Common problems and solutions for users

CONTENT

The list of currently supported products is as follows

Super Ethernet Port Product：

Product Name	Eport-E10	Eport-E20	Eport-E30	Eport Pro-EP10	Eport Pro-EP20
Product Picture					

Ethernet Serial Server Product：

Product Type	HF5111B	HF5142B	HF5111A	HF5142A
Product Name				

Wi-Fi Serial Server Product：

Product Type	Wport-W10	Wport-W20	HF2211	HF2221
Product Name				

3G、4G Serial Server:

Product Type	HF2321	HF2421
Product Name		

Remote IO Controller Class:

Product Type	HF6108	HF6208	HF6508
Product Name			

1. HOW TO ENTER THE CLI COMMAND MODE ?

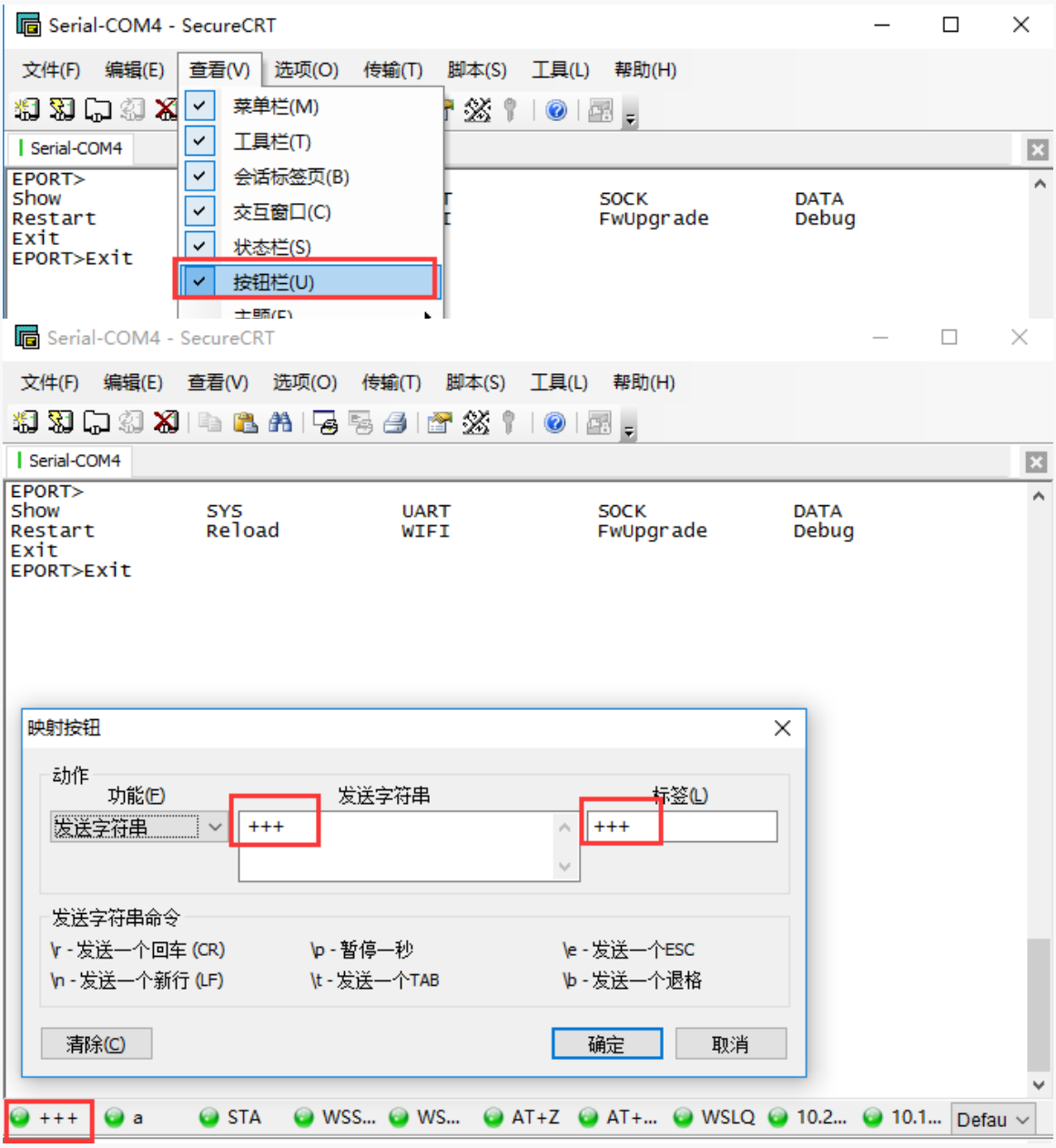
answer : a) serial mode。

Steps 1：Download SecureCRT Tool：

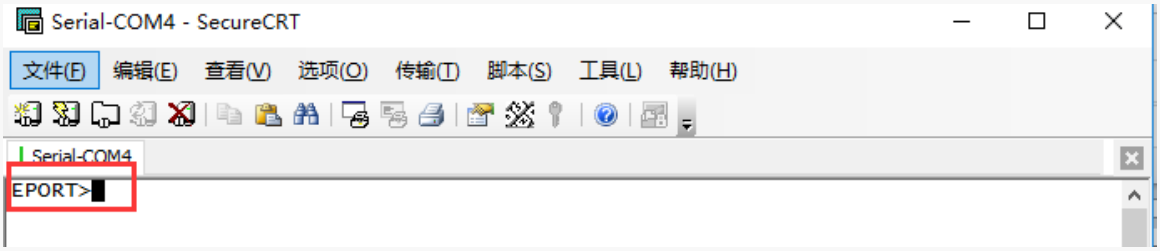
http://gb.hi-flying.com/download_detail_dc/downloadsId=22.html

