1. Interface for pack-up and unpacking

- 1) Request URL: http://ServerIP:8091/upus_APP/app/expressbox/hpickupbill
- 2) Request Methods:: Get
- 3) Example: http://ServerIP:8091/upus_APP/app/expressbox/hpickupbill? compno=87690001&devno=JD88&billno=FCB51245121&telno=13784521465&sign=0c2fed585ca54052d72df86e 2fb1673e
- 4) Parameter Description
 - a) compno: Express firm ID
 - b) devno: Device ID
 - c) billno: Parcel ID
 - d) telno: Consignee's phone number
 - e) sign: Signature, Format: compno + devno + billno + telno + token, then do md5
- 5) Return result
 - a) Return mode: json
 - b) Json:Parsed parameter
 - i. msg: Returen message, If the call fails, it is not null, success is null
 - ii. data: Return operation data, if it fails, it is null, Success is not null
 - iii. sucess: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result
```

```
{
  "msg": "Signature verification failed!",
  "data": null,
  "success": "0"
}

Example of returning successful result
  {
  "msg": "Operation successfully!",
  "data": "Pick up successfully!"
```

2. Status and access record query interface

- 1) Request URL: http://ServerIP:8091/upus APP/app/expressbox/billIst
- 2) Request Methods: Get
- 3) Example:

"success": "1"

}

http://ServerIP:8091/upus_APP/app/expressbox/billlst?compno=87690001&billno=1806130001&stateno=0&fix no=A01&depuser=ADMIN&depbegtime=2018-06-13 00:00:00&dependtime=2018-06-13 23:59:59&takebegtime=2018-06-13 00:00:00&takeendtime=2018-06-13

23:59:59&recphone=18745102145&pagesize=10&pageindex=1&sign=0c2fed585ca54052d

- 4) Parameter Description
 - a) compno: Express firm ID
 - b) billno: Parcel ID
 - c) stateno: Parcel status
 - i. 0: Stored in locker

```
ii.
             1: Pick-up by consignee
      iii.
             2: Overdue and not pick-up
      iv.
             3: Overdue but pick-up
    d) fixno: Locker number
    e) depuser: Courier ID
    f)
        depbegtime: Beginning time of deliver parcel
        dependtime: End time of deliver parcel
    g)
        takebegtime: Beginning time of pick-up parcel
    h)
    i)
        takeendtime: End time of pick-up parcel
    i)
        recphone: Consignee's phone number
    k) expno: Inner Record number
    I)
        pagesize: (Pagination) How many records per page
    m) pageindex: (Pagination) Page number
    n) sign: Signature, Format: compno + billno + stateno + fixno + depuser + token, then do md5
5) Return result
    a) Return mode: json
    b) Json Parsed parameter
       i.
             msg: Returen message, If the call fails, it is not null, success is null
       ii.
             data: Return operation data, if it fails, it is null, Success is not null JSON ARRAY
      iii.
             sucess: Call success or failure flag, "1" means success, "0" means failure
Example of returning failed result
    "msg": "Parameter incorrect!",
    "data": null,
    "success": "0"
  }
 Example of returning successful result
  "msg": "search successful!",
  "data": {
      "pagecnt": "1",
      "reccnt": "1",
      "record": [
          {
               "recno": "1",
               "deptel": "13633880292",
              "fixna": "xll48",
               "imgtype": "SMS sent",
               "takecode": "890920",
               "rowid": "1",
               "takepics": "http://www.upus.cn:8091/Userfile/Attach/1568167112194-86977.jpg",
                               // Pick up the captured image path
               "statena": Picking-up by Receiver",
               "depuser": "xll",
               "taketime": "2019-09-11 09:58:31.937",
               "deptime": "2019-09-11 09:58:11.02",
```

```
"recphone": "13101794443",
             "expno": "67066334223928",
             "shelfna": "005048A11",
             "billno": "jgd",
             "recname": null,
             "deppics": "http://www.upus.cn:8091/Userfile/Attach/1568167092443-41258.jpg"
                           // Snapshot image path
         }
     ]
  },
  "success": "1"
 }
3. Open/close lockers, switch on/off power
   Request URL: http://ServerIP:8091/upus APP/app/Lock/openLocks
```

- 2) Request Methods: Get
- 3) Example:

http://ServerIP:8091/upus_APP/app/Lock/openLocks?compno=87690001&logno=ADMIN&action=0&data={"fixn $o":"00201","dtl":[\{"shelfno":"00201A101","boardno":"1","lockno":"1"\}, \{"shelfno":"00201A102","boardno":"1","lockno":"1", \{"shelfno":"00201A102", \{"shelfno":"00201A102", \{"shelfno":"1", \{"s$ ockno":"2"}]}&sign=0c2fed585ca54052d

- 4) Parameter Description
 - a) compno: Express firm ID
 - b) action: Button selection:
 - i. 0: open lock
 - 1: switch on
 - iii. 2: switch off
 - 3: status iv.
 - c) logno: User logged in
 - d) sign: Signature, Format: compno + logno+ action+token, then do md5
 - e) data:
 - i. ison data
 - ii. fixno: device number
 - iii. dtl: detailed data
 - shelfno: locker id iv.
 - boardno: board number ٧.
 - lockno: lock number vi.

5.Return result

- a) Return mode: json
- b) Json Parsed parameter
 - i. msg: Returned message!
 - ii. sucess: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result
        "msg": cabinet network not reliable!",
```

```
"success": "0"
  }
```

```
Example of returning successful result

{
    "success": "1",
    "msg": "Locker or Locker Channel A02: OPENED"
}

4. Get status by device number

1) Request URL: http://ServerIP:8091/upus_APP/app/expressbox/allstate
2) Request Methods: POST, The request parameter is placed into the request stream
3) Example of request parameter: {"compno": "87695551","devno": "A01","sign": "0c2fed585ca54052d"}
4) Parameter Description
a) compno: Express firm ID
b) devno: Device ID
c) sign: Signature, Format: compno + devno + token, then do md5
5) Return result
a) Return mode: json
```

