2023

# SETP_Lable_V23 System Developer's Manual

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# Contents

# 1. Electronic label label registration

By manually triggering the registration of the electronic label to the system, the functional test can be carried out after the registration is successful.

Successful registration: display rssi:-xxdB, xx is greater than 0, the smaller the xx, the better the signal.

## 1.1. SETP_Label_V23 registration

Press Right button + Left-botom button to trigger registration:


## 1.2. Registration Successful

Successful registration shows rssi:-xxdB as follows：


The smaller the absolute value, the worse the signal, generally 0 ~ -75dB can communicate normally

## 1.3. Registration Failed


# 2. Query electronic label information API

## 2.1. API Description

Query the information of electronic tags registered in the system.

## 2.2. AP Information

APIaddress：*192.168.1.200/wms/associate/queryTagsInRouterId*

request type：*application/json*

request method：*post*

APIRemarks: Query the electronic label information according to the base station id

Debugging tool: ApiPost

Description of request body parameters：

| ParameterName | Example Value | Type | Parameter Description |
|---|---|---|---|
| A collection of base station ids, if empty, check all | | | |

request example：

```
[1]
```

Return parameter description: (200) success

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| datalist | | Object | A collection of label information |
| datalist.hardwareVersion | 4.5 | String | hardware version number |
| datalist.height | 128 | Number | High-resolution) |

| | | | |
|---|---|---|---|
| datalist.mac | 99.26.17.85 | String | tag id number |
| datalist.manufacture | CoreWind31 | String | model identification |
| datalist.power | 100 | Number | Label power |
| datalist.productionBatch | 20-08-29 | String | production batch |
| datalist.routerId | 1 | Number | Binding base station ID |
| datalist.rssi | -21 | Number | signal strength |
| datalist.screenType | 1 | Number | screen type |
| datalist.serialNumber | CNSHZH1000 | String | serial number |
| datalist.shopNumber | A0015 | String | Affiliated store |
| datalist.showStyle | Picking Template Single Column | String | use template name |
| datalist.softwareVersion | 7.0 | String | software version number |
| datalist.state | true | String | online status |
| datalist.status | 4 | Number | update status |
| datalist.tagRegisterEN | 1 | Number | Allow tag registration switch |
| datalist.width | 296 | Number | resolution (wide) |
| resultCode | 10 | Number | return code |
| resultMsg | success | String | APIresponse information |

Return example: (200) success


```
{
    "datalist": [
        {
            "hardwareVersion": "4.5",
            "height": 128,
            "mac": "99.26.17.85",
            "manufacture": "CoreWind31",
            "power": 100,
```

```
        "productionBatch": "20-08-29",
        "routerId": 1,
        "rssi": -21,
        "screenType": 1,
        "serialNumber": "CNSHZH1000",
        "shopNumber": "A0015",
        "showStyle": "拣货模板单列",
        "softwareVersion": "7.0",
        "state": true,
        "status": 4,
        "tagRegisterEN": 1,
        "width": 296
    },
    {
        "hardwareVersion": "4.5",
        "height": 128,
        "mac": "99.26.18.21",
        "manufacture": "CoreWind31",
        "power": 87,
        "productionBatch": "20-08-29",
        "routerId": 1,
        "rssi": -19,
        "screenType": 1,
        "serialNumber": "CNSHZH1000",
        "shopNumber": "A0015",
        "showStyle": "拣货模板单列",
        "softwareVersion": "7.0",
        "state": true,
        "status": 4,
        "tagRegisterEN": 1,
        "width": 296
    },
    {
        "hardwareVersion": "4.5",
```

```
            "height": 128,
            "mac": "99.26.18.36",
            "manufacture": "CoreWind31",
            "power": 100,
            "productionBatch": "20-08-29",
            "routerId": 1,
            "rssi": -25,
            "screenType": 1,
            "serialNumber": "CNSHZH1000",
            "shopNumber": "A0015",
            "showStyle": "拣货模板单列",
            "softwareVersion": "7.0",
            "state": true,
            "status": 4,
            "tagRegisterEN": 0,
            "width": 296
        }
    ],
    "resultCode": 10,
    "resultMsg": "success"
}
```