Steps 2：Set the actual device serial parameters, baud rate and so on。

Steps 3：Button bar to add "+++" button command。



Steps 4： UI shows "EPORT>" which means module has entered the CLI command mode。

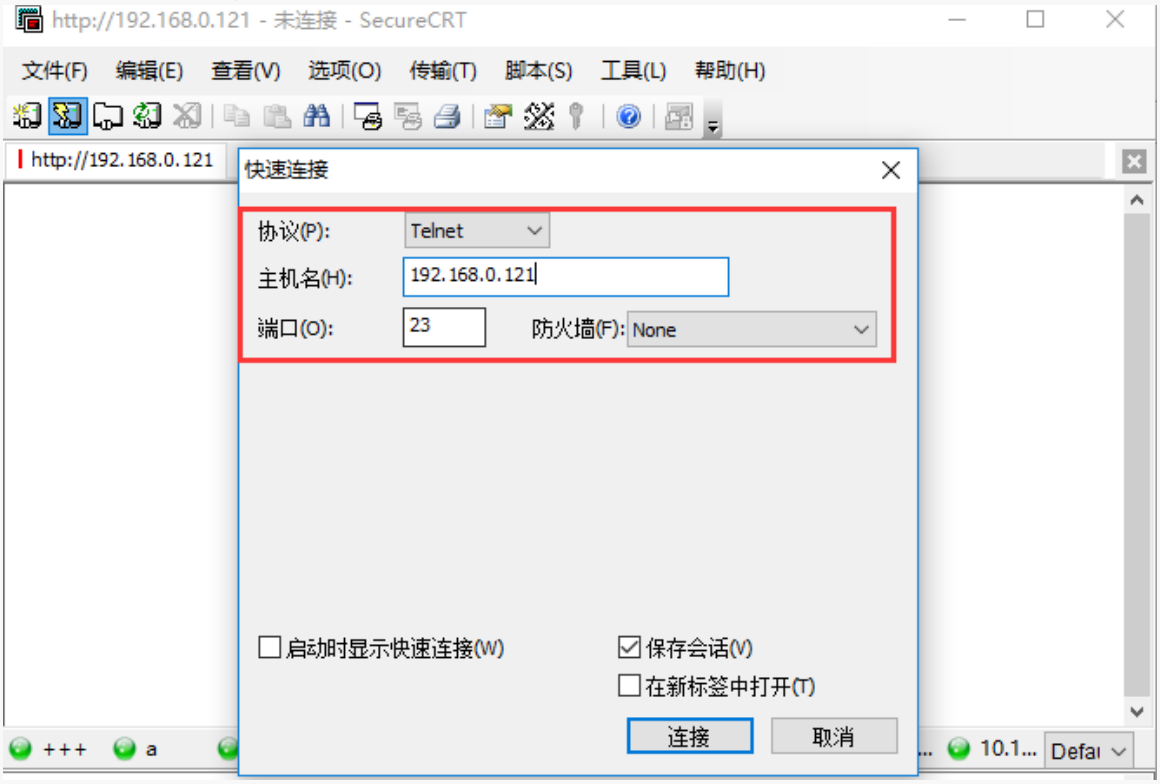


Note:

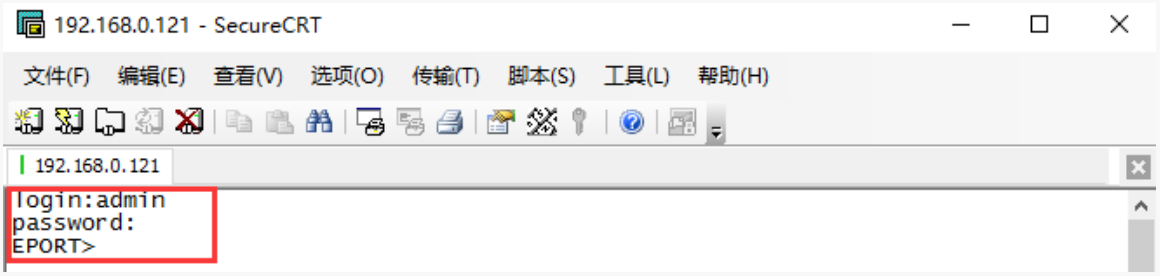
Any serial port tools which can be sent "+++" must be a continuous packet of data, before and after can not have other data (such as enter and newline characters).

b) Telnet Mode。

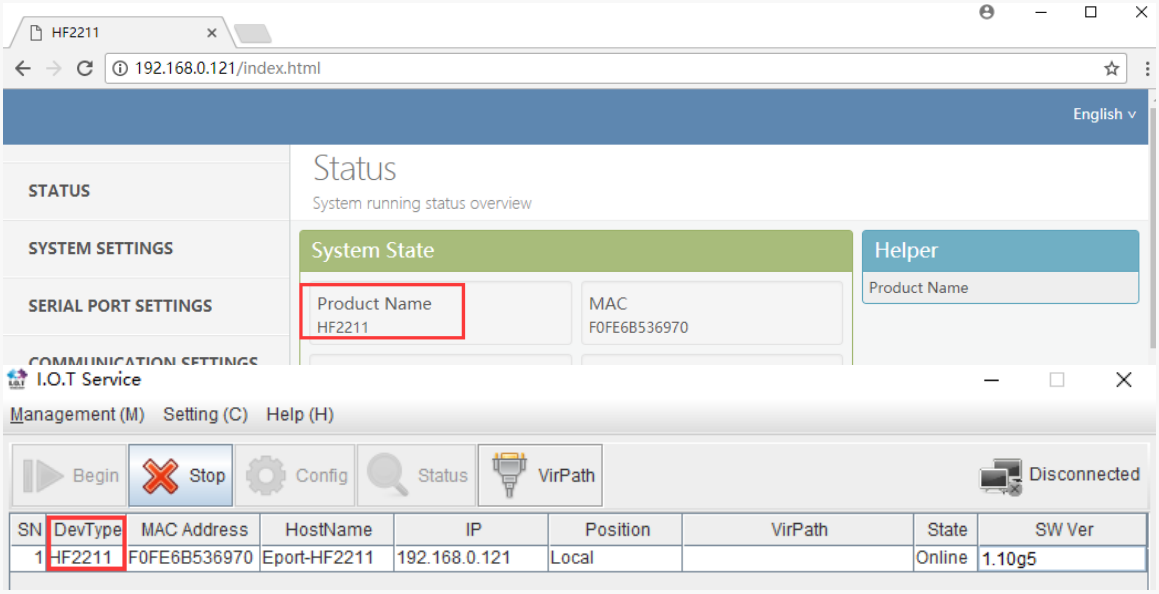
Steps 1 : Input the IP address of the device (IP address can be searched by IOTService tool), port 23.



Steps 2 : The default login name and password are both admin, then it shows "EPORT> " which means module has entered the CLI command mode



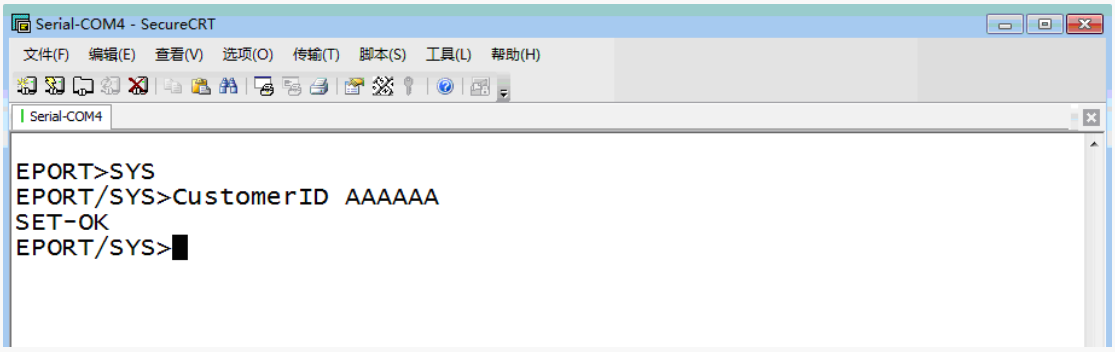
2. HOW TO MODIFY THE FOLLOWING WEB PAGE AND DISPLAY IOTSERVICE DEVICE NAME ?



Answer： Modify by Cli instruction。

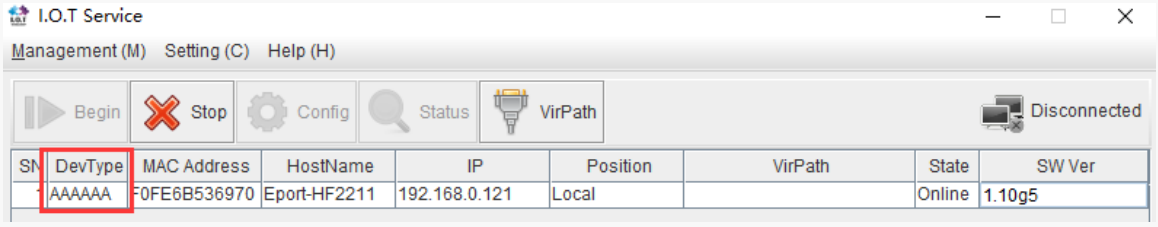
Steps 1： Enter Cli instruction mode.

