

SETP_Lable_V23 System Developer's Manual

DALIAN SERTAG TECHNOLOGY CO., LTD

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1. Electronic 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_V3 registration

Press Right button + Left-bottom 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

API address: `192.168.1.200/wms/associate/queryTagsInRouterId`

request type: `application/json`

request method: `post`

API Remarks: Query the electronic label information according to the base station id

Debugging tool: ApiPost

Description of request body parameters:

Parameter Name	Example Value	Type	Parameter Description
routers	[]or[1,2]	collection	A collection of base station ids, if empty, check all

request example:

```
{"routers": [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",
```

100

```
"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

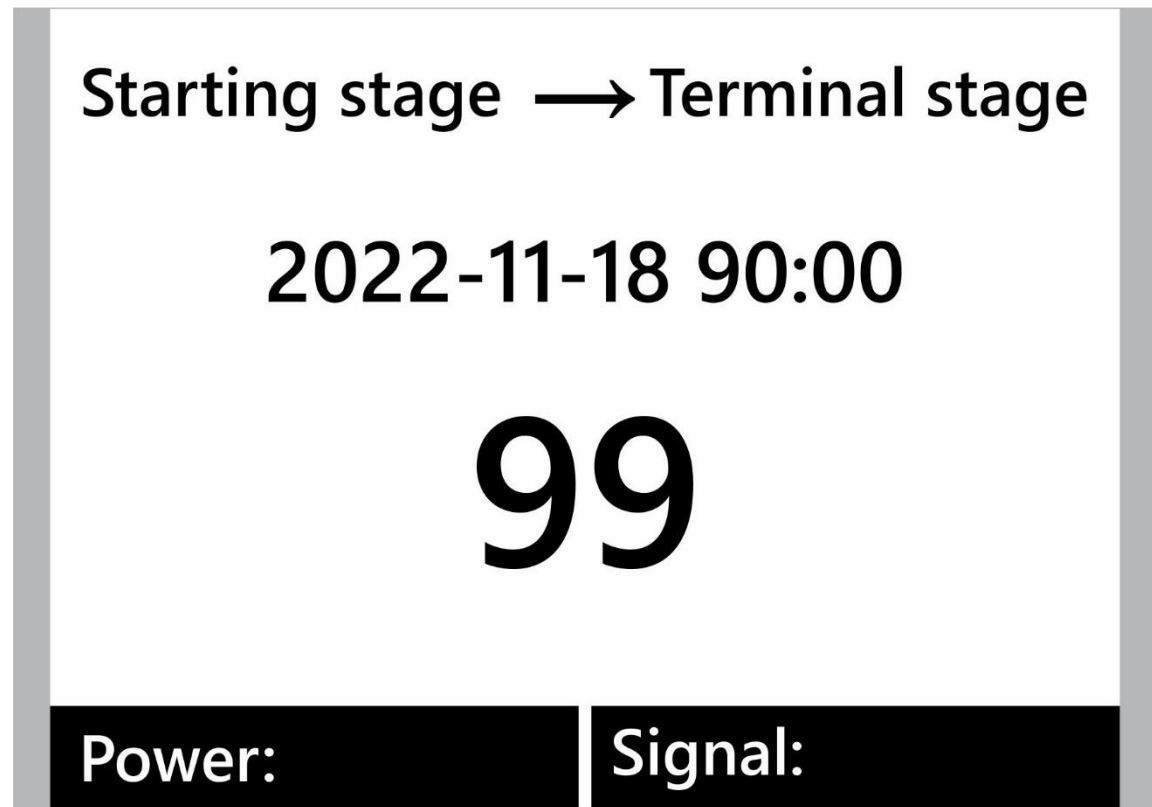
Parameter Name	Example Value	Type	Parameter Description
No request parameter KEY/VALUE type			

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 API according to the designed template

3.2. API information



API address:

<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*

API Remarks: 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 red, ledrgb="ff0000"; green, ledrgb="ff00"; blue, ledrgb="ff"; yellow, ledrgb="ffff00"; white, ledrgb="ffffff"; purple, ledrgb="ff00ff"; light blue, ledrgb="ffff"; no color, ledrgb="0"
ledstate	0	String	Yes	Lighting mode: 0, always on; 1, fast flash; 2. Slow flash; 3. Turn off the lights;
outtime	0	String	Yes	Automatic time-out time when the light is on, 0: always on; 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
rss	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": "",
"rsi": "",
"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": "",
"rsi": "",
"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

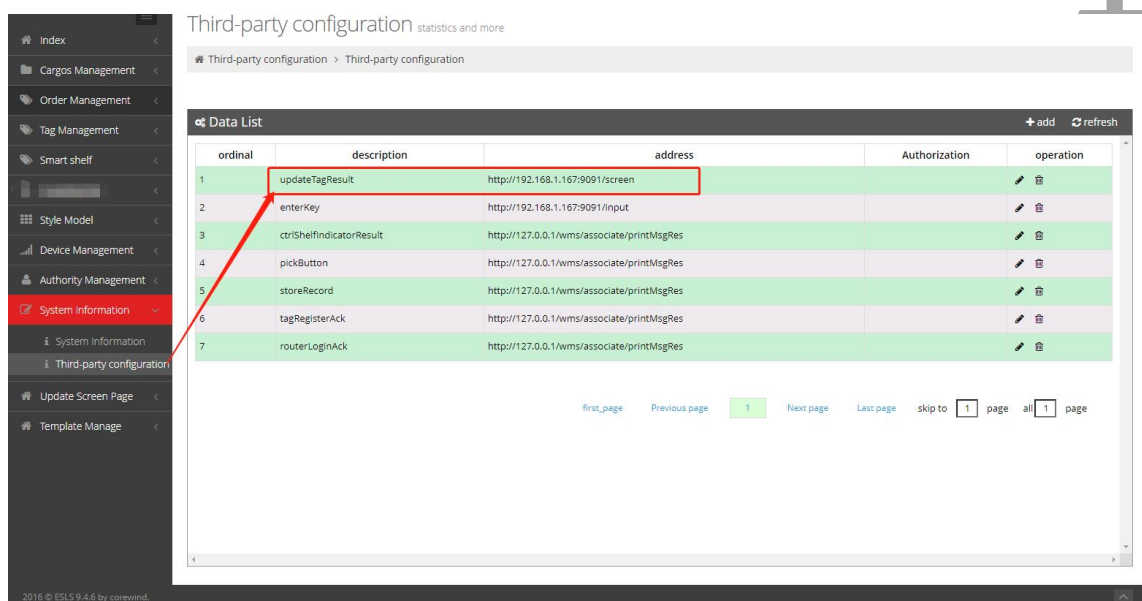
Callback request parameter example:

