

杭州软库科技有限公司

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A DUSUN company

We had a **LUCI** management platform in the gateway, once you connect the gateway and your PC with a same router, you can log in it. You can connect to the gateway by following three steps,

- 1) Connect the gateway and your PC with one router, shown in figure 1.



Figure 1

- 2) Log into the router to check the gateway's IP address.
In my case, I use the program **Advanced IP Scanner** to help me find it. The IP address in red rectangle is my gateway's IP address, shown in figure 2.

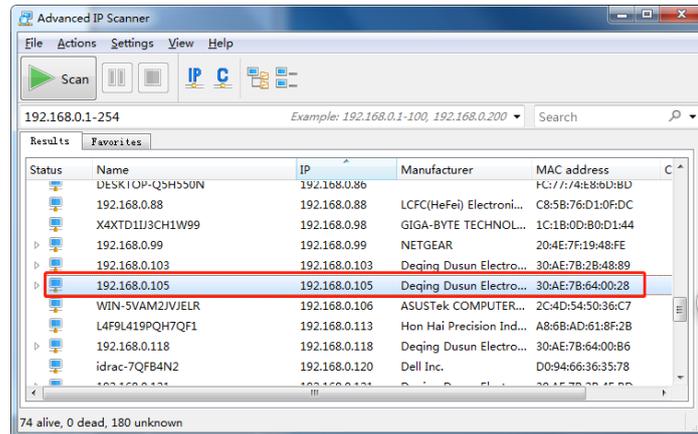


Figure 2

- 3) Open a web browser on PC, Input Gateway IP Address, in my case is **192.168.0.105**; Enter the username and Password (default Username: root, Password: root) , login to the gateway, the process is shown in figure 3.

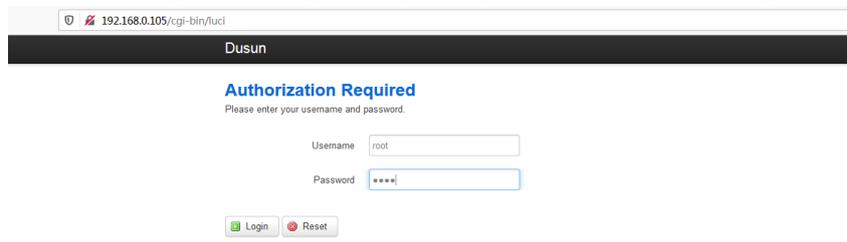


Figure 3

杭州市大关路 189 号万通中心 A 幢 8 楼,310004

Tel:86-571-86769027/8 8810480

Website: www.dusuniot.com www.dusunremotes.com www.dusunlock.com

Floor 8, building A, Wantong center,
Hangzhou 310004, china

After you log in the gateway with the IP address, you can configure the gateway as you desire. According to your **questions**, we had following **answers**.

1. Configure WiFi connection

We have a management page for both **ap** and **sta** wifi connection, seen in the figure 4,

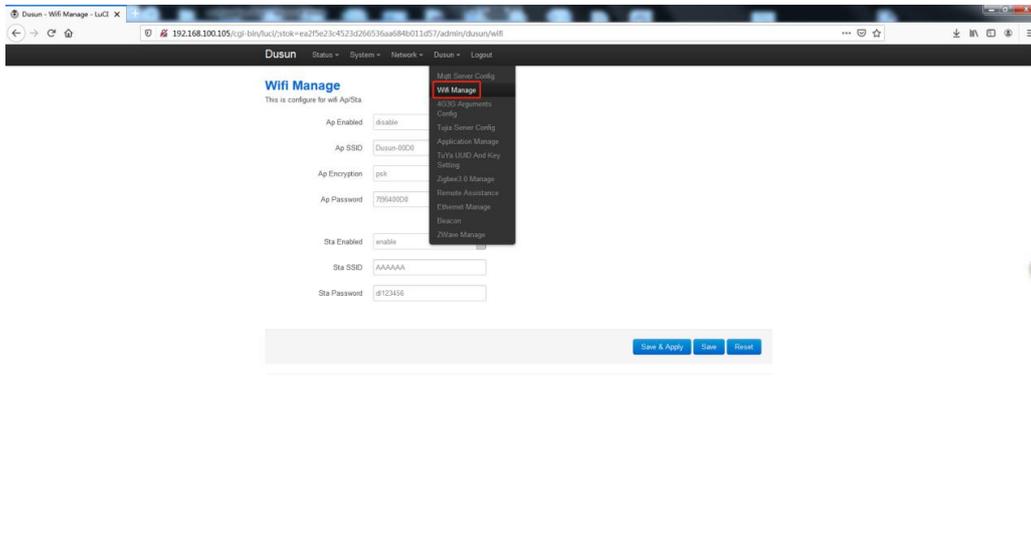


Figure 4

Then you can set the gateway in both AP and sta mode.