Return parameter description: (201) failed

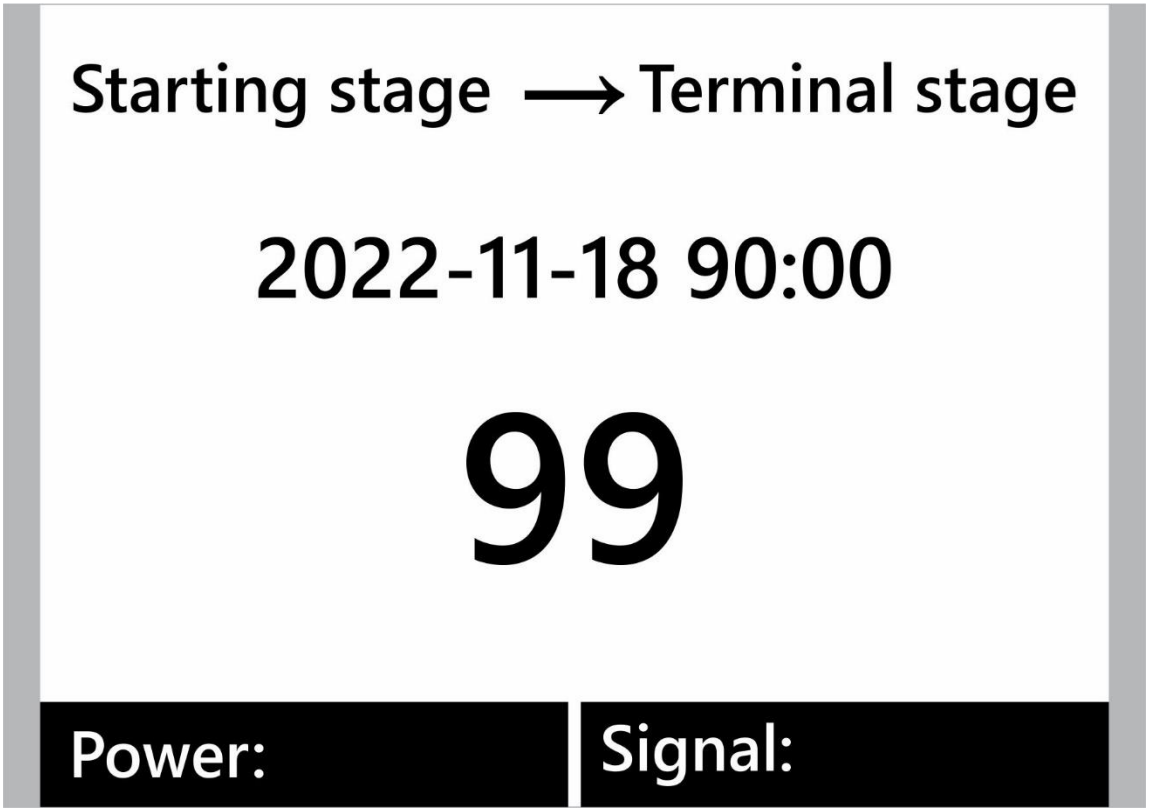
| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| No request parameter KEY/VALUE type | | | |

# 3. Refresh the screen API according to the template

## 3.1. API description

The ink screen management system configures the template, and then calls the APIaccording to the designed template