```
{"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 API address

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, 0: always on; n: Automatically turn off after n seconds;
ledrgb	0	string	Yes	led color: red, ledrgb="ff0000"; green, ledrgb="ff00"; blue, ledrgb="ff"; yellow, ledrgb="ffff00"; white, ledrgb="ffffff"; purple, ledrgb="ff00ff"; light blue, ledrgb="ffff"; no color, ledrgb="0"
ledmode	0	int	Yes	lightint mode; 0, always on 1, quick flash 2, slow flash n, n ms period flash 3: turn off; 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:

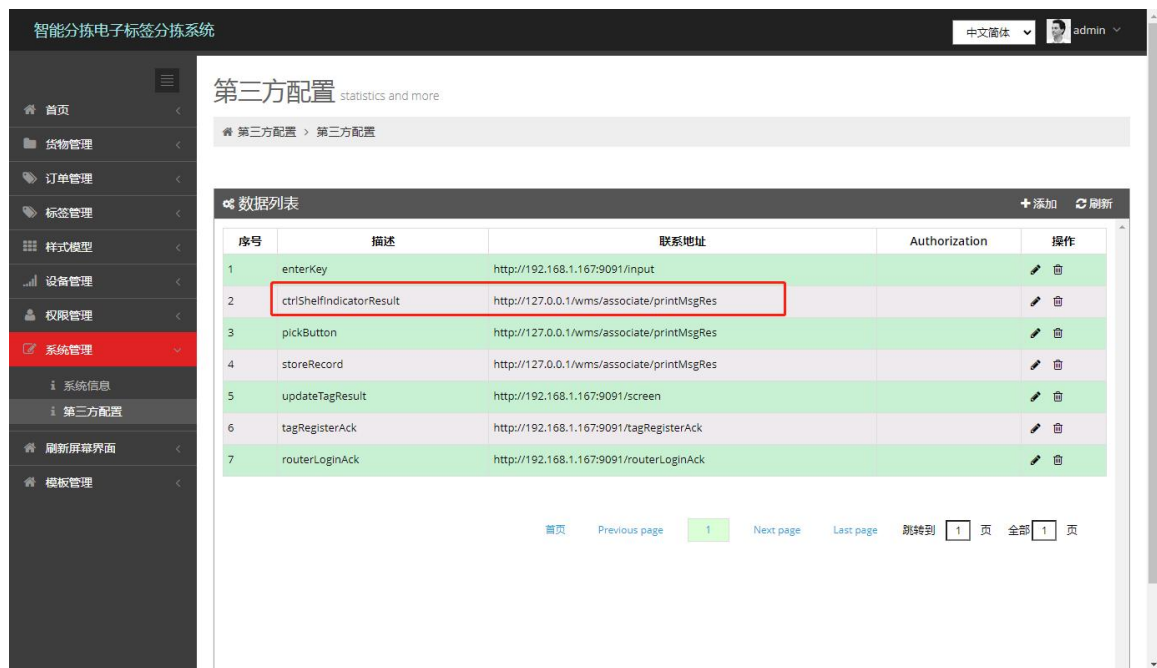
```
{"mac":"99.99.08.51","result":true,"power":100,"lednum":1,"cmdtoken":"55555",
,"message":"数据成功"}
```