b) Json Parsed parameteri. msg: Returen message, If the call fails, it is not null, success is null!

ii. data: Return operation data, if it fails, it is null, Success is not null. when it is successful, it is json array according to board number, success in array is status of return data, 0 means failure, 1 means success, msg is status, it is binary data listed by lock number, Electronic lock with door opening feedback, 0 means open, 1 means close, Electronic lock with closed door feedback is the opposite

iii. success: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result
      "msg": "Signature verification failed!",
      "data": null,
      "success": "0"
Example of returning successful result
      "msg": "Successful operation!",
      "data": [
          {
               "boardno": 1,
               "success": "1",
               "msg": "10111111111111111111111"
          },
               "boardno": 2,
               "success": "0",
               "msg": "query timeout"
          }
     ],
      "success": "1"
}
```

5. Android host uploads device abnormal information at fixed time

```
Request URL: http://ServerIP:8091/upus APP/app/expressbox/ uploaderror
    Request Methods: POST, The request parameter is placed into the request stream
2)
    Request parameter sample: {"compno": "87695551","devno": "A01","shelfno": "A01","sign":
    "0c2fed585ca54052d"}
4) Parameter Description
    a) compno: Express firm ID
    b) devno: Device ID
    c) shelfno: Locker ID
    d) sign: Signature, Format: compno + devno + shelfno + token, then do md5
5) Return result
    a) Return mode: json
    b) JsonParsed parameter
              msg: Returen message, If the call fails, it is not null, success is null
       ii.
              data: Return operation data, if it fails, it is null, Success is not null
              sucess: Call success or failure flag, "1" means success, "0" means failure
Example of returning failed result
    "msg": "Signature verification failed!",
    "data": null,
    "success": "0"
Examples of returning successful results
    "msg": "Successful operation!",
    "data": "Successful operation!",
    "success": "1"
}
```

6. POST after Parcel deposited

```
1) Post URL: http:// (URL provided by the customer)
```

2) Post Methods: POST, The request parameter is placed into the request stream

```
3) Request parameter sample: {
    "orderId":"original order number _receiver number",
    "closeTime":"deposit time",
    "password":"verification code",
    "location":"deposit address",
    "locker":"device numbe",
    "number":"box number"}
```

7. Post after parcel collected

```
1) Post URL: http:// (URL provided by the customer)
```

2) Post Methods: POST, The request parameter is placed into the request stream

```
3) Request parameter sample: {
    "orderId": "original order number",
    "time":"collect time"}
```

8. Common operation box interface

```
Request URL: http://ServerIP:8091/upus_APP/app/cabinet/openboxs/put
2)
     Request mothod: Post, The request parameter is placed into the request stream
3)
     Request parameters example: {
     "compno": "87695551",
     "devno": "A01",
     "detail": [{"boardno": "1",
     "lockno": "1",
     "action": "0"},
     {"boardno": "2",
     "lockno": "2",
     "action": "0"}],
     "sign": "0c2fed585ca54052d"}
4) Parameter description
     a) compno: Express firm ID, required
     b) devno: Divice number, required
     c) boardno: Board number, required
     d) lockno: Lock number, required
     e) action: (required)
        i.
              0 : open lock
        ii.
              1: switch on
       iii.
              2: switch off
         sign: Signature, Format: compno + devno +token, then do md5, required
5) Returen result
     a) Returen method: json
     b) Json: Parameter after analysis
        i.
               msg: Returen message, If the call fails, it is not null, success is null
              success: Call success or failure flag, "1" means success, "0" means failure
        ii.
 Example of returning failed result
     "msg": "Signature verification failed!",
     "success": "0"
}
Example of returning successful result
     "msg": "Successful operation!",
     "success": "1"
}
```

9. Public drop off interface

1) Post URL: http://ServerIP:8091/upus_APP/app/cabinet/express/post