## 3.2. API information




APIaddress：

*http://192.168.1.200/wms/associate/updateScreen*

*http://192.168.1.200/wms/associate/refreshMovingTags* *(Dedicated to mobile scenes)*

request type：*application/json*

request method：*post*

APIRemarks: No description yet

Debugging tool: ApiPost

Description of request body parameters:

| Parameter Name | Example Value | Parameter Type | Is it Required? | Parameter Description |
|---|---|---|---|---|
| mac | 99.26.17.85 | String | Yes | tag id number |
| mappingtype | 694 | Number | No | Mapping type, optional |
| styleid | 30 | Number | Yes | template id |

| | | | | |
|---|---|---|---|---|
| ledrgb | 0 | String | Yes | Lighting color<br>red， ledrgb =“ff0000”;<br>green， ledrgb=“ff00”;<br>blue， ledrgb=“ff”;<br>yellow， ledrgb=“ffff00”;<br>white， ledrgb=“ffffff”;<br>purple， ledrgb= “ff00ff”;<br>light blue， ledrgb= “ffff”;<br>no color, ledrgb=“0” |
| ledstate | 0 | String | Yes | Lighting mode:<br>0, always on;<br>1, fast flash;<br>2. Slow flash;<br>3. Turn off the lights； |
| outtime | 0 | String | Yes | Automatic time-out time when the light is on,<br>0: always on;<br>n: Automatically turn off after n seconds; |
| startMachine | PE1-01 | String | No | Custom addition, starting point process table |
| endMachine | PE2-05 | String | No | Custom Addition, End Process Bench |
| taskStartTime | 2022-11-11 9:00 | String | No | Custom add, task start time |
| basketsQuantity | 20 | number | No | Customized addition, the number of flower baskets |
| arrow | null | string | Yes | Arrow icon, just do not pass a value |
| power | null | number | No | Automatically display optional |
| rssi | null | number | No | Automatically display optional |

request example：

```
[
  {
      "mac":"99.29.3.22",
      "mappingtype":791,
```

```
        "styleid":44,
        "ledrgb":"0",
        "ledstate":"0",
        "outtime":"0"
        "startMachine":"PE1-01",
        "endMachine":"PE2-05",
        "taskStartTime":"2022-11-18 9:00",
        "basketsQuantity":"99",
        "arrow":"",
        "rssi":"",
        "power":"",
    },
    {
        "mac":"99.29.3.22",
        "mappingtype":791,
        "styleid":44,
        "ledrgb":"0",
        "ledstate":"0",
        "outtime":"0"
        "startMachine":"PE1-01",
        "endMachine":"PE2-05",
        "taskStartTime":"2022-11-18 9:00",
        "basketsQuantity":"99",
        "arrow":"",
        "rssi":"",
        "power":"",
    }
]
```


Return parameter description: (200) success

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|

| No request parameter KEY/VALUE type |
|---|

Return example: (200) success

```
true
```

Return parameter description: (201) failed

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| No request parameter KEY/VALUE type | | | |

# 4. Update screen result callback

## 4.1. API description

Update the result feedback of the screen, asynchronously

## 4.2. API information

Callback request type: application/json

Callback request method: post

Callback request note: the ink server is the caller, and the client software receives the callback

Callback request parameter example：

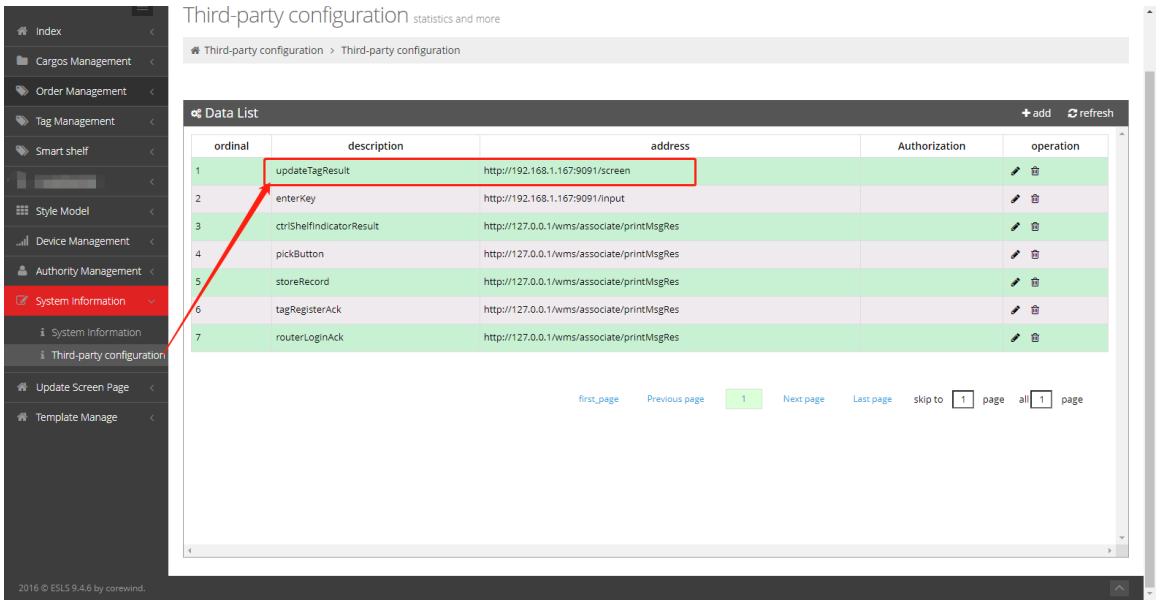
```
{"cmdtoken":"cmdtoken","lednum":0,"mac":"99.88.29.82","message":"数据成功","power":100,"result":true}
```