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 false:Light failed
lednum	1	int	Led num
cmdtoken		string	
message	数据成功(send ok)	string	数据成功; (send ok) 数据失败; (send failed) 数据发送超时; (send timeout) 唤醒失败; (wake up failed) 基站不在线; (router offline) 数据异常; (Abnormal data) 数据格式不正确, 解析失败; (incorrect data format) 参数格式不正确或参数不全; (Missing required parameters)

			无法执行;(Unable to execute) 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 API of 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

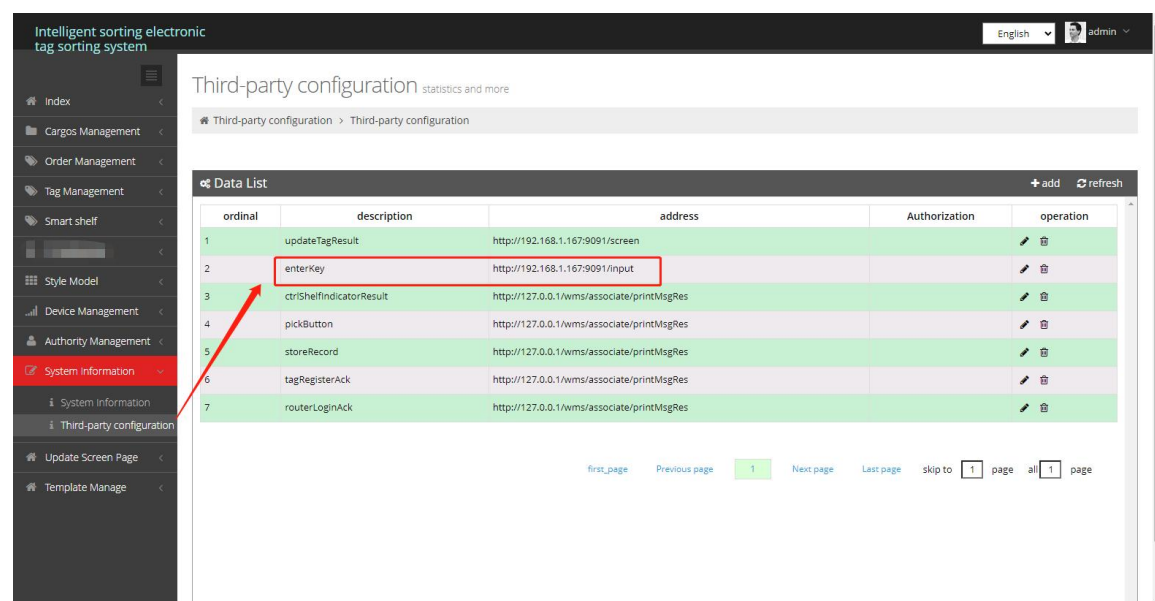
Callback request note: the ink server is the caller, and the client software receives

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; result=1, the middle right button; result=3, press the upper right button;

7.3. Setting of Callback API



Description	URL
enterKey	Client's own callback API address

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 registration 1: enable 0: disable

8.3. Setting of Callback API

序号	描述	联系地址	Authorization	操作
1	enterKey	http://192.168.1.167:9091/input		✎ 🗑
2	ctrlShelfIndicatorResult	http://127.0.0.1/wms/associate/printMsgRes		✎ 🗑
3	pickButton	http://127.0.0.1/wms/associate/printMsgRes		✎ 🗑
4	storeRecord	http://127.0.0.1/wms/associate/printMsgRes		✎ 🗑
5	updateTagResult	http://192.168.1.167:9091/screen		✎ 🗑
6	tagRegisterAck	http://192.168.1.167:9091/tagRegisterAck		✎ 🗑
7	routerLoginAck	http://192.168.1.167:9091/routerLoginAck		✎ 🗑

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

9. Callback event of Tag Registration

9.1. API description

Callback event of Tag Registration 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

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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 registration 1: enable 0: disable

9.3. Setting of Callback API

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第三方配置 statistics and more

第三方配置 > 第三方配置

数据列表 + 添加 刷新

序号	描述	联系地址	Authorization	操作
1	enterKey	http://192.168.1.167:9091/input		 
2	ctrlShelfIndicatorResult	http://127.0.0.1/wms/associate/printMsgRes		 
3	pickButton	http://127.0.0.1/wms/associate/printMsgRes		 
4	storeRecord	http://127.0.0.1/wms/associate/printMsgRes		 
5	updateTagResult	http://192.168.1.167:9091/screen		 
6	tagRegisterAck	http://192.168.1.167:9091/tagRegisterAck		 
7	routerLoginAck	http://192.168.1.167:9091/routerLoginAck		 

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