```
Post method: POST, The request parameter is placed into the request stream
   3) Post parameter example: {
        "compno": "87695551",
        "devno": "A01",
        "logno": "ADMIN",
        "data": [{"shelfno": "A01",
                 "billno": "SB18050001",
                 "tel": "13500010001" },
                 { "shelfno": "A01",
                   "billno": "SB18050001",
                   "tel": "13500010001" }],
         "sign": "0c2fed585ca54052d"}
    4) Parameter decription
            compno: Express firm ID, required
        a)
        b) devno: device number, required
            logno: log in number, required
        d) shelfno: box number, required
        e)
            billno: original order number, required
            tel: phone number, If it has been recorded in the pre-entry, can leave it blank, otherwise it is required
        f)
        g) sign: Signature, format: compno + devno + logno + token, that do md5
       Returen result
        1) Return method: json
        2) Json: Parameter after analysis
             a) msg: Returen message, If the call fails, it is not null, success is null
             b) success: Call success or failure flag, "1" means success, "0" means failure
    Example of returning failed result
   {
        "msg": "Signature verification failed!",
        "success": "0"
   Example of returning successful result
        "msg": "Successful operation!",
        "success": "1"
   }
10.
        Public query cargo interface
        Request URL: http://ServerIP:8091/upus_APP/app/cabinet/boxs/get
   1)
        Request method: GET, The request parameter is placed into the request stream
   2)
        Request parameter example:
        ?compno=87695551&devno=A01&boxtype=1&cateno=2&sign=0c2fed585ca54052d
```

Parameter description

c) boxtype: box type

a) compno: Express firm ID, requiredb) devno: device ID, required

0 :can be used,1 all, default is all

```
d) cateno: bill type
           0 express, 1 parcel, Default no charge 2
     e) sign: Signature, format: compno + devno +token, then do md5
     Returen result
     a) Returen method: json
     b) Json: Parameter after analysis
         i.
               msg: Return message, If the call fails, it is not null, success is null
        ii.
               data:
               kindno: box type no,
               kindna: box type name,
               price: Storage price,
               stateno: status number
               statena: status name
               shelfno: box number
               posno: box name
               boardno: board number
               lockno: lock number
        iii.
               success: Call success or failure flag, "1" means success, "0" means failure
 Example of returning failed result
{
      "msg": "Signature verification failed!",
     "success": "0"
Example of returning successful result
   "msg": "query successful!",
   "data": [
        {
             "kindno": "2",
             "kindna": "big box",
             "price": "0.00",
             "stateno": "1",
             "lockno": "1",
             "posno": "A101",
             "shelfno": "00101A101",
             "boardno": "1",
             "statena": "cab be used"
        },
        {
             "kindno": "0",
             "kindna": "small box ",
             "price": "0.00",
             "stateno": "1",
             "lockno": "2",
             "posno": "A102",
             "shelfno": "00101A102",
             "boardno": "1",
```

{

```
"statena": "can be used"
          }
      ],
      "success": "1"
 }
11.
        Public get /input interface
        Request URL: http://ServerIP:8091/upus_APP/app/cabinet/order/post
        Request method: POST, The request parameter is placed into the request stream
    3) Example: {"compno": "87690001","depotno": "006","logno": "ADMIN", "billno": "435233124456745","telno":
        "13789451245", "sign": "0c2fed585ca54052d"}
    4) Parameter
            compno: Express firm ID, required
        a)
        b) depotno: Site number, required
            logno: Log In ID, required
        d) billno: original bill number, required
        e) telno: phone number, required
            sign: Signature, format: compno + depotno + billno + telno +token, then do md5
    5) Returen result
        a) Return result: json
        b) Json: Parameter after analysis
                 msg: Returen message, If the call fails, it is not null, success is null
           i.
                 success: Call success or failure flag, "1" means success, "0" means failure
    Example of returning failed result
        "msg": "Signature verification failed!",
        "success": "0"
   Example of returning successful result
   {
        "msg": "Successful operation!",
        "success": "1"
   }
```

12. Public query receipt data

- 1) Request URL: http://ServerIP:8091/upus_APP/app/cabinet/order/get
- 2) Request method: Get, the request parameter is placed into the request stream
- 3) Example: ?compno=87695551&depotno=A01&begdate=2018-01-01& enddate=2018-10-01&sign=0c2fed585ca54052d
- 4) Parmeter deceiption
 - a) compno: Express firm ID, required
 - b) depotno: depotno: Site number, required
 - c) begdate: start date Format 2018-01-01 Required
 - d) enddate: end date Format 2018-01-01 Optional
 - e) sign: Signature, Format: compno + depotno +token then do md5

```
5) Returen result
                    a) Return method: json
                    b) Json: Parameter after analysis
                            i.
                                           msg: Returen message, If the call fails, it is not null, success is null!
                            ii.
                                           data:
                                                                  entryOrder total amount get
                                                                      Total amount deposited
                                           delivery
                                           takeout
                                                                        Total amount collected
                                           success: Call success or failure flag, "1" means success, "0" means failure
                          iii.
          Example of returning failed result
         {
                     "msg": "Signature verification failed!",
                     "success": "0"
         }
       Example of returning successful result
               "msg": " Query successful!",
               "data": {
                           "entryOrder": "0",
                          "delivery": "3051",
                           "takeOut": "2689"
               "success": "1"
13.
                    Create a new user interface
                    Request URL: http://ServerIP:8091/upus_APP/app/Register/expressRegisterOut
         1)
         2)
                    Request Methods: Get
                                                  ?data={"cocode":"ZY","logno":"666","password":"1","cellphone":"15323457975","openid":"00201A
                    102", "userna": "bbb", "custno": "002", "depotno": "001", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c59faa8c + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c596 + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c596 + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c596 + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c596 + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c596 + 102", "cardno": "123456" \} \& sign = 77a28602987c4b0a41c596 + 102", "cardno": "123456" \} \& sign = 77a28602986 + 102", "cardno": "123456 + 102", "cardno": 
                    19c10d
                   Parameter Description
                    a) sign: Signature, Format: logno+ cocode+ cellphone+token, then do md5
                    b) data: json DATA
                            i.
                                           cocode: Company Code
                           ii.
                                           logno: Registrant login number, required
                                           password: Login password, required
                          iii.
                          iv.
                                           cellphone: Registrant Phone, required
                           ٧.
                                           openid: Wechat openid, required
                                           userna: Name of Registrant
                          vi.
                                           custno: Customer Number
                         vii.
                        viii.
                                           depotno: Site number
                                           cardno: Registrant card number
                           ix.
                  Return result
                    a) Return mode: json
```

b) Json Parsed parameter

msg: Returned message!