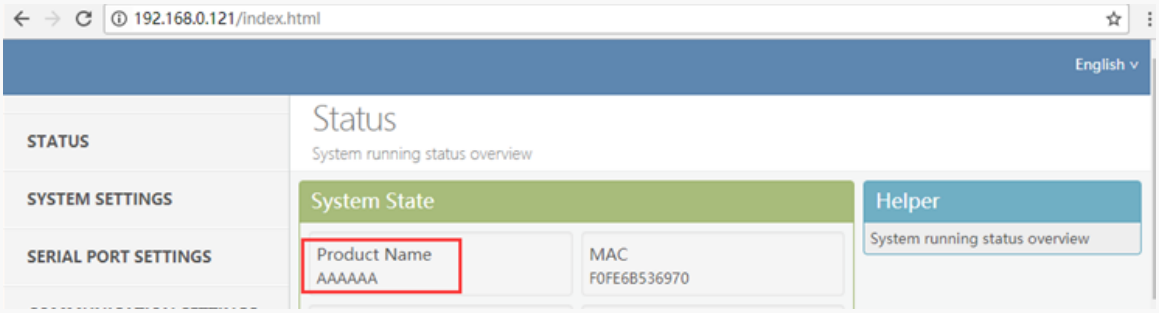
Steps 2： Enter the following directory to modify the CustomerID to a custom value (available in the Cli command mode tab to display available commands or fill command, the command is case sensitive).



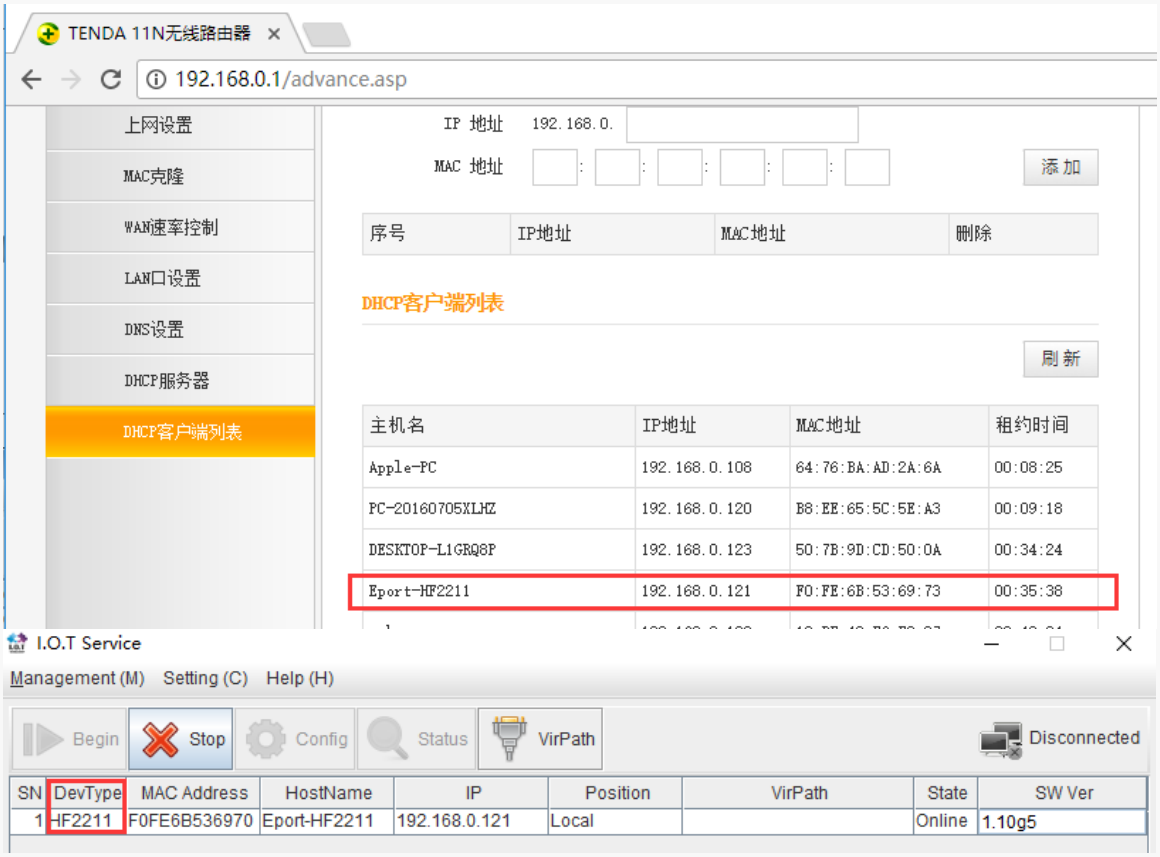
Results show :

Restart the tool or refresh the page to see the effect.



