

WhatsGPS API

Version: V1.2.6

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1 Range

The document specifies the external interface of the Web server.

The document is applicable to development works of web page and mobile client.

2 Terms, definitions and abbreviations

2.1 Terms, definitions

2.2 Abbreviations

The following abbreviations are used in this file:

Abbreviations	English	Chinese
HTTP	hypertext transport protocol	超文本传送协议
JSON	JavaScript Object Notation	JavaScript 对象注解

3 Protocol Overview

The communication interface is developed based on HTTP1.1 + JSON protocol.

The default all non-login requests with token

4 Port

4.1 User

4.1.1 Login

	Type	Value	Description	
URL	String	user/login.do		
Require parameter	name	Mandatory	Login Name	
	password	Mandatory	Login password	
	timeZoneSecond	Integer	Optional	Relative UTC time milliseconds (defaults to East eight 8x3600)
	lang	String	Optional	National language code (default simplified Chinese) zh_CN zh_HK zh_HK
Response parameter	JSON	{ret:1 0, data:user data}		
Exception			No	

Example:<http://www.whatsgps.com/user/login.do?name=Rookie&password=123456>

Response JSON demo

```
{
  "data": {
    "address": "广东深圳",
    "email": "",
    "joinTime": "2018-03-05 10:36:47",
    "lang": "zh_CN",
```

```

"linkMan": "张三",
"linkPhone": "13435792203",
"name": "设备测试 hhh",
"parentId": 1090,
"password": "E10ADC3949BA59ABBE56E057F20F883E",
"rechargeURL": "http://www.taobao.com",
"remark": "",
"timeZoneSecond": 28800,
"token": "21cce73e-6078-4a82-a10f-bdf9c10531a9",
"updateTime": "2018-05-22 09:19:11",
"userId": 1103,
"userName": "Rookie",
"userType": 1
},
"ret": 1
}

```

4.1.2 Access to user information

		Type	Value	Description
URL		String	user/getByUserId.do	
Require parameter	token	String	Mandatory	token
	userId	Long	Optional	User id
Response parameter		JSON	{ret:1 0, data:user data}	
Exception				No

Example: <http://www.whatsgps.com/user/getByUserId.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9>

Response JSON demo

```

{
  "data": {
    "address": "广东深圳",
    "allCount": 10,
    "email": "",
    "joinTime": "2018-03-05 10:36:47",
    "linkMan": "张三",
    "linkPhone": "13435792203",
    "name": "设备测试 hhh",
    "parentId": 1090,
    "password": "E10ADC3949BA59ABBE56E057F20F883E",
    "rechargeURL": "http://www.taobao.com",
    "remark": "",
    "underCount": 7,
    "updateTime": "2018-05-22 09:19:11",
    "userId": 1103,
    "userName": "Rookie",
    "userType": 1
  },
}

```

```
"ret": 1
}
```

4.2 Vehicle

4.2.1 Query vehicle info based on IMEI

		Type	Value	Description
URL		String	car/getByImei.do	
Require parameter	token	String	Mandatory	token
	imei	String	Mandatory	imei
Response parameter		JSON	{ret:1 0, Data:vehicle data}	
Exception				no

Example:<http://www.whatsgps.com/car/getByImei.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&imei=690618040400016>

Response JSON demo

```
{
  "data": {
    "activeTime": "2018-04-04",
    "carId": 102760,
    "carNO": "gpsnow-400016",
    "carType": 0,
    "driverName": "",
    "driverTel": "",
    "imei": "690618040400016",
    "joinTime": "2018-05-14",
    "machineName": "S06t-400016",
    "machineType": 18,
    "overSpeedSwitch": false,
    "overSpeedValue": 120,
    "password": "F3F72DB27521D43BA89C49F196EACD1E",
    "platformTime": "2019-05-14",
    "remark": "",
    "serviceState": 0,
    "serviceTime": "2019-05-14",
    "simNO": "",
    "updateTime": "2018-05-14",
    "userId": 1103
  },
  "ret": 1
}
```

4.2.2 Query vehicle info based on user ID

		Type	Value	Description
URL		String	car/getByUserId.do	
Require	token	String	Mandatory	token

parameter	userId	Long	Optional	User ID (do not query the current user)
Response parameter		JSON	{ret:1 0, data:vehicle data}	
Exception				no

Example: <http://www.whatsgps.com/car/getByUserId.do?token=98af593e-b120-4569-a8ed-efdb33580e92>