```
d) sucess: Call success or failure flag, "1" means success, "0" means failure
    Example of returning failed result
        "msg": " This user is already registered !",
        "success": "0"
    Example of returning successful result
       "success": "1",
      "msg": "Registration success!"
     Modify user information interface
     Request URL: http://ServerIP:8091/upus_APP/app/Register/expressUpdateUserOut
 2)
     Request Methods: Get
 3) Example: ?data={"password":"1","cellphone":"15323457975","openid":"00201A102","userna":"bbb","cardno
     ":"123456"}cocode=ZY&logno=666depotno=001&sign=77a28602987c4b0a41c59faa8c19c10d
 4) Parameter Description
     a) sign: Signature, Format: logno+ cocode+ depotno+token, then do md5
     b) data: json DATA
              password: User password
        i.
        ii.
              cellphone: User mobile phone number
              openid: User Wechat openid
       iii.
       iv.
              userna: User name
              cardno: User card number
     c) cocode: Company Code, required
     d) logno: User login number, required
     e) depotno: Site number, required
 5) Return result
     a) Return mode: json
     b) Json Parsed parameter
              msg: Returned message!
        i.
              sucess: Call success or failure flag, "1" means success, "0" means failure
Example of returning failed result
      {
       "msg": " Failed to modify user information!",
        "success": "0"
      }
Example of returning successful result
       "success": "1",
       "msg": " Successfully modify user information!"
```

14.

15. Public search lockers

```
Request URL: http://ServerIP:8091/upus_APP/app/Laundry/getFixList
     Request method: Get, the request parameter is placed into the request stream
     Request parameter example:
3)
     ?sign=415e25350c81cbf50348a46ec1323c00&compno=87550088&custno=0001&depotno=001
    Parameter description
     a) compno: company id, required
     b) custno: Customer number, required
     c) depotno: Site number, required
     d) sign: Signature, format: compno + custno+token, then do md5
5) Returen result
     a) Returen method: json
     b) Json: Parameter after analysis
        i.
              msg: [Return message, If the call fails, it is not null, success is null!
        ii.
              data:
                   depotna: Site name
                   depotno: Site number
                   libno: location number
               libna: location name
                   fixno: device number
                  fixna: device name
              success: Call success or failure flag, "1" means success, "0" means failure
       iii.
 Example of returning failed result
     "msg": "Signature verification failed!",
     "success": "0"
Example of returning successful result
   "msg": " search successful!",
   "data": [
       {
            "depotna": "Maritime University",
            "depotno": "001",
            "libno": "00101",
            "fixna": " Large catering cabinet No. 1 ",
            "fixno": "HB01-01",
            "libna": " Nanyuan Building Entrance "
       },
       {
            "depotna": "Maritime University",
            "depotno": "001",
            "libno": "00104",
            "fixna": "Small catering cabinet No. 1",
            "fixno": "HB02-01",
```

"libna": " Postgraduate entrance on the 25th floor"

```
{
               "depotna": "Maritime University",
               "depotno": "001",
               "libno": "00105",
               "fixna": " Small catering cabinet No. 2",
               "fixno": "HB02-02",
               "libna": " Men's Hostel 29th floor entrance"
         },
               "depotna": "Maritime University",
               "depotno": "001",
               "libno": "00106",
               "fixna": " Small catering cabinet No. 3",
               "fixno": "HB02-03",
               "libna": " Entrance to the 52nd floor of the female dormitory"
         },
         {
               "depotna": "Maritime University",
               "depotno": "001",
               "libno": "00102",
               "fixna": " Large catering cabinet No. 2",
               "fixno": "HB01-02",
               "libna": " Male dormitory 34-35 floor middle"
         },
         {
               "depotna": "Maritime University",
               "depotno": "001",
               "libno": "00107",
               "fixna": " Small catering cabinet No. 4",
               "fixno": "HB02-04",
               "libna": " Men's Dormitory 58-59 floor entrance "
         },
               "depotna": "Maritime University",
               "depotno": "001",
               "libno": "00103",
               "fixna": " Large catering cabinet No. 3",
               "fixno": "HB01-03",
               "libna": " Opposite to the newsstand "
         }
     ],
     "success": "1"
}
```

},

16. Public search lockers type

1) Request URL: http://ServerIP:8091/upus_APP/app/Laundry/getshelfType