As for ap mode, the gateway acts like a router, the other devices can connect to it

In sta mode, the gateway can connect to other router, shown in figure 5,

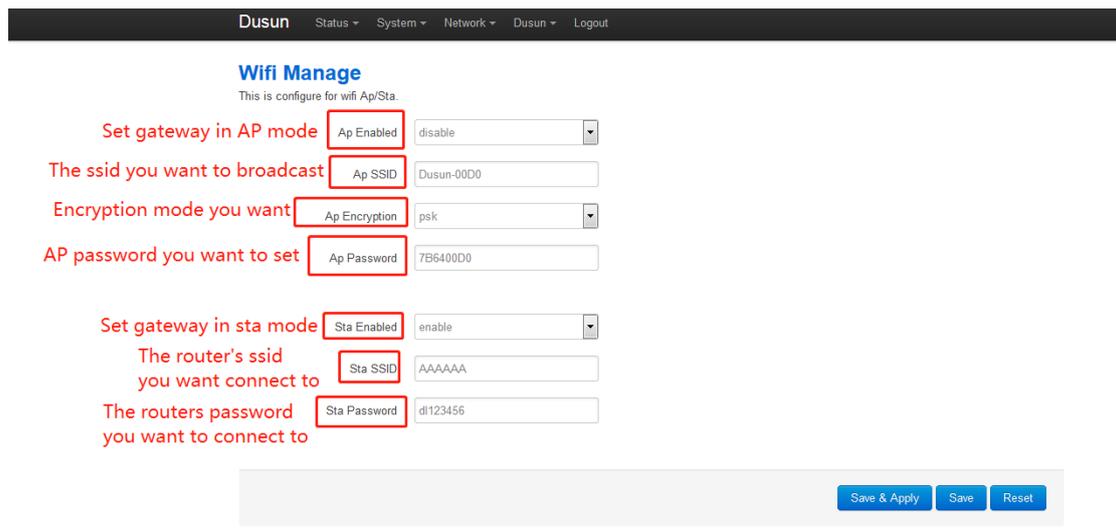


Figure 5

2. Configure the Server address where the collected data is sent

It can also be set in our management page on web, seen in the figure 6 ,

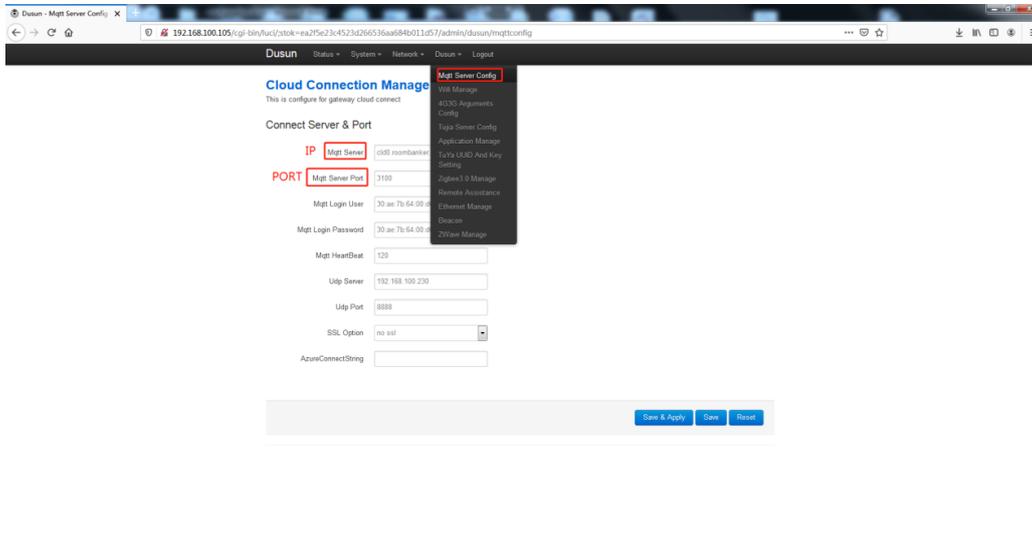


Figure 6

You can configure the MQTT broker as you desired, shown in figure 7,

Connect Server & Port

Mqtt Server	<input type="text" value="cld0.roombanker.cn"/>
Mqtt Server Port	<input type="text" value="3100"/>
Mqtt Login User	<input type="text" value="30:ae:7b:64:00:d0-00000001"/>
Mqtt Login Password	<input type="text" value="30:ae:7b:64:00:d0-00000001"/>
Mqtt HeartBeat	<input type="text" value="120"/>
Udp Server	<input type="text" value="192.168.100.230"/>
Udp Port	<input type="text" value="8888"/>
SSL Option	<input type="text" value="no ssl"/>
AzureConnectString	<input type="text"/>