Response JSON demo

```
{
  "data": [{
    "carId": 103131,
    "carNO": "gpsnow-365607",
    "carType": 0,
    "imei": "353701091365607",
    "joinTime": "2018-06-01",
    "machineName": "gpsnow-365607",
    "machineType": 3,
    "password": "F03E6E94AD9E20C2CDAA2AE8DA4EA84F",
    "platformTime": "2019-06-01",
    "remark": "",
    "serviceState": 0,
    "serviceTime": "2019-06-01",
    "updateTime": "2018-06-01",
    "userId": 1103
  }],
  "ret": 1
}
```

4.3 Location

4.3.1 Query history playback

		Type	Value	Description
URL		String	position/queryHistory.do	
Require parameter	token	String	Mandatory	token
	carId	Long	Mandatory	Vehicle ID
	mapType	Integer	Optional	Map type
	startTime	String	Mandatory	Starts time UTC (yyyy-MM-dd HH:mm:ss)
	endTime	String	Mandatory	End time UTC (yyyy-MM-dd HH:mm:ss)
Response parameter		JSON	{ret:1 0, data:location data}	
Exception				no

Example: <http://www.whatsgps.com/position/queryHistory.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&carId=102760&startTime=2018-05-14 00:00:00&endTime=2018-05-18 23:00:00>

Response JSON demo

```
{
```

```

    "data": [{
        "alarm": "",
        "altitude": 0,
        "dir": 0,
        "exData": "",
        "imei": "690618040400016",
        "isStop": false,
        "lat": 23.168647,
        "latc": 23.171978,
        "lon": 113.434396,
        "lonc": 113.446435,
        "mileage": 7,
        "pointDt": "2018-05-14 09:44:19",
        "pointType": 1,
        "remark": "",
        "signalMile": 7,
        "speed": 0,
        "status": "",
        "stopTime": 0
    }],
    "ret": 1
}

```

4.3.2 According to vehicle ID to get location and status

		Type	Value	Description
URL		String	carStatus/getByCarIds.do	
Require parameter	token	String	Mandatory	token
	carIds	String	Mandatory	Vehicle id (Separate comma)
	mapType	Integer	Optional	Map type (default is 1) 1: Baidu coordinate system 2: Google coordinate system
Response parameter		JSON	{ret:1 0, data:Vehicle status data,time:sever time}	

Example: <http://www.whatsgps.com/carStatus/getByCarIds.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&carIds=102760>

Response JSON demo

```

{
    "data": [{
        "alarm": ":21",
        "carId": 102760,
        "dir": 0,
        "exData": "",
        "heartTime": 1526439611362,
        "lat": 23.168652,
        "latc": 23.171983,

```



```

        "lon": 113.434368,
        "lonc": 113.446407,
        "online": 0,
        "pointTime": 1526365841000,
        "pointType": 1,
        "speed": 0,
        "staticTime": 1526291172000,
        "status": ":1:5"
    }],
    "ret": 1,
    "time": 1526953767067
}

```

4.4 GEO-fence

4.4.1 Query based on vehicle ID

		Type	Value	Description
URL		String	geo/getByCarIdNew.do	
Require parameter	token	String	Mandatory	token
	carId	Long	Mandatory	Vehicle id
Response parameter		JSON	{ret:1 0, data:geo-fence}	
Exception				no

Example: <http://www.whatsgps.com/geo/getByCarIdNew.do?token=4cd8e508-04d1-402f-969c-80b27b9e0eec&carId=103237>

Response JSON demo

```

{
  "data": [{
    "carId": 103237,
    "geoId": 232,
    "points": "113.386359,23.175494",
    "radius": 400,
    "type": 0
  }, {
    "carId": 103237,
    "geoId": 295,
    "points":
"1.445627,1.171923;1.666605,50.333273;50.887996,1.555019;50.998976,50.098972",
    "radius": 0,
    "type": 1
  }, {
    "carId": 103237,
    "geoId": 296,
    "points": "113.445589,23.172003",
    "radius": 10000,

```

```

    "type": 0
  }],
  "ret": 1
}

```

4.4.2 Add

		Type	Value	Description
URL		String	geo/add.do	
Require parameter	token	String	Mandatory	token
	carId	Long	Mandatory	Vehicle id
	type	Integer	Mandatory	Type: 0: circular 1: polygon
	radius	Integer	Optional	radius
	points	String	Mandatory	Latitude and longitude
Response parameter		JSON	{ret:1 0}	
Exception				no