Description of callback request body parameters：

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| mac | 99.89.40.57 | string | ID number of the tag that triggered the button |
| result | true | int | true, the update is successful false, update failed |
| power | 100 | int | The current battery level of the ink screen |

| message | data success | string | prompt information |
|---|---|---|---|
| lednum | 0 | int | not deal with |
| cmdtoken | | string | not deal with |

## 4.3. Setting of Callback API




| Description | URL |
|---|---|
| updateTagResult | Client's own callback APIaddress |

# 5. API of control the LED

## 5.1. API description

Individual lighting interface

## 5.2. API information

URL:

*http://192.168.1.200/wms/associate/lightTagsLed*

*http://192.168.1.20wms/associate/lightMovingTagsLed/v2* *(Dedicated to mobile scenes)*

Callback request type: application/json

Callback request method: post

Callback request note: the ink server is the caller, and the client software receives the callback

Description of callback request body parameters：

| Parameter Name | Example Value | Type | Require | Parameter Description |
|---|---|---|---|---|
| mac | 99.26.17.85 | string | Yes | Tag mac / Tag ID |
| lednum | 694 | int | No | Specify the number of Leds (1,2,3,4) |
| timeout | 30 | int | Yes | Automatic time-out time when the light is on,<br>0: always on;<br>n: Automatically turn off after n seconds; |
| ledrgb | 0 | string | Yes | led color:<br>red, ledrgb =“ff0000”;<br>green, ledrgb=“ff00”;<br>blue, ledrgb=“ff”;<br>yellow, ledrgb=“ffff00”;<br>white, ledrgb=“ffffff”;<br>purple, ledrgb=“ff00ff”;<br>light blue, ledrgb= “ffff”;<br>no color, ledrgb=“0” |
| ledmode | 0 | int | Yes | lightint mode;<br>0, always on<br>1, quick flash<br>2, slow flash<br>n, n ms period flash<br>3： turn off;<br>4： turn off all leds; |
| cmdtoken | 0 | string | Yes | |
| reserve | PE1-01 | string | No | reserve |

Request example：

```
[
    {
        "mac": "99.88.64.65",
        "lednum": 2,
        "timeout": 0,
        "ledrgb": "ff00",
        "ledmode": 0,
        "reserve": "reserve",
        "cmdtoken": "Inve123ntec"
    },
    {
        "mac": "99.88.64.65",
        "lednum": 2,
        "timeout": 0,
        "ledrgb": "ff00",
        "ledmode": 0,
        "reserve": "reserve",
        "cmdtoken": "Inve123ntec"
    }
]
```


Return parameter description: (200) success

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| No request parameter KEY/VALUE type | | | |

Return example：(200) success


```
true
```


Return parameter description：(404) faile

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| No request parameter KEY/VALUE type | | | |

# 6. Callback API of Control Led Result

## 6.1. API Description

Callback API of Control Led Result；

## 6.2. API Information

Callback request type: application/json

Callback request method: post

Callback request note: the ink server is the caller, and the client software receives the callback