```
Request method: Get, The request parameter is placed into the request stream
2)
3)
     Request parameter example:
     ?sign=0a27ce59587abdfaba3f7dea556f910f&compno=87550088&fixno=HB01-01&depotno=001
     Parameter description
     a) compno: company id, required
     b) fixno: device number, required
     c)
          depotno: Site number, required
     d) sign: Signature, format: compno + fixno+token, then do md5
    Returen result
     a) Returen method: json
     b) Json: Parameter after analysis
         i.
               msg: Return message, If the call fails, it is not null, success is null!
        ii.
               data:
               \triangleright
                   kindno: Cargo Type Number,
                   kindna: Cargo type name,
                   leftnum: Available cargo space,
                   allnum: Total cargo quantity,
                   price: Inventory price
              success: Call success or failure flag, "1" means success, "0" means failure
        iii.
Example of returning failed result
     "msg": "Signature verification failed!",
     "success": "0"
Example of returning successful result
   "msg": "search successful!",
   "data": [
       {
            "leftnum": "89",
            "kindno": "0",
            "kindna": "small box",
            "price": "0.00",
            "allnum": "89"
       },
       {
            "leftnum": "55",
            "kindno": "1",
            "kindna": " medium box",
            "price": "0.00",
            "allnum": "79"
       },
        {
            "leftnum": "16",
            "kindno": "2",
            "kindna": "big box",
```

"price": "0.00",

```
"allnum": "18"
          },
          {
               "leftnum": "1",
               "kindno": "3",
               "kindna": "large box",
               "price": "0.00",
               "allnum": "2"
          }
      ],
      "success": "1"
 }
17.
        Smart laundry locker order interface
        Request URL: http://ServerIP:8091/upus APP/app/Laundry/saleToBgconv
   2)
        Request Methods: Get
   3) Example:
        ?data={"fixno":"HB01-
        01","origno":"1525855","linktel":"13565658585","kindno":"1","cvtype":"0"}&sign=77a28602987c4b0a41c59faa
        8c19c10d&compno=87550088&depotno=001
   4) Parameter Description
        a) sign: Signature, Format: logno+origno+token, then do md5
        b) compno: company id, required
            depotno: Site number, required
        d) data: json,data
             fixno: device number, required,
             > origno: Order number (required and unique),
             linktel: User phone number, required,
                 kindno: Cargo type, required (0: small box, 1: medium box, 2: big box, 3: large box),
                 cvtype: order type,required(0: Save dirty clothes order, 1: Save clean clothes order),
   5) Return result
        a) Return mode: json
        b) Json Parsed parameter
                 msg: Returned message!
           i.
                 sucess: Call success or failure flag, "1" means success, "0" means failure
  Example of returning failed result
   {"msg": " The order already exists !",
```

18. Register customer information interface

- 1) Request URL: http://ServerIP:8091/upus_APP/app/Register/bgcustinfoAPP
- 2) Request Methods: Get

Example of returning successful result

"msg": " Order saved successfully!"}

"success": "0"}

{"success": "1",

3) Example:

?sign=358a6223c2c3d71e88fe34362f2abbd3&compno=87690001&data={"custna":"dfjksajkl","spell":"aaa","compna":"dsggggg","principal":"gfg","telno":"345564566","faxno":"","email":"","http":"www.4387784378897.cn", "addr":"sdfgdsggd","curno":"001","remark":"gdgsd"}

- 4) Parameter Description
 - a) sign: Signature, Format: logno+origno+token, then do md5 token:upus O,difLF9406-87
 - b) compno: company id, required
 - c) data: json data,
 - i. custna: Customer abbreviation, required,
 - ii. spell: Customer old number,
 - iii. compna: Customer's full name,
 - iv. principal: Customer responsible,
 - v. telno: Customer company phone number,
 - vi. faxno: device number,
 - vii. email: email address,
 - viii. http: Homepage URL,
 - ix. addr: company address,
 - x. curno: Settlement currency number,
 - xi. remark: Remark
- 5) Return result
 - a) Return mode: json
 - b) Json Parsed parameter
 - i. msg: Returned message
 - ii. sucess: Call success or failure flag, "1" means success, "0" means failure

Example of returning failed result

```
{"msg": "The mailbox name is illegal!",
    "success": "0"}

Example of returning successful result
    {"success": "1",
    "msg": "Operation Success !"}
```

19. Get currency list interface

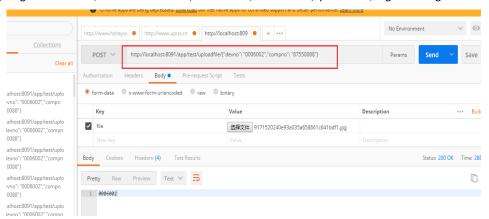
- 1) Request URL: http://ServerIP:8091/upus APP/app/Register/getcurno
- 2) Request method: Get, The request parameter is placed into the request stream
- 3) Request parameter example: ?sign=358a6223c2c3d71e88fe34362f2abbd3&compno=87690001
- 4) Parameter description
 - a) compno: company id, required
 - b) sign: Signature, format: compno +token then do md5 token:upus_O,difLF9406-87
- 5) Returen result
 - a) Returen method: json
 - b) Json: Parameter after analysis
 - i. msg: Return message, If the call fails, it is not null, success is null!
 - ii. data:
 - curno: currency number,
 - > expchar: Currency code
 - iii. success: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result
       "msg": "Signature verification failed!",
       "success": "0"
  }
 Example of returning successful result
     "msg": "search successful!",
     "data": [
         {
               "expchar": "RMB",
              "curno": "001"
         },
              "expchar": "USD",
              "curno": "002"
         },
         {
              "expchar": "HKD",
               "curno": "003"
         },
              "expchar": "EUR",
              "curno": "004"
         },
               "expchar": "NTD",
               "curno": "005"
         },
         {
               "expchar": "GRP",
               "curno": "006"
         },
              "expchar": "THB",
               "curno": "007"
         },
         {
              "expchar": "JPY",
               "curno": "008"
         }
     ],
     "success": "1"
}
```