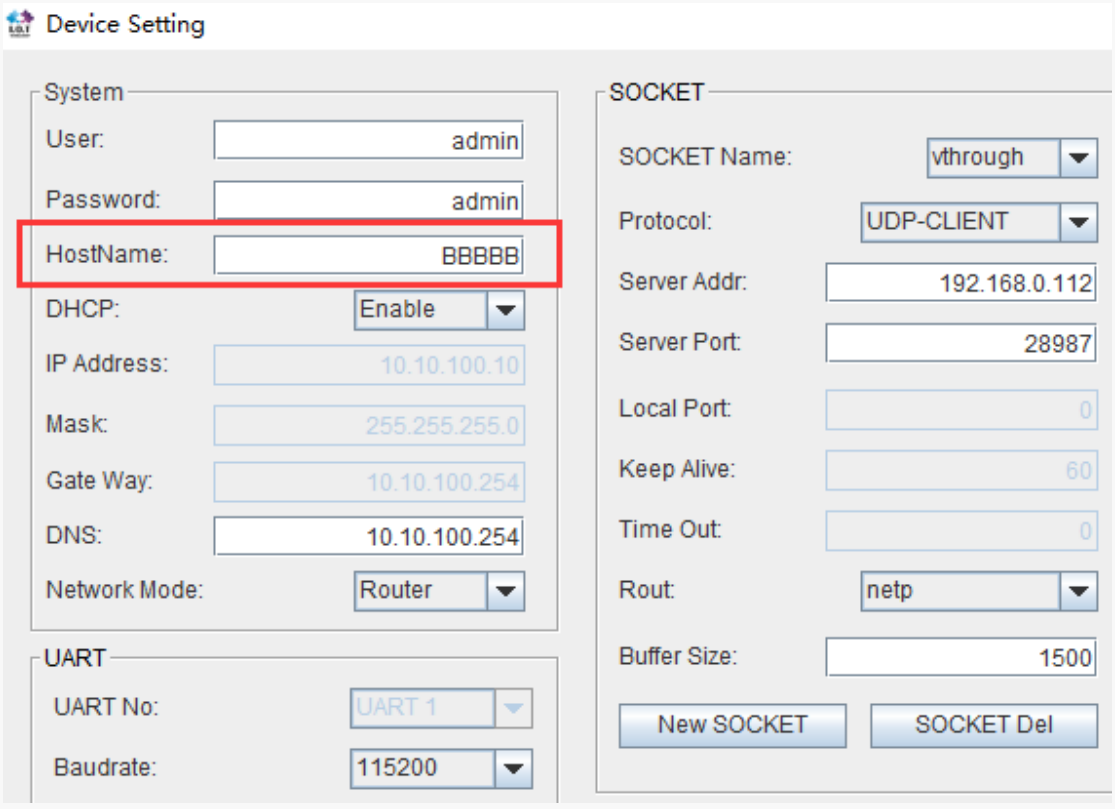


3. HOW TO MODIFY THE HOST NAME DISPLAYED ON THE ROUTER DHCP CLIENT ?

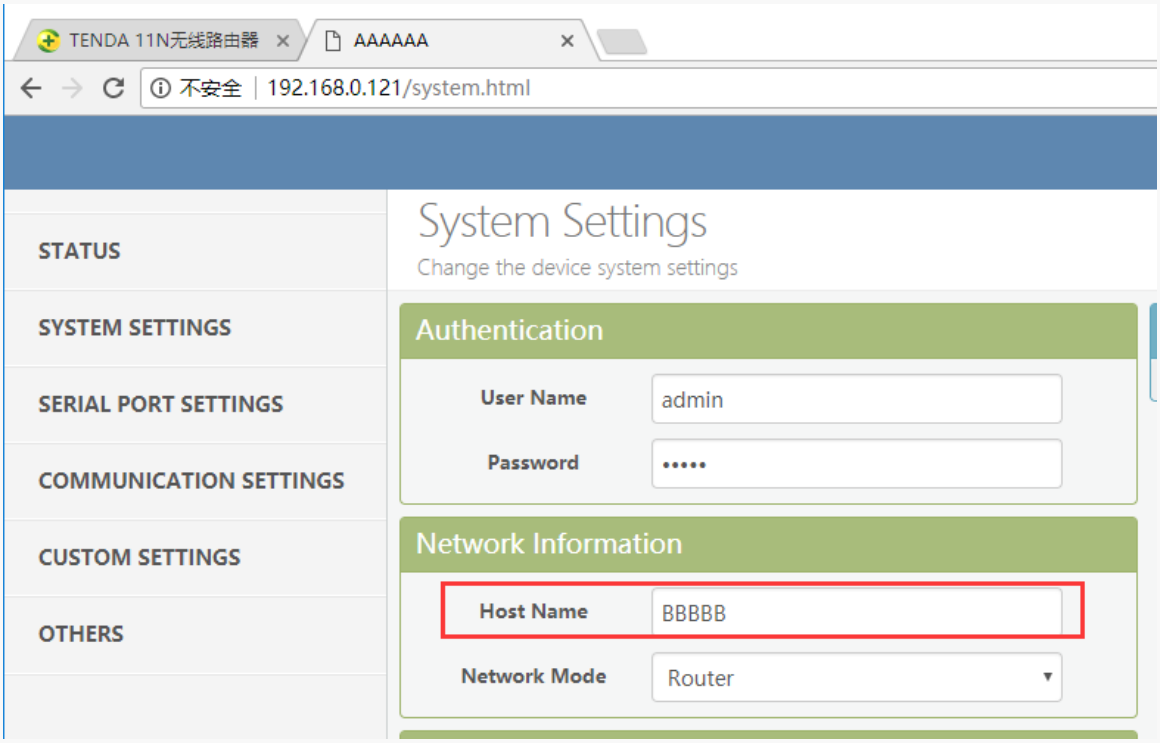


Answer : Through IOTService tools or Web pages.

a) IOTService Tools

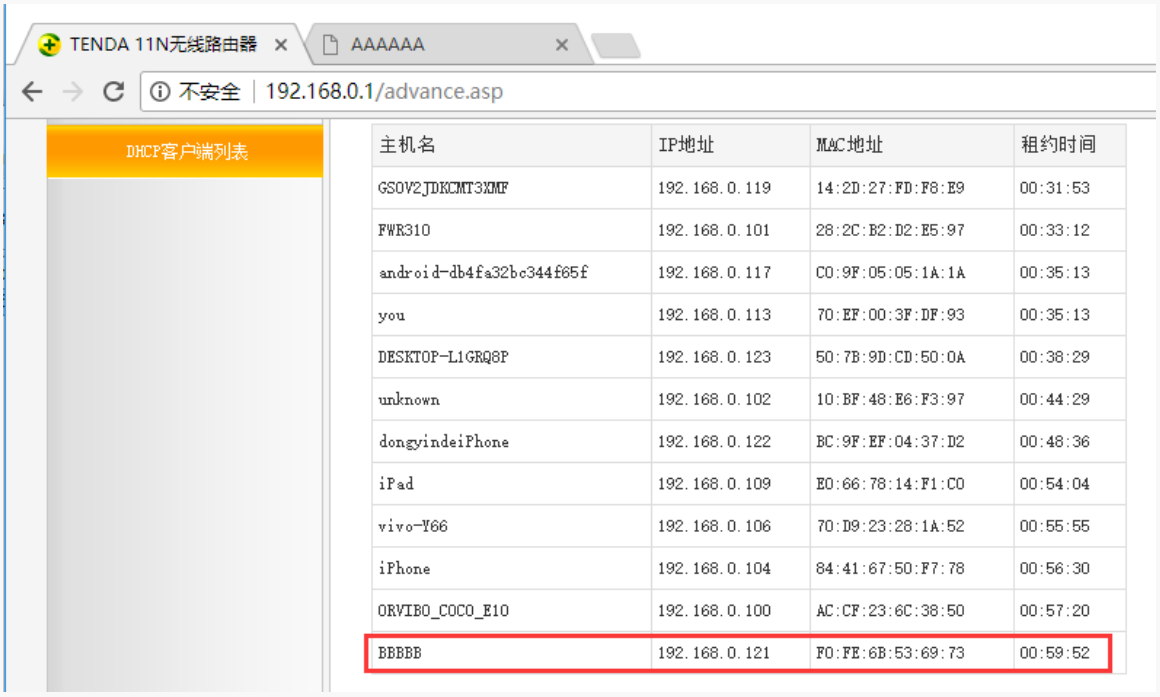


b) Web Pages



Results show :

Restart the device after setup, login to the router to view the device hostname.



主机名	IP地址	MAC地址	租约时间
GSOV2JDKCMT3XMF	192.168.0.119	14:2D:27:FD:F8:E9	00:31:53
FWR310	192.168.0.101	28:2C:B2:D2:E5:97	00:33:12
android-db4fa32bc344f65f	192.168.0.117	C0:9F:05:05:1A:1A	00:35:13
you	192.168.0.113	70:EF:00:3F:DF:93	00:35:13
DESKTOP-L1GRQ8P	192.168.0.123	50:7B:9D:CD:50:0A	00:38:29
unknown	192.168.0.102	10:BF:48:E6:F3:97	00:44:29
dongyindeiPhone	192.168.0.122	BC:9F:EF:04:37:D2	00:48:36
iPad	192.168.0.109	E0:66:78:14:F1:C0	00:54:04
vivo-Y66	192.168.0.106	70:D9:23:28:1A:52	00:55:55
iPhone	192.168.0.104	84:41:67:50:F7:78	00:56:30
ORVIBO_COCO_E10	192.168.0.100	AC:CF:23:6C:38:50	00:57:20
BBBBB	192.168.0.121	F0:FE:6B:53:69:73	00:59:52