Circular

Example: <http://www.whatsgps.com/geo/add.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&carId=102760&type=0&radius=1000&points=113.445603,23.171902>

Response JSON demo

```

{
  "ret": 1
}

```

polygon

Example: <http://www.whatsgps.com/geo/add.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&carId=102760&type=0&radius=1000&points=1.445603,1.171902;1.6666,50.3333;50.888,1.555;50.999,50.0990>

4.4.3 Modify

		Type	Value	Description
URL		String	geo/updateNew.do	
Require parameter	token	String	Mandatory	token
	geoId	Long	Mandatory	Fence id
	type	Integer	Mandatory	Type: 0: circular 1: polygon
	radius	Integer	Optional	radius
	points	String	Mandatory	Latitude and longitude
Response parameter		JSON	{ret:1 0}	
Exception				no

Example: <http://www.whatsgps.com/geo/updateNew.do?token=4cd8e508-04d1-402f-969c-80b27b9e0eec&geoId=296&type=0&radius=10000&points=113.445603,23.171902>

Response JSON demo

```

{

```

```
"ret": 1
}
```

4.4.4 Delete

		Type	Value	Description
URL		String	geo/delNew.do	
Require parameter	token	String	Mandatory	token
	geoid	Long	Mandatory	Vehicle id
Response parameter		JSON	{ret:1 0}	
Exception				no

Example: <http://www.whatsgps.com/geo/delNew.do?token=4cd8e508-04d1-402f-969c-80b27b9e0e0c&geoid=295>

Response JSON demo

```
{
  "ret": 1
}
```

4.5 Tree structure

4.5.1 Gets the user tree structure

		Type	Value	Description
URL		String	structure/getChildStruc.do	
Require parameter	token	String	Mandatory	token
	targetUserId	Long	Optional	Expand the user ID (default current user)
	dataType	Integer	Optional	Request type (default is 0) 0: total number of vehicles 1: expiration equipment 2: off-line equipment 3: static equipment 4: unused equipment
	self	Boolean	Optional	include target data or not default is false
Response parameter		JSON	{ret:1 0, data:User structure} tree	

Example: <http://www.whatsgps.com/structure/getChildStruc.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9>

Response JSON demo

```
{
  "data": [{
    "hasChild": true,
    "name": "设备测试 hhh",
    "parentId": 1090,
    "totalNum": 10,
    "underNum": 7,
    "userId": 1103,
```

```

    "userType": 1
  }],
  "ret": 1
}

```

4.5.2 Acquisition of vehicle grouping structure

		Type	Value	Description
URL		String	structure/getCarGroup.do	
Require parameter	token	String	Mandatory	token
	targetUserId	Long	Optional	Expand the user ID (default current user)
	format	Boolean	Optional	Formatted data or not
Response parameter		JSON	{ret:1 0, data:{"cars": Vehicle tree data ,"groups":group data}}	

Example:<http://www.whatsgps.com/structure/getCarGroup.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9>

Response JSON demo

```

{
  "data": {
    "cars": [{
      "activeTime": "2018-04-18",
      "carId": 102725,
      "carNO": "gpsnow-801159",
      "carType": 0,
      "machineName": "S101T 测试-801159",
      "machineType": 3,
      "serviceState": "0",
      "serviceTime": "2019-04-17",
      "userId": 1103
    }],
    "ret": 1
  }
}

```

4.5.3 searches for vehicles based on IMEI or device name

		Type	Value	Description
URL		String	search/searchByNameOrImei.do	
Require parameter	token	String	Mandatory	token
	name	String	Mandatory	Device name/IMEI
Response parameter		JSON	{ret:1 0,data:vehicle}	

Example:<http://www.whatsgps.com/search/searchByNameOrImei.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&name=690618040400016>

Response JSON demo

```
{
  "data": [{
    "activeTime": "2018-04-04",
    "carId": 102760,
    "carNO": "gpsnow-400016",
    "carType": 0,
    "machineName": "S06t-400016",
    "machineType": 18,
    "serviceState": "0",
    "serviceTime": "2019-05-14",
    "userId": 1103
  }],
  "ret": 1
}
```