20. Upload product image interface

- 1) Request URL: http://ServerIP:8091/upus_APP/app/BgpartManage/uploadAdvertFiles
- 2) Request method: post form submission
- 3) Example: http://ServerIP:8091/upus_APP/app/BgpartManage/uploadAdvertFiles/
 {"compno":"87690001","fixno":"JD100","pluskind":"1","boardno":"0","plusno":"0","begdate":"2018-0906","enddate":"2018-09-

30", "begtime": "00:01", "endtime": "23:59", "stride": "1", "remark": "", "plusna": "", "sign": "sdffdgrewre43fd" }



4) Parameter Description

- a) compno: company id, required
- b) fixno: device number
- c) pluskind: Additional equipment or function type
 - > 0: flashlight
 - > 1: Cooling fan
 - 2: Half screen AD
 - 3: Full screen AD
- d) boardno: Control board number
- e) plusno: Additional equipment or function number
- f) begdate: Validity period start date
- g) enddate: Validity period end date
- h) begtime: Validity period start time
- i) endtime: Validity period end time
- j) stride: Does the end time span to the next day 0:no 1:yes
- k) remark: Remark
- I) sign: Signature, format: compno+fixno+token, then do md5

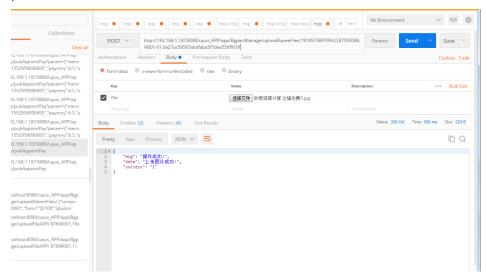
5) Returen result

- 1) Returen method: json
- 2) Json: Parameter after analysis
 - a) msg: Return message
 - b) sucess: Call success or failure flag, "1" means success, "0" means failure

21. Upload smart locker snapshot picture interface

- 1) Request URL: http://ServerIP:8091/upus_APP/app/BgpartManage/uploadExpeeFiles
- 2) Request method: post

 $http://ServerIP:8091/upus_APP/app/BgpartManage/uploadExpeeFiles/1918573897956,0,87550088, HB01-01,0a27ce59587abdfaba3f7dea556f910f$



3) Parameter Description

Example:1918573897956,0,87550088,HB01-01,0a27ce59587abdfaba3f7dea556f910f

- ➤ 1918573897956 → Original order number
- \triangleright 0 \rightarrow drop off 1 \rightarrow pick up
- ➤ 87550088 → company id
- ➤ HB01-01→device number
- > 0a27ce59587abdfaba3f7dea556f910f → Signature, format: company id+device number+token, then do md5
- 4) Returen result
 - a) Returen method: json
 - b) Json: Parameter after analysis
 - i. msg: Return message
 - ii. sucess: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result

{
    "msg": "signature verification failed!",
    "success": "0"
}

Example of returning successful result
{
    "msg": " Picture uploaded successfully!",
    "success": "1"
}
```

22. Get smart locker picture path interface

- 1) Request URL: http://ServerIP:8091/upus_APP/app/BgpartManage/getPictPath
- 2) Request method: get
- 3) Example: http://localhost:8080/upus_APP/app/BgpartManage/getPictPath?compno=87550088&fixno=HB01-01&filename=1562140718103-17523.jpg&sign=0a27ce59587abdfaba3f7dea556f910f
- 4) Parameter Description
 - a) compno: company id, required
 - b) fixno: device number
 - c) filename: Picture file name
 - d) sign: Signature, format: compno + fixno+ token, then do md5
- 5) Returen result
 - a) Returen method: json
 - b) Json: Parameter after analysis
 - i. msg: Return message, If the call fails, it is not null, success is null!
 - ii. data: Return operation data
 - iii. sucess: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result

{
    "msg": "signature verification failed!",
    "data": null,
    "success": "0"
}

Example of returning successful result

{
    "success": "1",
    "data": "http://ServerIP:8091/Userfile/Attach/1562140718103-17523.jpg",
    "msg": "search successful!"
}
```