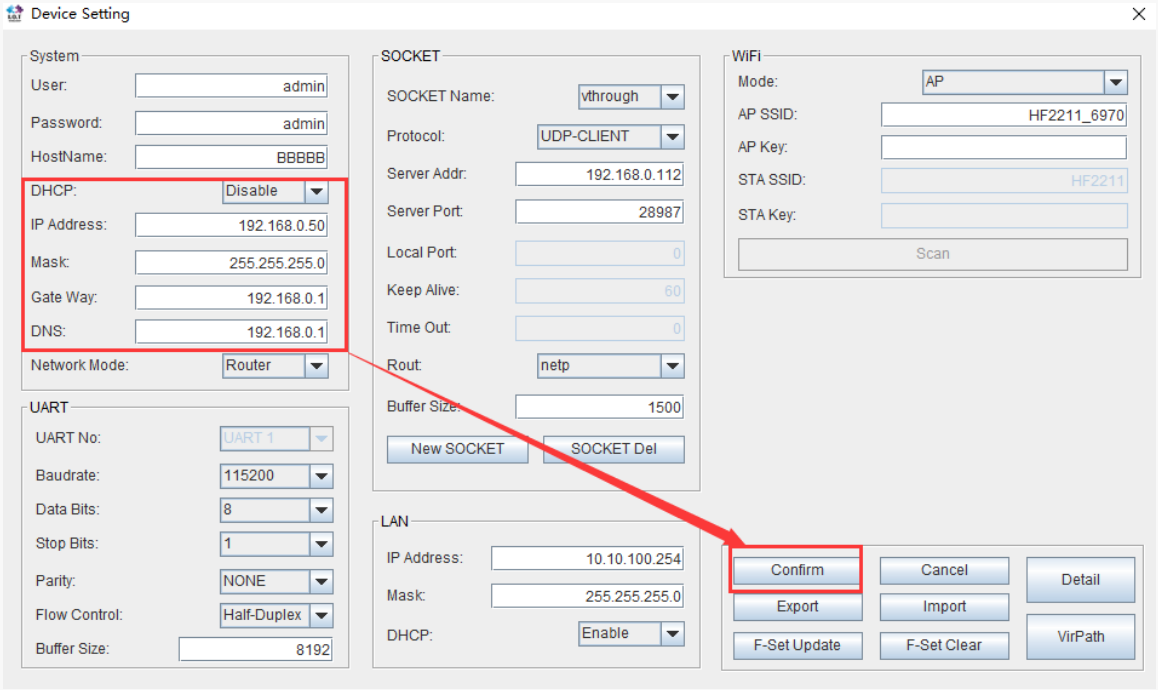
4. HOW TO MODIFY THE HF2211 DEVICE AS A STATIC IP ADDRESS ?

Answer : Through IOTService tools or Web pages which is similar to other industrial products.

a) IOTService TOOLS

Steps 1 : HF2211 Ethernet interface directly connected to the router LAN port, PC is also connected to the router。

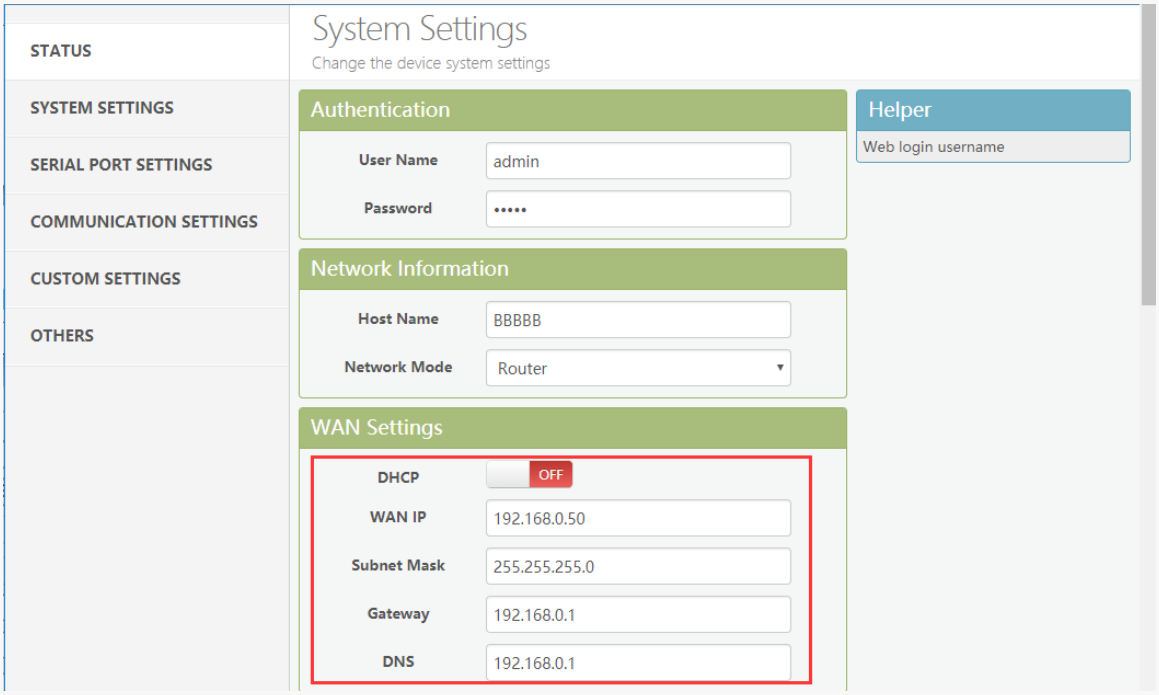
Steps 2 : Open the IOTService tool to modify the configuration, restart after the modification is effective。



b) Web Pages

Steps 1 : WIFI connects to HF2211 device hotspot, hotspot name starts with "HF2211_"。

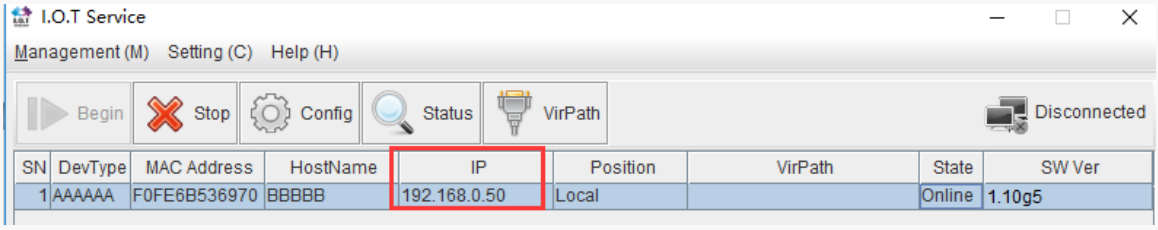
Steps 2 : Input IP "10.10.100.254" in browser, restart the following modified WAN parameters.



Note:

You can also use the network cable directly connected to the PC and HF2211, but the HF2211 network port with different wireless operating mode IP address will be different (AP mode network port is LAN port, direct connection LAN IP is 10.10.100.254 , STA mode network port is WAN port, directly connected with Auto IP: 169.254.173.207).