Figure 7

3. Scan the BLE beacon signal

In our web page, you can see the beacon lists which would be uploaded to the server, seen in the figure 8,

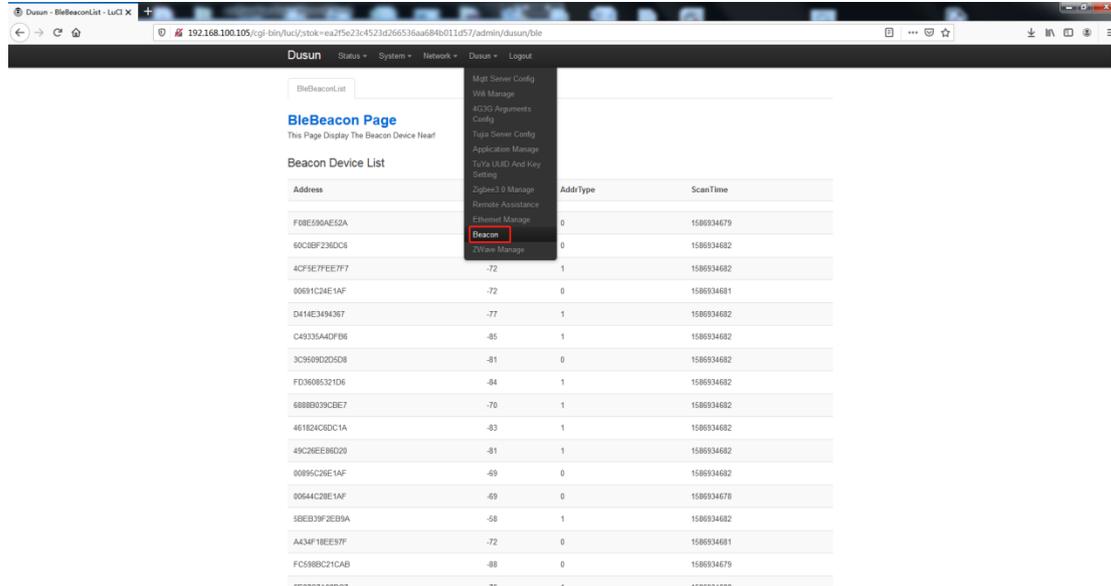


Figure 8

4. Filter options for BLE beacon signals based on UUID, Name etc & Configure BLE Scan Interval/window

In the platform <http://open.brtbeacon.com/>, you can do the filter and setting job as you desired, seen in figure 9