23. Get push failure record interface

- 1) Request URL: http://ServerIP:8091/upus_APP/app/expressextra/pusherrors
- 2) Request method: get
- 3) Example: http://localhost:8080/upus_APP/app/ expressextra/pusherrors?compno=87550088& devno =HB01-01& cateno=1& begdate=2018-08-07 00:00:00& enddate =2019-08-07 00:00:00& pagesize =10& pageindex =1&sign=0a27ce59587abdfaba3f7dea556f910f
- 4) Parameter Description
 - a) compno: company id, required
 - b) devno: device number
 - c) cateno: Push type $0 \rightarrow \text{drop off } 1 \rightarrow \text{pick up}$
 - d) begdate: Push start date
 - e) enddate: Push deadline
 - f) pagesize: The number of records displayed per page
 - g) pageindex: Page index
 - h) sign: Signature, format: compno + devno+ token, then do md5
- Returen result

```
b) Json: Parameter after analysis
        i.
              msg: Return message, If the call fails, it is not null, success is null!
             data: Return operation data
       ii.
             sucess: Call success or failure flag, "1" means success, "0" means failure
       iii.
Example of returning failed result
     "msg": "signature verification failed!",
     "data": null,
     "success": "0"
Example of returning successful result
"msg": "search successful!",
"data": {
   "pagecnt": "23",
   "reccnt": "46",
   "record": [
       {
           "expno": "58866892756685,",
           "pushurl": "https://xwxapi.itknow.cn/WechatToken/FlickNotify",
           "recno": "1",
           "pushdata": [
               {
                   "orderId": "xdre_13823353929",
                   "closeTime": "2019-07-16 14:35:01.247",
                   "password": "792728",
                   "location": "UPUS",
                   "locker": "0000001",
                   "number": "0000001A101",
                   "expno": "58866892756685",
                   "compno": "87550088",
                   "devno": "0000001",
                   "cvtype": ""
               }
           ],
           "response": "connect timed out",
           "fixno": "0000001",
           "createdt": "2019-07-16 14:35:11.53",
           "rowid": "1"
       },
           "expno": "58866892756685",
           "pushurl": "https://xwxapi.itknow.cn/WechatToken/TakenNotify",
           "recno": "1",
           "pushdata": {
               "orderId": "xdre",
```

a) Returen method: json

```
"time": "2019-07-16 14:35:24.33",
                 "expno": "58866892756685",
                 "compno": "87550088",
                 "devno": "0000001"
              },
              "response": "connect timed out",
              "fixno": "0000001",
              "createdt": "2019-07-16 14:35:34.357",
              "rowid": "2"
      ]
  },
   "success": "1"
  }
24.
       Get the cargo information of all equipment in the site
       Request URL: http://ServerIP:8091/upus_APP/app/Lock/getShelfnoNum
   2)
       Request method: get
       Example
   3)
       http://ServerIP:8091/upus_APP/app/Lock/getShelfnoNum?compno=87550088&depotno=000&sign=b78da70c5d3f009ca
       1e1d9e35efa53f6
   4) Parameter Description
       a) compno: company id, required
       b) depotno: Site number
       c) sign: Signature, format: compno + depotno+ token, then do md5
   5) Returen result
       a) Returen method: json
        b) Json: Parameter after analysis
          i.
                msg: Return message, If the call fails, it is not null, success is null
          ii.
                data: Return operation data
            depotno: Site numbe,
            dleftnum: Number of available site cargoes,
               dallnum: total number of site cargoes,
            fleftnum: Number of available device cargoes,
            fallnum: total number of device cargoes,
            sleftnum: The number of specific cargo type available,
            sallnum: Specific cargo compartment type
                sucess: Call success or failure flag, "1" means success, "0" means failure
   Example of returning failed result
        "msg": "signature verification failed!",
        "data": null,
       "success": "0"
   }
```

Example of returning successful result

{

```
"success": "1",
"data": {
    "depotno": "000",
    "dleftnum": "152",
    "dallnum": "168",
    "ddtl": [{
        "fixna": "UPUS TEST 02",
        "fixno": "0000002",
        "fdtl": [{
            "kindno": "0",
            "kindna": "small box",
            "sleftnum": "3",
            "sallnum": "9"
        }, {
            "kindno": "1",
            "kindna": "medium box",
            "sleftnum": "0",
            "sallnum": "0"
        }, {
            "kindno": "2",
            "kindna": "big box",
            "sleftnum": "0",
            "sallnum": "1"
        }, {
            "kindno": "3",
            "kindna": "large box",
            "sleftnum": "0",
            "sallnum": "0"
        }],
        "libna": "UPUS",
        "fallnum": "10",
        "fleftnum": "3"
   }, {
        "fixna": " 10.1inch test machine ",
        "fixno": "0000009",
        "fdtl": [{
            "kindno": "0",
            "kindna": "small box",
            "sleftnum": "8",
            "sallnum": "8"
        }, {
            "kindno": "1",
            "kindna": "medium box",
            "sleftnum": "0",
            "sallnum": "0"
        }, {
            "kindno": "2",
            "kindna": "large box",
```

25. Get device total cargo information

- 1) Request URL: http://ServerIP:8091/upus_APP/app/Lock/getShelfnoNumToFixno
- 2) Request method: get
- 3) Example

 $\label{lem:http://ServerlP:8091/upus_APP/app/Lock/getShelfnoNumToFixno?compno=87550088\&fixno=0000001\&sign=147eaeae\\ 560e692173b1b14a4344a7ed$