4.6 Search

4.6.1 According to device name or IMEI to search

		Type	Value	Description
URL		String	search/queryByMachineNameOrImei.do	
Require parameter	token	String	Mandatory	token
	condition	String	Mandatory	query criteria
Response parameter		JSON	{ret:1 0, data:vehicle list}	

Example:<http://www.whatsgps.com/search/queryByMachineNameOrImei.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&condition=690618040400016>

Response JSON demo

```
{
  "data": [{
    "activeTime": "2018-04-04",
    "carId": 102760,
    "carNO": "gpsnow-400016",
    "carType": 0,
    "driverName": "",
    "driverTel": "",
    "imei": "690618040400016",
    "joinTime": "2018-05-14",
    "machineName": "S06t-400016",
    "machineType": 18,
    "password": "F3F72DB27521D43BA89C49F196EACD1E",
    "platformTime": "2019-05-14",
    "remark": "",
    "serviceState": 0,
    "serviceTime": "2019-05-14",
  }]
```

```

        "simNO": "",
        "updateTime": "2018-05-14",
        "userId": 1103
    }],
    "ret": 1
}

```

4.7 Vehicle alarm trigger switch

4.7.1 Alarm switch based on vehicle ID

		Type	Value	Description
URL		String	carAlarmSwitch/getByCarId.do	
Require parameter	token	String	Mandatory	token
	carId	Long	Mandatory	Vehicle id
Response parameter		JSON	{ret:1 0, data:vehicle alarm}	

Example:<http://www.whatsgps.com/carAlarmSwitch/getByCarId.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&carId=102760>

Response JSON demo

```

{
  "data": [{
    "carId": 102760,
    "isOpen": false,
    "type": 1,
    "value": "120"
  }],
  "ret": 1
}

```

4.7.2 Add or update switch

		Type	Value	Description
URL		String	carAlarmSwitch/addOrUpdate.do	
Require parameter	token	String	Mandatory	token
	carId	Long	Mandatory	Vehicle id
	type	Integer	Mandatory	Alarm type
	isOpen	Boolean	Mandatory	Open or not
	value	String	Optional	value
Response parameter		JSON	{ret:1 0}	

Example:<http://www.whatsgps.com/carAlarmSwitch/addOrUpdate.do?token=21cce73e-6078-4a82-a10f-bdf9c10531a9&carId=102760&type=3&isOpen=true>

Response JSON demo

```

{"ret":1}

```

4.8 User traffic alarm message

4.8.1 Query user alarm

		Type	Value	Description
URL	Require parameter	String	carAlarm/getNotReadByUser.do	
Require parameter	token	String	Mandatory	token
Response parameter		JSON	{ret:1 0, data:alarm list}	

Example: <http://www.whatsgps.com/carAlarm/getNotReadByUser.do?token=98af593e-b120-4569-a8ed-efdb33580e92>

Response JSON demo

```
{ "data": [{"alarmId": "4777abaa-e274-4dec-be43-251ea96cbace", "alarmTime": "2018-05-20 07:00:06", "alarmType": 6, "carId": 102547, "dir": 0, "lat": 23.458196, "latC": 23.461942, "lon": 113.169554, "lonC": 113.18145, "machineName": "林肯", "pointTime": "2018-05-20 07:00:03", "pointType": 3, "speed": 0, "userId": 1036, "userType": 2}, {"alarmId": "d941ecfa-8128-4d8a-a067-e4a756d8ab5b", "alarmTime": "2018-05-20 07:00:06", "alarmType": 10, "carId": 102547, "dir": 0, "lat": 23.458196, "latC": 23.461942, "lon": 113.169554, "lonC": 113.18145, "machineName": "林肯", "pointTime": "2018-05-20 07:00:03", "pointType": 3, "speed": 0, "userId": 1036, "userType": 2}], "ret": 1 }
```

4.8.2 According to vehicle id to query

		Type	Value	Description
URL	Require parameter	String	carAlarm/getNotReadByUserCarId.do	
Require parameter	token	String	Mandatory	token
	carId	Long	Mandatory	Vehicle id
Response parameter		JSON	{ret:1 0, data:alarm list}	

Example: <http://www.whatsgps.com/carAlarm/getNotReadByUserCarId.do?token=98af593e-b120-4569-a8ed-efdb33580e92&carId=102572>