Callback request parameter example：

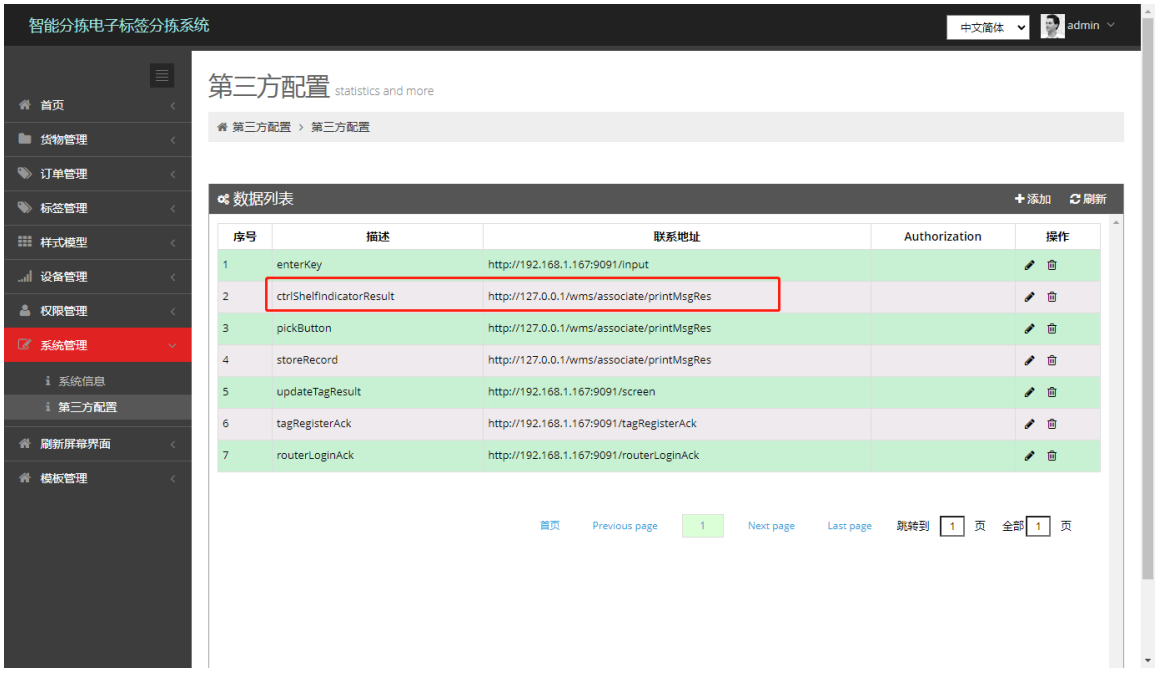
```
{"mac":"99.99.08.51","result":true,"power":100,"lednum":1,"cmdtoken":"55555","message":"数据成功"}
```

Description of callback request body parameters:

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| mac | 99.99.08.51 | string | Tag ID |
| power | 100 | int | surplus power（0~100） |
| result | true | bool | true: Light on<br>false:Light failed |
| lednum | 1 | int | Led num |
| cmdtoken | | string | |
| message | 数据成功(send ok) | string | 数据成功；(send ok)<br>数据失败；(send failed)<br>数据发送超时；(send timeout)<br>唤醒失败；(wake up failed)<br>基站不在线；(router offline)<br>数据异常；(Abnormal data)<br>数据格式不正确，解析失败；(incorrect |

| | | | |
|---|---|---|---|
| | | | data format)<br>参数格式不正确或参数不全;<br>(Missing required parameters)<br>无法执行;(Unable to execute)<br>标签不存在；(Tag does not exist) |

## 6.3. Setting of Callback API




| Description | URL |
|---|---|
| ctrlShelfIndicatorResult | The URL of customer's own callback API |

# 7. Key Event Callback

## 7.1. API Description

Introduction to the callback APIof the 24th generation electronic label button event callback;