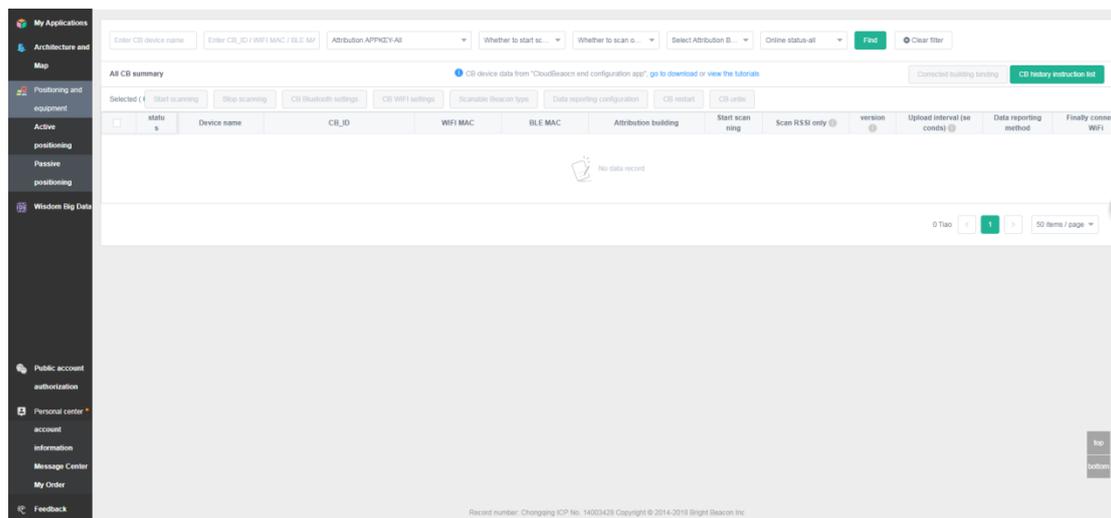


Figure 9

5. Send Scanned BLE data to designated Server

The scanned BLE beacon list would be uploaded to the platform in a certain time gap according to the user's setting, the data in the gateway is shown in figure 10,

```
Busybox v1.23.2 (2019-06-20 16:17:33 CST) built-in shell (ash)
Roombanker Co.Ltd
CHOS CALMER (Chaos Calmer, r49378) ver:1.0.20-20180809 by Purefarner
# 1/2 oz gin      shake with a glassfu
# 1/4 oz triple sec or OranGe and oup
# 1/2 oz Orange Juice unstrained into a goblet.
# 1 tsp. Grenadine Syrup
-----
root@Dusun:~# ./bluetooth_beacon
[rmf] Starting up...
[rmf] Resetting hcr target...
bootdaemon running
[ok ] system booted
scanning for devices 0.
ble_list_len:0
ble_list_len:1
ble_list_len:2
ble_list_len:3
ble_list_len:4
ble_list_len:5
ble_list_len:6
ble_list_len:7
ble_list_len:8
ble_list_len:9
ble_list_len:10
ble_list_len:11
ble_list_len:12
ble_list_len:13
ble_list_len:14
ble_list_len:15
ble_list_len:16
ble_list_len:17
ble_list_len:18
ble_list_len:19
ble_list_len:20
ble_list_len:21
ble_list_len:22
time is 3s
write file success
Send: smgp; "deviceCode": "" "to": "CLOUD" "from": "BLE" "time": 158700340 "type": "reportAttribute" "mac": "30:a6:7b:64:00:d0" "data": [{"attribute": "BLE_device_list" "mac": "30:a6:7b:64:00:d0" "value": [{"device_list": [{"ble_a
ddr": "044E349438" "scan_rssi": -83 "scan_time": 158700337 "addr_type": 1} {"ble_addr": "67134148331" "scan_rssi": -81 "scan_time": 158700339 "addr_type": 1} {"ble_addr": "44021044807" "scan_rssi": -58 "scan_time": 158700
039 "addr_type": 1} {"ble_addr": "86545454364" "scan_rssi": -52 "scan_time": 158700340 "addr_type": 1} {"ble_addr": "34630064048" "scan_rssi": -75 "scan_time": 158700335 "addr_type": 1} {"ble_addr": "2865900CE48" "scan_r
ssi": -52 "scan_time": 158700340 "addr_type": 0} {"ble_addr": "44C4000DE8C" "scan_rssi": -81 "scan_time": 158700336 "addr_type": 1} {"ble_addr": "7AEC9FAA8E" "scan_rssi": -60 "scan_time": 158700340 "addr_type": 1} {"ble
_addr": "441648E874" "scan_rssi": -80 "scan_time": 15870
0036 "addr_type": 0} {"ble_addr": "F6598C234C" "scan_rssi": -86 "scan_time": 158700337 "addr_type": 0} {"ble_addr": "F080853106" "scan_rssi": -83 "scan_time": 158700336 "addr_type": 1} {"ble_addr": "844611F1C0" "scan
_rssi": -67 "scan_time": 158700337 "addr_type": 1} {"ble_addr": "AC239A2E705" "scan_rssi": -69 "scan_time": 158700340 "addr_type": 0} {"ble_addr": "7C69A8E830" "scan_rssi": -75 "scan_time": 158700340 "addr_type": 1} {"ble
_addr": "601664486A" "scan_rssi": -78 "scan_time": 158700338 "addr_type": 1} {"ble_addr": "708700C6330" "scan_rssi": -83 "scan_time": 158700338 "addr_type": 1} {"ble_addr": "70808602446" "scan_rssi": -79 "scan_time": 1587
00345 "addr_type": 1} {"ble_addr": "70840A9149" "scan_rssi": -85 "scan_time": 158700338 "addr_type": 1} {"ble_addr": "4434783384" "scan_rssi": -86 "scan_time": 158700338 "addr_type": 0} {"ble_addr": "E4E318684A" "scan
_rssi": -51 "scan_time": 158700338 "addr_type": 1} {"ble_addr": "6266229F9EA" "scan_rssi": -73 "scan_time": 158700339 "addr_type": 1}]]]]
ble_list_len:23
ble_list_len:24
ble_list_len:25
ble_list_len:26
time is 3s
write file success
Send: smgp; "deviceCode": "" "to": "CLOUD" "from": "BLE" "time": 158700345 "type": "reportAttribute" "mac": "30:a6:7b:64:00:d0" "data": [{"attribute": "BLE_device_list" "mac": "30:a6:7b:64:00:d0" "value": [{"device_list": [{"ble_a
ddr": "044E349438" "scan_rssi": -73 "scan_time": 158700345 "addr_type": 1} {"ble_addr": "67134148331" "scan_rssi": -81 "scan_time": 158700344 "addr_type": 1} {"ble_addr": "44021044807" "scan_rssi": -49 "scan_time": 158700
044 "addr_type": 1} {"ble_addr": "86545454364" "scan_rssi": -50 "scan_time": 158700345 "addr_type": 1} {"ble_addr": "34630064048" "scan_rssi": -74 "scan_time": 158700345 "addr_type": 1} {"ble_addr": "2865900CE48" "scan_r
ssi": -59 "scan_time": 158700345 "addr_type": 0} {"ble_addr": "44C4000DE8C" "scan_rssi": -81 "scan_time": 158700345 "addr_type": 1} {"ble_addr": "7AEC9FAA8E" "scan_rssi": -69 "scan_time": 158700344 "addr_type": 1} {"ble
_addr": "441648E874" "scan_rssi": -80 "scan_time": 158700344 "addr_type": 1} {"ble_addr": "F6598C234C" "scan_rssi": -86 "scan_time": 158700345 "addr_type": 0} {"ble_addr": "F080853106" "scan_rssi": -83 "scan_time": 158700345 "addr_type": 1} {"ble_addr": "844611F1C0" "scan
_rssi": -67 "scan_time": 158700342 "addr_type": 1} {"ble_addr": "AC239A2E705" "scan_rssi": -69 "scan_time": 158700345 "addr_type": 1} {"ble_addr": "7C69A8E830" "scan_rssi": -75 "scan_time": 158700344 "addr_type": 1} {"ble
_addr": "601664486A" "scan_rssi": -78 "scan_time": 158700344 "addr_type": 1} {"ble_addr": "708700C6330" "scan_rssi": -83 "scan_time": 158700344 "addr_type": 1} {"ble_addr": "70808602446" "scan_rssi": -79 "scan_time": 1587
00345 "addr_type": 1} {"ble_addr": "70840A9149" "scan_rssi": -85 "scan_time": 158700344 "addr_type": 1} {"ble_addr": "4434783384" "scan_rssi": -86 "scan_time": 158700344 "addr_type": 1} {"ble_addr": "E4E318684A" "scan
_rssi": -51 "scan_time": 158700345 "addr_type": 1}]]]]
```