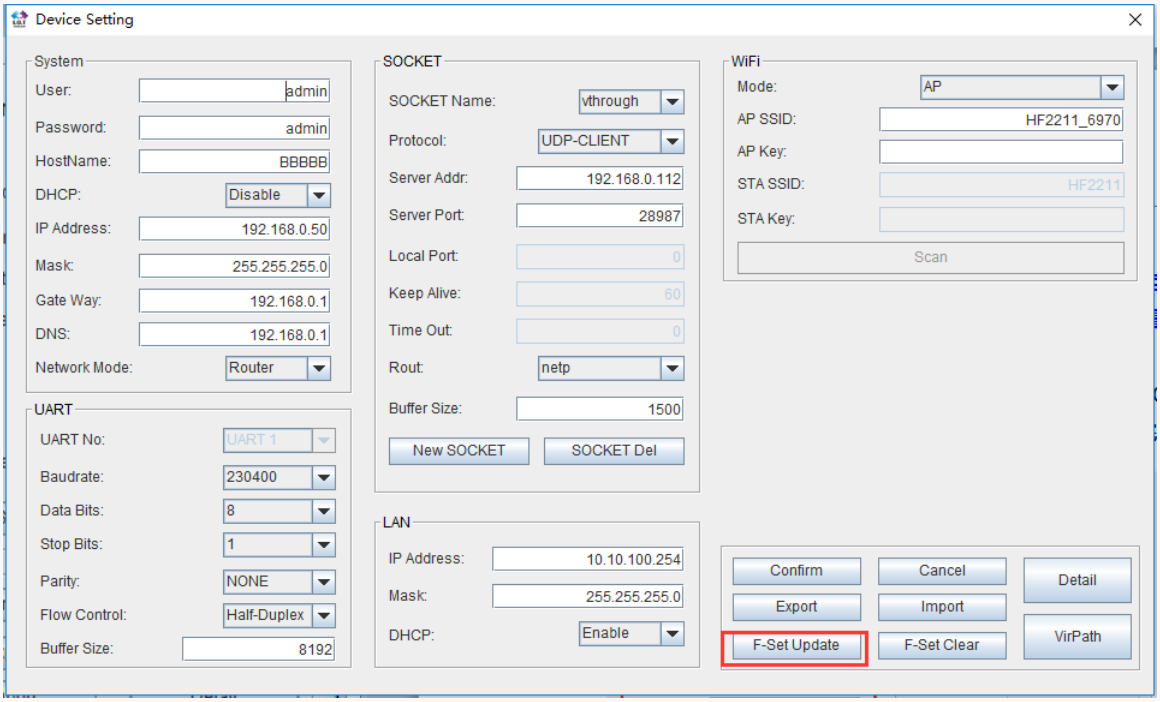
Results show :



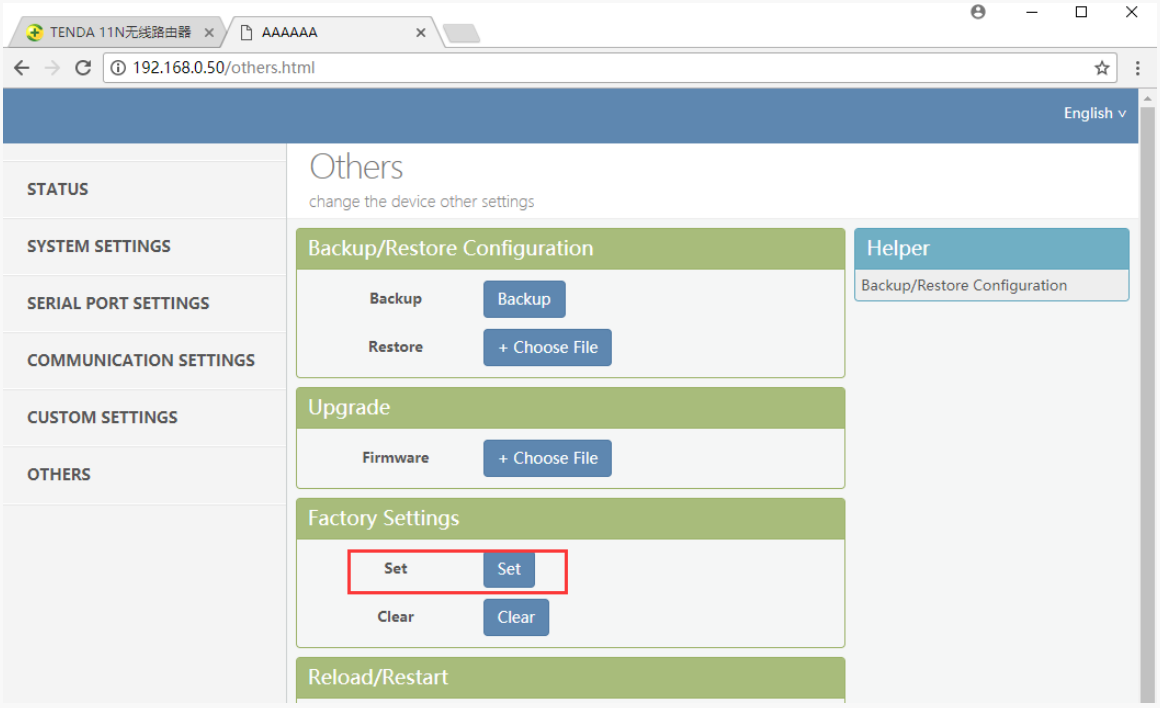
5. HOW TO SAVE THE MODIFIED PARAMETERS AS FACTORY PARAMETERS ?

Answer : Through the IOTService tool or web page factory parameters save function, so that even after the factory reset to restore the current saved parameters, otherwise it will restore the most primitive parameters of the device.

a) IOTService Tools



b) Web Pages



Note :

The saved factory parameters can also be cleared by the Clear button.

6. CAN PING EQUIPMENT IP BUT WHY NOT OPEN WEB CONFIGURATION PAGE ?

Answer : There may be the following situations.

a) Upgrade the new program but did not update the corresponding page, the latest firmware and web page upgrade file can contact Hi-flying, enter IP / hide.html login to the internal web page, the first [select file] to upgrade the application, the second [Select File] to upgrade external web pages.

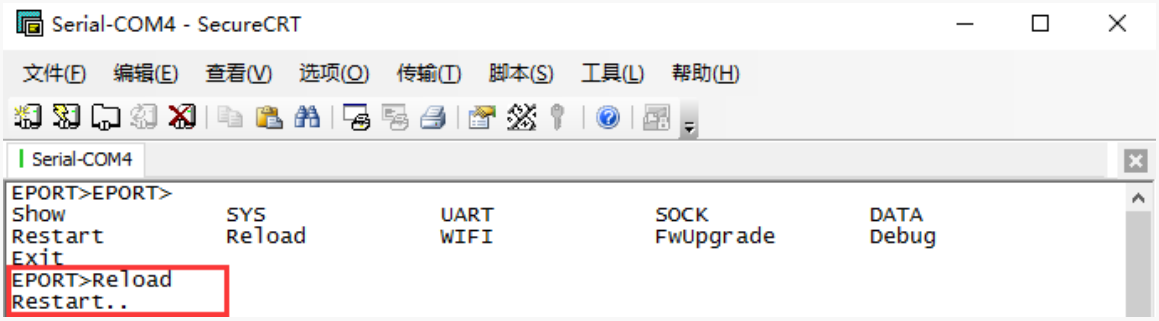
b) Browser version, the device supports IE10, Chrome, Firefox and other browsers, but does not support 360 browser, IE version less than 10. Because some versions do not support, Google Chrome is optimally recommended.

7. AFTER SETTING THE STATIC IP OF THE DEVICE, BUT FORGET THE PARAMETERS SET BEFORE THE DEVICE AND THE NETWORK ENVIRONMENT HAS CHANGED, HOW TO RESTORE ?