## 7.2. API information

Callback request type: application/json

Callback request method: post

Callback parameter format: json object

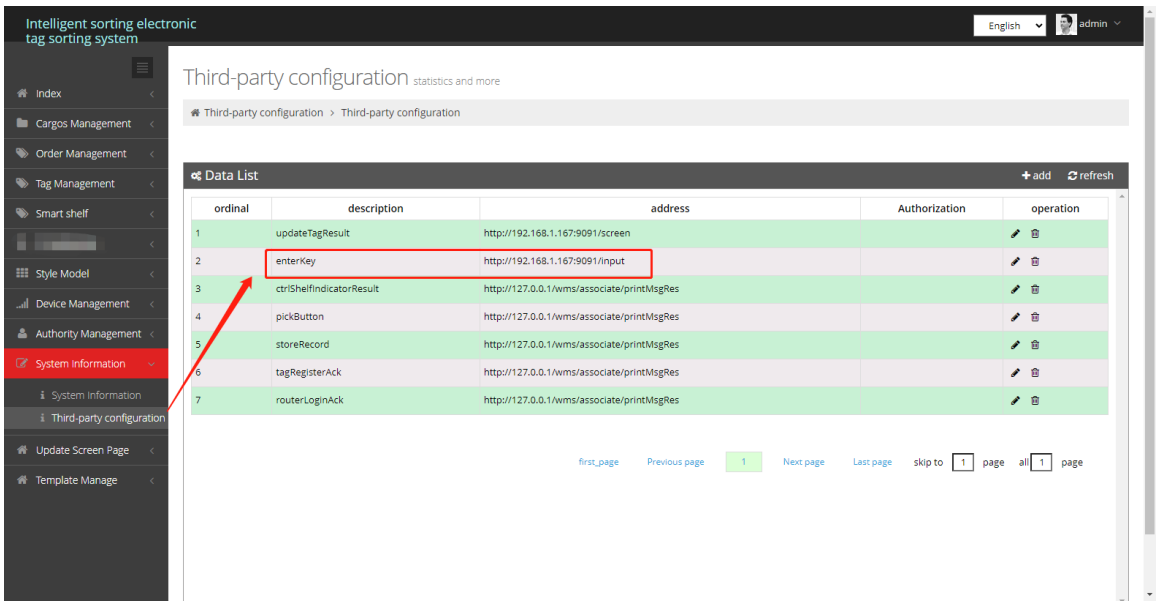
Callback request note: the ink server is the caller, and the client software receives the callback

Example callback request parameters:

```
{"mac":"92.91.34.99","result":0}
```

| Parameter Name | Example Value | Type | Parameter Description |
|---|---|---|---|
| mac | 92.91.34.99 | string | ID number of the tag that triggered the button |
| result | 0 | int | result=0, the lower right button;<br>result=1, the middle right button;<br>result=3, press the upper right button; |

## 7.3. Setting of Callback API



| Description | URL |
| --- | --- |
| enterKey | Client's own callback APIaddress |

# 8. Callback of Report Router status

## 8.1. API description

Callback of report Router status：

## 8.2. API information

Callback request type: application/json

Callback request method: post

Callback parameter format: json object

Callback request note: the ink server is the caller, and the client software receives the callback