Figure 10

The data in back end of platform is shown in figure 11 ,

```
JSON 原始数据 头
保存 删除 全部折叠 全部展开 过滤JSON
+ CloudBeacon:
+
+ beacons:
+
+ 0:
+   addr_type: 0
+   ble_addr: "052F0D6169F0"
+   scan_rssi: -83
+   scan_time: 158700350
+
+ 1:
+   addr_type: 1
+   ble_addr: "7868797D318F"
+   scan_rssi: -77
+   scan_time: 158700355
+
+ 2:
+   addr_type: 1
+   ble_addr: "768829C284"
+   scan_rssi: -74
+   scan_time: 158700350
+
+ 3:
+   addr_type: 1
+   ble_addr: "7066E17A28E"
+   scan_rssi: -77
+   scan_time: 158700350
+
+ 4:
+   addr_type: 1
+   ble_addr: "7878038180F"
+   scan_rssi: -58
+   scan_time: 158700350
+
+ 5:
+   addr_type: 1
+   ble_addr: "0286E6CCECF"
+   scan_rssi: -86
+   scan_time: 158700350
+
+ 6:
+   addr_type: 0
+   ble_addr: "0328E6E83070"
+   scan_rssi: -83
+   scan_time: 158700350
+
+ 7:
+   addr_type: 1
+   ble_addr: "7779473864"
+   scan_rssi: -83
+   scan_time: 158700350
+
+ 8:
+   addr_type: 1
+   ble_addr: "7868797D318F"
+   scan_rssi: -77
+   scan_time: 158700350
```

Figure 11