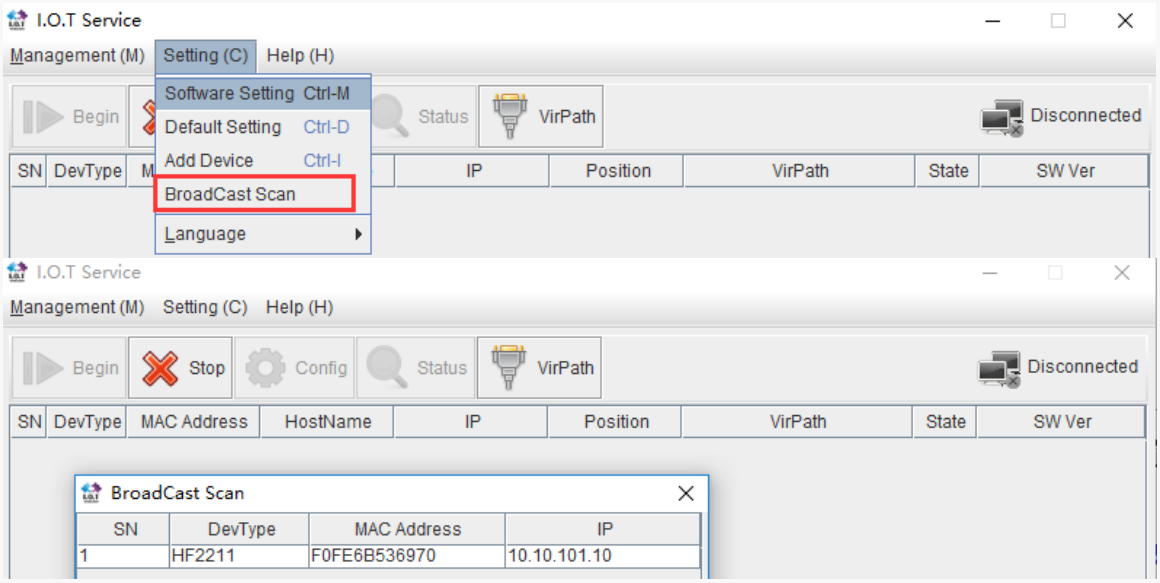
Answer : There are several ways。

a) Long press the device's Reset button for more than 3 seconds until release,which will restore the factory settings, the device will automatically restart。

b) The serial port enters Cli order, Reload resumes the factory setting。



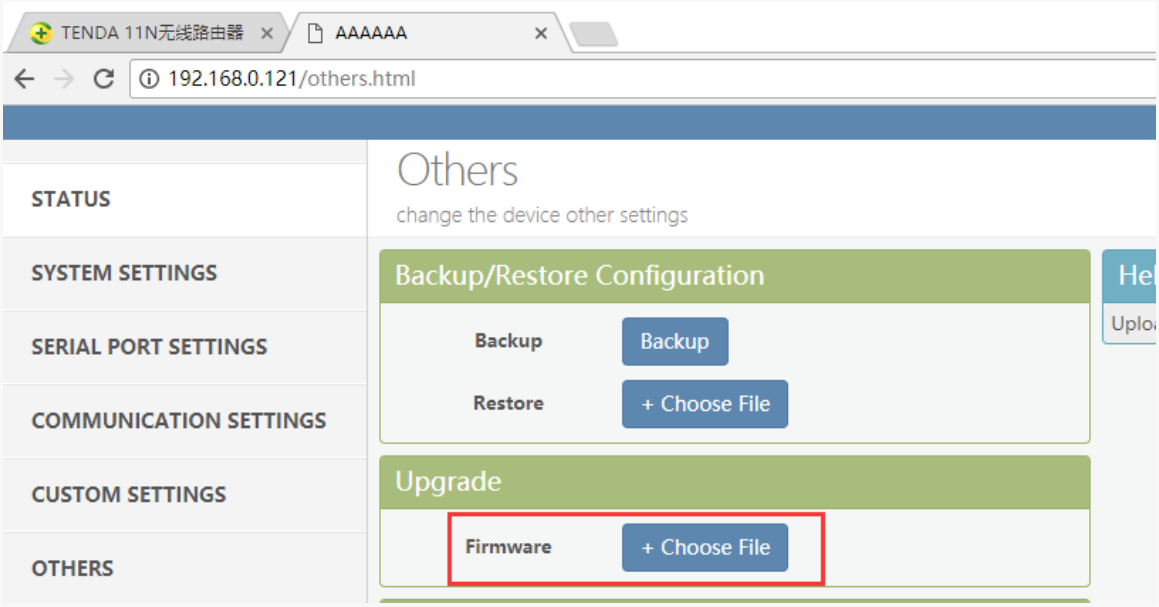
c) Network cable directly connected to the PC and equipment, use the broadcast search method to find the current static IP device to modify. Modify the PC into the same network segment and restart the device, you can use the tool to re-configure the device.



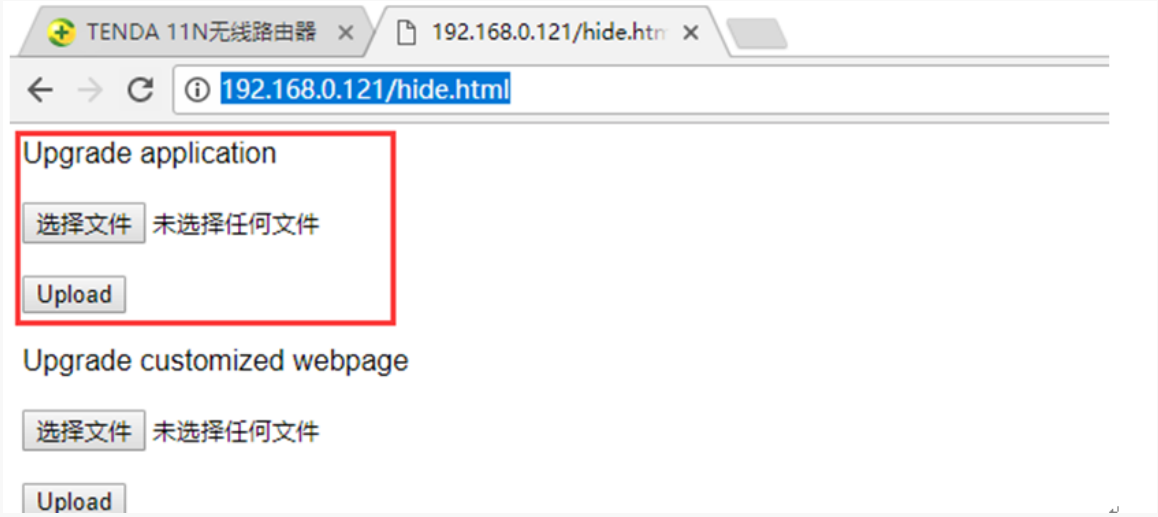
8. HOW TO UPGRADE THE PROGRAM ?

Answer : There are several ways.

