes          | string | gps Lock number |
| fTokenID       | Yes          | string | Token           |

## Return Example:

Return when correct:

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

#### Return on error:

Error message explanation: The passed parameter tripId is empty.

```
{
  "Result": 105,
  "Message": "Fail:tripId is null",
  "FObject": null
}
```

Error message description: Incorrect token ID, or database connection timed out.

```
{
  "Result": 105,
  "Message": "Fail:token error or timeout",
  "FObject": null
}
```

Error message explanation: The waybill device is not activated.

```
{
  "Result": 105,
  "Message": "Fail:asset is not activated.",
  "FObject": null
}
```

Error message explanation: The passed parameter status does not match, only 0 and 1 are supported."

```
{
  "Result": 105,
  "Message": "Fail:status does not match",
  "FObject": null
}
```

Error message explanation: The passed parameter gpsLockNo(deviceID) is empty.

```
{
  "Result": 105,
  "Message": "Fail:gpsLockNo is null",
  "FObject": null
}
```

Error message explanation: Other undefined errors,need to contact Jointech.

```
{
  "Result": 105,
  "Message": "Fail:other error",
  "FObject": null
}
```

## Return Parameter Description:

| Parameter Name | Type | Instructions |
|----------------|------|--------------|
|----------------|------|--------------|

## Request Example:

```
String result = "";
//request url
String url ="http://icloud.assetscontrols.com:8092/api/AscentPH/UpdateGpsLockStatus?status=0&gpsLockNo=1548764523&fTokenID=DB7F20D9-84C3-44C3-B05A-06A9C392A189";
//Create post request object
HttpPost post = new HttpPost(url);
CloseableHttpClient client = HttpClients.createDefault();
//Start the execution request and get the return value
HttpResponse response = client.execute(post);
//Get the returned entity object
HttpEntity entity = response.getEntity();
//Convert entity object to string
String result = EntityUtils.toString(entity, "UTF-8");
return result;
```