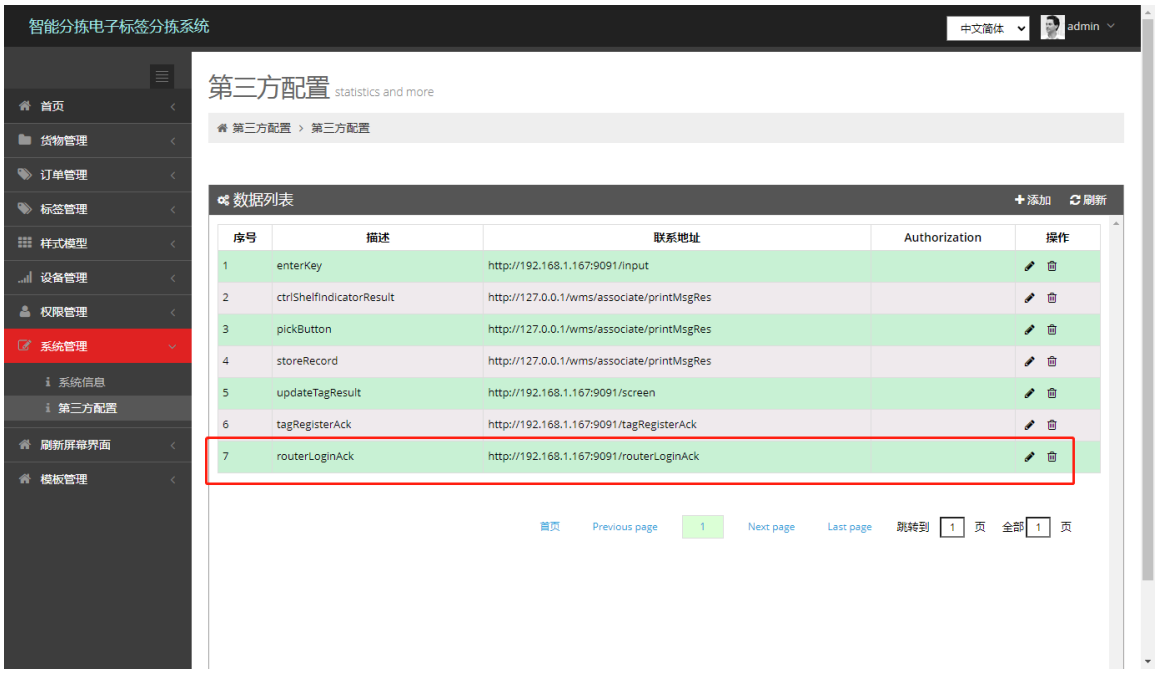
Callback request parameter example:

```
{
    "frequency": 460,  //频率
    "hardVersion": "8.1.2",  //硬件版本
    "id": 1844,  //基站地址
    "ip": "192.168.1.244", //IP地址
    "longPeriod": 1,  //长周期
    "masterRouterMac": 0,
    "productBatch": "2021-11-01",
    "serialNumber": "CNSHZH1844",
    "shortPeriod": 0.5,  //短周期
    "softVersion": "8.3.3",  //软件版本
    "state": 1, // 1在线 ， 0 离线
    "tagRegisterEN": 1 //注册开关,1开启,0关闭
}
```

Description of callback request body parameters：

| Parameter Name | Example Value | Type | Require | Parameter Description |
|---|---|---|---|---|
| id | 1820 | int | | Router ID |
| ip | "192.168.1.244" | string | | Router IP |
| frequency | 460 | int | | Router communication frequency |
| hardVersion | "8.1.2" | string | | HW version |
| masterRouterMac | 0 | int | | |
| productBatch | "2021-11-01" | string | | productBatch |
| serialNumber | "CNSHZH1844" | string | | serialNumber |
| shortPeriod | 0.5 | float | | shortPeriod |
| softVersion | "8.3.3" | string | | SW version |
| state | 1 | int | | Router state |
| tagRegisterEN | 1 | int | | Allow tag registeration<br>1：enable<br>0：disable |

## 8.3. Setting of Callback API




| Description | URL |
|---|---|
| routerLoginAck | The URL of customer's own callback API |

# 9. Callback event of Tag Registeration

## 9.1. API description

Callback event of Tag Registeration introduce

## 9.2. API information

Callback request type: application/json

Callback request method: post

Callback parameter format: json object

Callback request note: the ink server is the caller, and the client software receives the callback