Response JSON demo

```
{ "data": [{"alarmId": "53a4c9ad-b732-497e-8dbc-f3bceda40b2a", "alarmTime": "2018-05-19 10:10:06", "alarmType": 5, "carId": 102572, "dir": 131, "lat": 25.482971, "latC": 25.486517, "lon": 106.436089, "lonC": 106.446301, "machineName": "gpsnow-215186", "pointTime": "2018-05-19 10:08:45",
```

```

        "pointType": 1,
        "speed": 6,
        "userId": 1036,
        "userType": 2
    }],
    "ret": 1
}

```

4.8.3 Alarm details

		Type	Value	Description
URL	Require parameter	String	alarmSta/queryDetail.do	
Require parameter	carId	Long	Mandatory	Vehicle id
	alarmType	Integer	Optional	Alarm type
	startTime	String	Mandatory	Starts time (UTC time) (yyyy-MM-dd HH:mm:ss)
	endTime	String	Mandatory	End time(UTC time) (yyyy-MM-dd HH:mm:ss)
Response parameter		JSON	{ret:1 0, Data: alarm details}	The return time is UTC, and it needs to be converted to local time when displayed.

Example: <http://www.whatsgps.com/alarmSta/queryDetail.do?token=98af593e-b120-4569-a8ed-efdb33580e92&carId=102572&alarmType=17&startTime=2018-05-14 00:00:00&endTime=2018-05-18 23:00:00>

5 Enclosure

5.1 Data definition

5.1.1 User type

0	Administrator
1	Dealer
2	Ordinary user
3	Logistics
4	Rental
5	Vehicle users
6	Risk Control

5.1.2 Longitude and latitude type

0	Original longitude and latitude
1	The longitude and latitude of Baidu
2	The longitude and latitude of Google GAD Tencent

5.1.3 Position method

0	No position
1	satellite position
2	Compass position

3	Base position
4	WIFI position

5.1.4 User vehicle alarm filtering definition

1	vibration alarm
2	Power off alarm
3	Low electric alarm
4	SOS help
5	overSpeed Alarm
6	Out of the fence alarm(Judged by the platform)
7	Displacement alarm
8	Low electricity and electricity alarm
9	Out of area alarm
10	Dismantling alarm
11	Light sensing alarm
12	Magnetic sensing alarm
13	tamper alarm
14	Bluetooth alarm
15	Signal shielding alarm
16	False base station alarm
17	Into the fence alarm(Judged by the platform)
18	Into the fence alarm(Judged by the terminal)
19	Out of the fence alarm(Judged by the terminal)

5.1.5 Device type definition

1	S15
2	S05
3	S06
4	SW06
5	S001
6	S08
7	S09
8	GT06
9	S08V
10	S01
11	S01T
12	S116
13	S119
14	TR06
15	GT06n
16	S101
17	S101T
18	S06T
19	S112U
20	S112B
21	SA4

22	SA5
23	S208
24	S10
25	S101E
26	S709

5.1.6 Vehicle icon definition

1	Water drop
2	Van
3	Car
4	Bus
5	Truck
6	Motorcycle
7	ship
8	Mixer
9	Train
10	Taxi
11	agricultural machinery

5.1.7 Vehicle status definition

0	Fortification
1	Unfortified
2	Dormancy
3	Cut off power
4	Running
5	ACC on
6	Door open
7	Cut of Oil
8	Electric valve break
9	Motor lock
10	Low electric voltage
11	Dismantling state

5.1.8 Vehicle alarm trigger definition

1	Overspeed alarm
2	GEO-fence

5.2 Data dictionary

5.2.1 User

userId	User's ID (unique)
parentId	ID of the user's superior account (unique)
userType	User type (dealer, user etc.)
userName	User name (account)
password	Password
joinTime	Account Create time
updateTime	Update time of account info

name	Account name
linkMan	Account's contact
linkPhone	Telephone number
email	Email
address	Address
remark	Remark
allCount	All count of device
underCount	Under count of device
onlineCount	Online count of device
notActiveCount	Not Active count of device

5.2.2 Vehicle

carId	Device's ID (unique)
userId	User's ID (unique)
machineType	Device model
carType	Vehicle type
imei	IMEI number
carNO	Device's plate number
password	Md5(The last six digits of IMEI) md5 use 32 lower-case characters
simNO	Sim card number of device
joinTime	Time for equipment to be added to the platform
activeTime	The time for the equipment to go online for the first time
updateTime	Update time
serviceTime	The expiration time of the device on the platform
platformTime	The expiration time of the use of the equipment on the platform
serviceState	Device's status
driverTel	Vehicle Owner's telephone number
driverName	Vehicle Owner's name
email	Email
address	Address
machineName	Device name
remark	Remark