- 4) Parameter Description
 - a) compno: company id, required
 - b) fixno: device number
 - c) sign: Signature, format: compno + fixno+ token, then do md5
- 5) Returen result
 - a) Returen method: json
 - b) Json: Parameter after analysis
 - i. msg: Return message, If the call fails, it is not null, success is null!
 - ii. data: Return operation data
 - fixno:device number,
 - fixna:device name,
 - > disablenum: Number of disabled boxes
 - > usablenum: Number of available boxes
 - > retainnum: Number of reserved boxes,
 - emplaynum: Number of Occupied boxes,
 - > allnum: Total number of boxes
 - iii. sucess: Call success or failure flag, "1" means success, "0" means failure

```
Example of returning failed result
{
    "msg": "signature verification failed!",
    "data": null,
    "success": "0"
}
```

Example of returning successful result

```
{
   "success": "1",
   "data": [{
       "retainnum": "0",
       "fixna": "UPUS01",
       "fixno": "0000001",
       "usablenum": "6",
       "emplaynum": "4",
       "disablenum": "0",
       "allnum": "10"
   }],
   "msg": "search successful!"
 }
26.
       Obtain cargo information according to cargo type
       Request URL: http://ServerIP:8091/upus_APP/app/Lock/getShelfposInfo
   2)
       Request method: get
       Example
   3)
       e8a644fe1b8696313c2bd353e6b
   4) Parameter Description
```

```
http://ServerIP:8091/upus_APP/app/Lock/getShelfposInfo?compno=87550088&fixno=0000001&poskind=5&sign=a8241
    a) compno: company id, required
    b) fixno: device number
    c) poskind: cargo type (0\rightarrow small box 1\rightarrow medium box 2\rightarrow large box, Pass other values to get all
         relevant data)
    d) sign: Signature, format: compno + fixno+poskind+ token, then do md5
5) Returen result
    a) Returen method: json
    b) Json: Parameter after analysis
       i.
             msg: Return message, If the call fails, it is not null, success is null!
       ii.
             data: Return operation data
         logno: Cargo owner,
         poskind: cargo type number,
         kindna: cargo type name,
            stateno: cargo status,
         lockno:lock number,
             posno:cargo display number,
            shelfno:cargo id,
             maxqty: Maximum storage number of cargo compartment,
             boardno:control board number,
             partno:product number,
             statena:status name
             sucess: Call success or failure flag, "1" means success, "0" means failure
Example of returning failed result
```

```
"msg": "signature verification failed!",
```

```
"data": null,
       "success": "0"
  Example of returning successful result
{
  "success": "1",
  "data": [{
      "logno": "a",
       "poskind": "2",
       "kindna": "large box",
       "stateno": "3",
       "lockno": "1",
       "posno": "A101",
       "shelfno": "0000001A101",
       "maxqty": null,
       "boardno": "1",
       "partno": null,
       "statena": "occupied "
  }, {
       "logno": "LBS01",
       "poskind": "2",
       "kindna": "large box",
       "stateno": "3",
       "lockno": "6",
       "posno": "A201",
       "shelfno": "0000001A201",
       "maxqty": null,
       "boardno": "1",
       "partno": null,
       "statena": "occupied "
  }, {
       "logno": "10010",
       "poskind": "0",
       "kindna": "small box",
       "stateno": "1",
       "lockno": "7",
       "posno": "A202",
       "shelfno": "0000001A202",
       "maxqty": null,
       "boardno": "1",
       "partno": null,
       "statena": "available"
  }, {
       "logno": "HB02",
       "poskind": "0",
       "kindna": "small box",
       "stateno": "1",
       "lockno": "10",
```

```
"posno": "A205",
        "shelfno": "0000001A205",
        "maxqty": null,
        "boardno": "1",
        "partno": null,
        "statena": "available"
   }],
   "msg": "search successful!"
 }
27.
        Save user phone number and openid interface
       Request URL: http://www.upus.cn:8091/upus_APP/app/Register/saveUserInfo
   2)
       Request Methods: Get
       Example:
       http://www.upus.cn:8091S/upus APP/app/Register/saveUserInfo?sign=5f76c222e17731abbc7590b4d3d60af3&
        data={"cellphone":"15858588888","openid":"rtftydrttytterrfgAffghh","cocode":"EMS"}
      Parameter Description
        a) sign: Signature, Format: openid+ cellphone+token, then do md5
        b) data: json data,
            cocode: company code, required,
            cellphone: user cellphone number, required,
            openid: wechat openid, required
   5) Return result
       a) Return mode: json
        b) Json Parsed parameter
        c) msg: Returned message!
        d) sucess: Call success or failure flag, "1" means success, "0" means failure
  Example of returning failed result
          "msg": "signature verification failed!",
          "success": "0"
         }
  Example of returning successful result
```

28. Obtain the mobile phone number according to the tracking number

```
1) Post URL: http://
```

"success": "1",

2) Post Methods: POST, The request parameter is placed into the request stream

```
3) Request parameter sample:
{"origno":" Original order number ","logno":" Login ID ","devno":"device number"}
```

4) Example of returning successful result

"msg": "Successful operation!"

{