device/user synchronization interface

project	explain
agreement	Http Post
format	UTF-8
URL	device/user synchronization url: https://106.75.150.141:8443/v2/eapi/dbpool/getdata?partid=Y1DMATNYSMZPOKC3R8NJ&appid=CN6SDL3H5K4UL55YP77L &random=13644564566
explain	get the device data and user data under the management account through the interface

request body:

```
"type": "device", //data type obtained: "device"/"user"
  "ctime": "2021-03-10",
  "loginname": "zhangsan",
  "sig":"7afdea03fb0d62fe6d316bcb499f9e0c49c148e9a977180a719deaf529f1c161",
}
explain:
partid: manufacturer ID
appid: application ID
random random number converts the current time to milliseconds
sig: MD5 value of (loginname=xxx&pwd=yyy&random=zzz) are encrypted in sha256
        loginname=zhangsan,pwd=123456,random=13644564566
kev=b206bfd3fea7ef0db929998642c8ea54cc70
the encryption formula is
sha256(md5(loginname=zhangsan&pwd=123456&random=13644564566), key);
the encrypted value is
228A0551179F9F9F255BE74C8230CDA4A7544B91E78EA04F08426617B89F981C
note: the key needs to be configurable, and the key needs to be replaced for
formal production
```

return device packet body:

```
"result": 0,
   "errmsg": "",
   "type": "device",//data type obtained: "device"/"user"
   "count":100,//data quantity of this query
   "data":{
        "devicesn":"32423sadsads",//device sn
        "devicestatus":1, //device status (0-inactive / 1-normal / 2-locked / 3-invalid)
        "online_status":1,//device status, 0 -- offline, 1 -- Online
        "calcvalue": 50.0000,//calculation power
        "calcmode":1,//number of copies
        "ownerid": 281621005598896, //device owerid
        "ower_name":"xxx",//owner name
```

```
"buytime":"2021-03-11 03:30:12",//buy time
        "refereruserid":281621005598895,//references userid
        "referercode":"xxx",//references code
        "referername": "xxx1", //references name
        "deviceclass":1, //device type 1 physical token 2 cloud device
        "online_time":"2021-03-11 03:30:12",//last online time
        "offline_time":"2021-03-11 03:30:12",//last offline time
        "device_ip":"192.168.20.108",//ip
        "device_vip":"192.168.20.108",//virtual IP
        "device_localtion":"192.168.20.108",//device address
     }
}
return user packet body:
    "result": 0,
    "type": "user",
    "errmsg": "",
    "count": 2,
    "data": [
        {
            "userid": 11111111111,//user id
            "loginname": "112", //login name
            "nickname": "", //nickname
            "firstname": "fdfgd", //firstname
            "lastname": "ddddddd",//lastname
            "appid": "ddddddd",//application ID
            "partnerid": "ddddddd",//manufacturer ID
            "mbpoint": 2.00000000,//user points
            "userstatus": 1,//user status 0 - normal 1 - inactive 2 - locked 3 -
voided 4 - expired
            "phone": "15918553889",//phone
            "email": "804882111@qq.com",//email
       }
   ]
}
```

nfcflow synchronization interface

project	explain
agreement	Http Post
format	UTF-8
URL	nfcflow synchronization url: https://65.19.174.235:8443/v2/eapi/dbpool/getd ata?partid=Y1DMATNYSMZPOKC3R8NJ&appid=CN6SDL3H5K4UL55YP77L&ra ndom=13644564566
explain	get the nfcflow data under the management account through the interface

request body:

```
{
  "type":"nfcflow",//data type obtained: "nfcflow"
```

```
"ctime":"2021-03-10",//it means to query the revenue of which day
  "loginname": "zhangsan",
   "sig":"7afdea03fb0d62fe6d316bcb499f9e0c49c148e9a977180a719deaf529f1c161",
}
explain:
partid: manufacturer ID
appid: application ID
random: random number converts the current time to milliseconds
sig: MD5 value of (loginname=xxx&pwd=yyy&random=zzz) are encrypted in sha256
          loginname=zhangsan,pwd=123456,random=13644564566
key=b206bfd3fea7ef0db929998642c8ea54cc70
the encryption formula is
sha256(md5(loginname=zhangsan&pwd=123456&random=13644564566), key);
the encrypted value is
228A0551179F9F9F255BE74C8230CDA4A7544B91E78EA04F08426617B89F981C
note: the key needs to be configurable, and the key needs to be replaced for
formal production
```

return nfcflow packet body:

```
{
    "result": 0,
    "errmsg": "",
    "type": "nfcflow",// nfcflow data
    "count":100,//data quantity of this query
        "ctime":"2021-03-10",//revenue day
        "devicesn": "2342342", //device SN
        "slow_bill":2332422423433,//flow unit B
        "mbpoint":343,//consumption points NB
        "nfc_num":43,//profit NFC
        "transfer_no":"0x123dd...",//transfer serial number is generated after
blockchain transfer
        "trans_flag":1,//transfer status, 1 succeeded, 2 failed, 0 to be
transferred, 3 transferring
        "transtime":"2021-03-11 03:30:12" //transfer time
}
```

point transfer interface

project	explain
agreement	Http Post
format	UTF-8
URL	point transfer url: https://106.75.150.141:8443/v2/eapi/dbpool/transfermbp? partid=xxxxx&appid=xxxxxxx&random=xxxxxx
explain	the management account transfer points through this interface

request body:

```
{
    "trout_userid":"123456789",//id of the user to transfer out point
```

```
"trin_userid":"987654321",// id of the user to transfer in point

"mbpoint":"2.00000", //point value

"loginname":"zhangsan",//management account

"sig":"7afdea03fb0d62fe6d316bcb499f9e0c49c148e9a977180a719deaf529f1c161",//sign,
the same as device synchronization interface
}

explain:
partid: manufacturer ID
appid: application ID
random: random number converts the current time to milliseconds
trout_userid: id of the user to transfer out point
trin_userid: id of the user to transfer in point
mbpoint: point value
```

return packet body:

```
{
    "result": 0,
    "errmsg": "success"
}
error code
0 success
1 invalid user ID
2 invalid transfer points
3 user points is not enough
```