5.2.3 Location

carId	Id of vehicle
imei	Device's IMEI
dataDt	The last time the device sends a signal to the server, the server responds to the time.
pointDt	Device position time
pointType	Device position type(GPS/base position)
lon	longitude
lonc	Calibrated longitude
lat	latitude
latc	Calibrated latitudes

altitude	altitude
speed	Speed
dir	Direction
status	Device status
alarm	Device alarm type
stopTime	Static time(units:s)
mileage	ODO
remark	Remark

5.2.4 GEO-fence

geoId	Main key
carId	Device's id
type	Fence type (0: circular ; 1: polygon)
radius	Radius of fence (meter)
points	Latitude and longitude (longitude latitude comma separates, and longitude and latitude separates between semicolons, such as points=113.445603,23.171902).
exData	exData

5.2.5 Tree structure user data

userId	Account's id
parentId	superior account's id
userType	User type
name	User name
hasChild	Sub-account or not
underNum	Vehicle amount of belonging this account
totalNum	All vehicle amount of this account(include sub-account)

5.2.6 Vehicle tree data

carId	Device id
userId	User id
carGroupId	Id of car group
carNO	Device's plate number
machineName	Device name
machineType	Device type
carType	Vehicle type
serviceTime	The expiration time of the device on the platform
serviceState	Service status (0: unexpired, 1: expired)

5.2.7 Vehicle final state data

carId	Device id
online	Device online or not(0: offline, 1: online)
pointTime	Location of the packet time (UTC)
heartTime	Time for heartbeat (UTC)
staticTime	The time when the equipment is still (UTC)

pointType	Position method
lon	Longitude
lat	latitude
lonc	Calibrated longitude
latc	Calibrated latitude
speed	speed
dir	direction
status	Device status
alarm	Device alarm type
isStop	Place of equipment stop or not
stopTime	The residence time of the device (unit: Second)

5.2.8 Vehicle alarm switch

carId	Device id
type	Device alarm type
isOpen	Open it or not
value	value

5.2.9 User vehicle alarm switch

userId	Account id
type	Device alarm type
isOpen	Open it or not

5.2.10 Alarm type

alarmId	Alarm typeid
userType	User type
userId	Account id
carId	Vehicle id
machineName	Device name
alarmType	Device alarm type
alarmTime	Alarm time
pointTime	Position time
speed	speed
dir	direction
pointType	Position method
lon	Longitude
lat	Latitude
isNew	Is it new alarm
remark	Remark

5.2.10.1 ACC

imei	imei
pointDt	Location time
state	Acc status(1:open; 0:close)
time	Static time(Units:s)
lon	Longitude

lat	Latitude
remark	remark

5.3 Code definition

5.3.1 Platform error code

-101	System abnormality
-102	Unauthorized operation
-1001	Please send token
-1002	Error token
-2001	Longitude is not null
-2002	Latitude is not null
-2003	Radius is not null
-2004	Start time is not null
-2005	End time is not null
-2007	Type of longitude and latitude before conversion is not null
-2008	Type of latitude and longitude is not null after conversion
-2009	Search conditions is not null
-10001	Login name is not null
-10002	Password is not null
-10003	Error account/password
-10004	User id is not null
-10005	The user name already exists
-10006	user does not exist
-10007	User type is not null
-10008	Client name is not null
-10009	Parent id is not null
-10019	Mobile phone number is illegal
-20001	Vehicle id is not null
-20002	No vehicle exists
-20003	Imei is not null
-20004	Device name is not null
-20005	user service date is not null
-20006	IMEI must be 15 digits
-20007	Device type is not null
-20008	IMEI has already existed
-20009	Platform service date is not null
-40001	Geo-fence type is not null
-40002	Longitude and latitude is not null
-40003	Geo fence has already existed
-50001	Group id is not null
-50002	Group name is not null
-60001	Vehicle alarm type is not null
-60002	Alarm switch is not null
-60003	Value of alarm switch is not null

-80001	Alarm id is not null
-90001	Device type serial number is not null
-90002	device type corresponding to the serial number has already existed
-90003	Type of device corresponding to the serial number does not exist
-90004	Name of the device type is not null
-90005	Type spare is not null