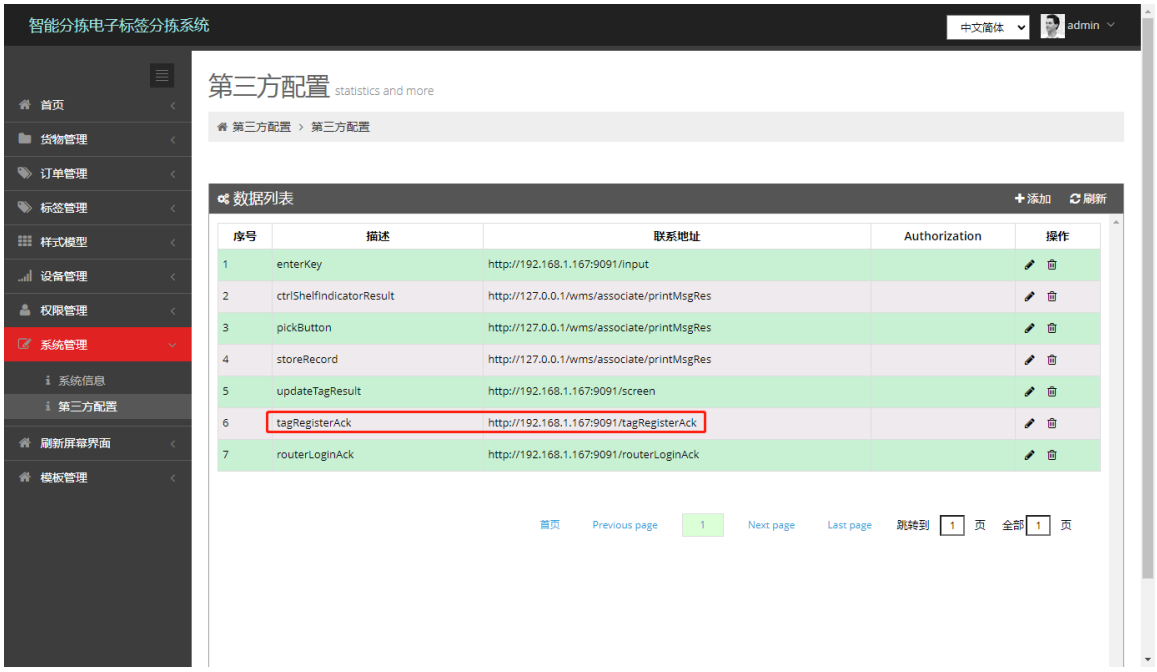
Callback request parameter example：

```
{
    "hardwareVersion":"4.7",  //硬件版本
    "height":300,  //高度
    "mac":"99.88.29.86", //标签地址
    "manufacture":"CoreWind24",
    "power":100,  //电量
    "productionBatch":"20-11-05",
    "routerId":1844,  //基站地址
    "rssi":-24,  //信号强度
    "screenType":1,  //屏幕类型
    "serialNumber":"CNSHZH1000",
    "shopNumber":"A0001",
    "showStyle":"默认模板46",//样式名称
    "softwareVersion":"7.2",  //软件版本
    "state":true,
    "status":4,
    "tagRegisterEN":1,//注册开关
    "width":400 //宽度
}
```

Description of callback request body parameters：

| Parameter Name | Example Value | Type | Require | Parameter Description |
|---|---|---|---|---|
| mac | "99.88.29.86" | int | | ID of TAG |
| power | 100 | int | | surplus power(1~100) |
| routerId | 460 | int | | Router ID that TAG bind |
| rssi | "8.1.2" | string | | signal intensity |
| screenType | 1 | int | | Screen type |
| height | 300 | string | | Screen height |
| width | 400 | string | | Screen width |
| status | 4 | int | | Update status |
| state | true | int | | Router stte |
| showStyle | "默认模板46" | string | | Template name |
| softwareVersion | "7.2" | string | | SW Version |
| hardwareVersion | "4.7" | string | | HW Version |
| serialNumber | "CNSHZH1000" | string | | serialnumber |
| shopNumber | "A0001" | string | | shopnum |
| productionBatch | "20-11-05" | string | | productionBatch |
| manufacture | "CoreWind24" | string | | manufacture |
| tagRegisterEN | 1 | int | | allow tag registeration<br>1：enable<br>0：disable |

## 9.3. Setting of Callback API




| Description | URL |
|---|---|
| tagRegisterAck | The URL of customer's own callback API |