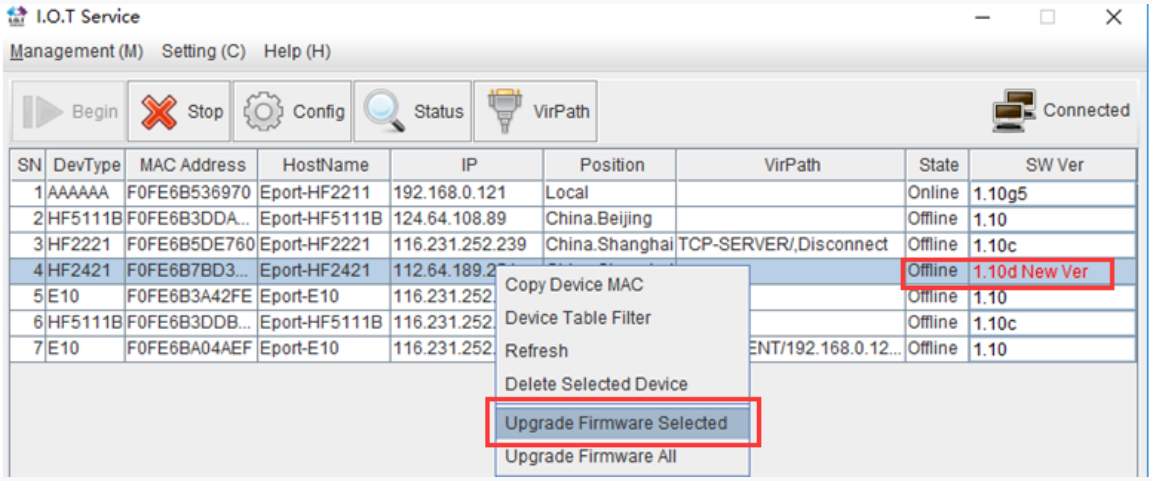
a) External webpage mode.



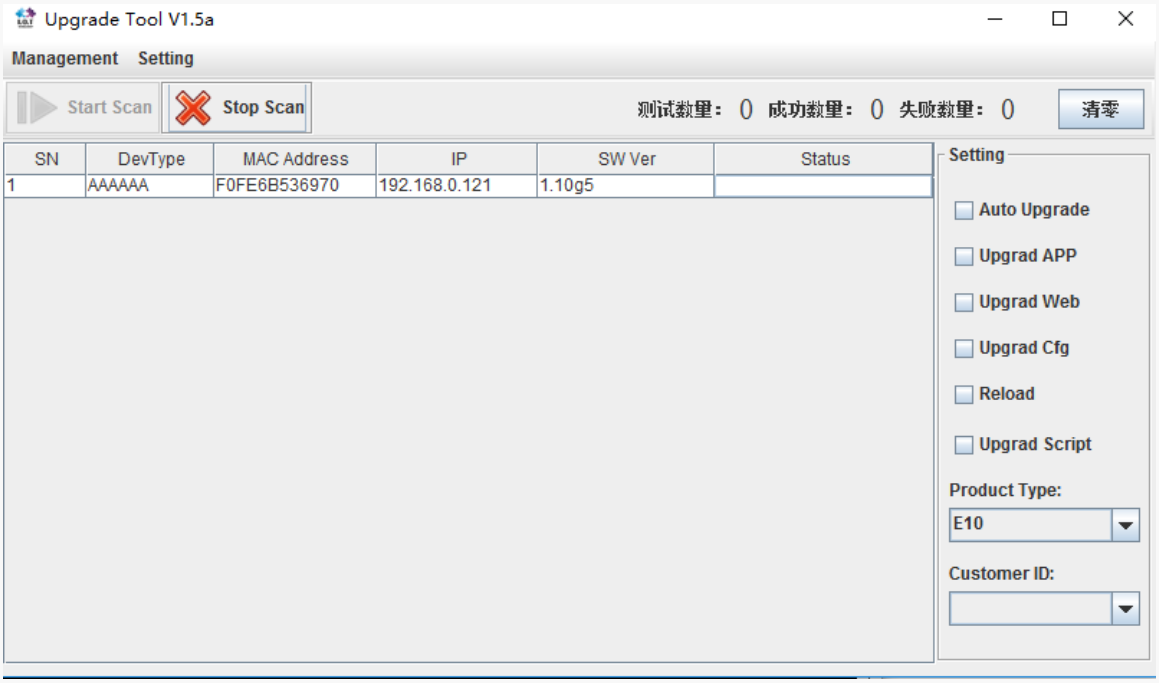
b) Internal web page approach.



c) IOTService tools, upgrade with IOTService tools need to register IOTBridge account (see IOTService tool instructions), part of the product firmware has been stored on our server. Just log in to the account you can perform local or remote device upgrade action. Contact Hi-flying to get this support, follow-up IOTBridge will open the firmware user upload feature to facilitate the management of user-customized firmware.



d) Upgrade Tools, you can use this tool to batch upgrade all devices in the LAN, upgrade applications, web pages, configuration parameters and scripts. Please contact Hi-flying for this support.

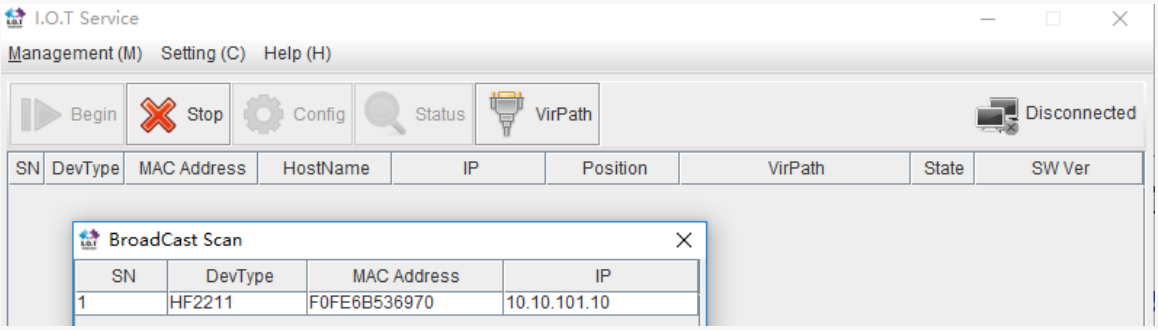


9. WHY IOTSERVICE TOOL CAN NOT FIND THE DEVICE ?

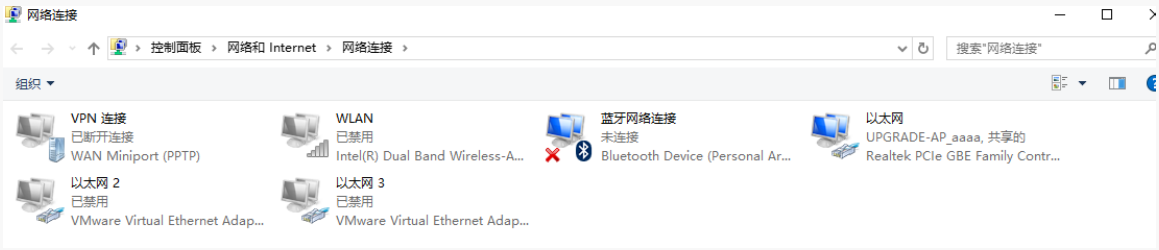
Answer : There are several possibilities.

a) In the LAN environment, the device that searches for the router above the network is not supported at present. That is, the network is as shown in the following figure. The PC1 can not search the upper-level device. If the network environment itself can communicate with the external network, the PC1 can be configured remotely using IOTService. If you do not Unicom extranet, this environment can only be configured by the tool installed on the PC2.

b) LAN environment, set the IP of the device but may not be in the same network segment with the router, through IOTService broadcast search function can be modified to the same network segment and then configure.



c) LAN environment, the device IP can PING , but IOTService tools still can not search the device. Make sure the computer is enabled to only one network card, all other cards are disabled, including the virtual network adapter.



d) Remote environment, IOTService set the account information, you can see all the devices under the current account. When the device shows online state, the first double-click the device may be timeout error, you can directly double-click again to enter.

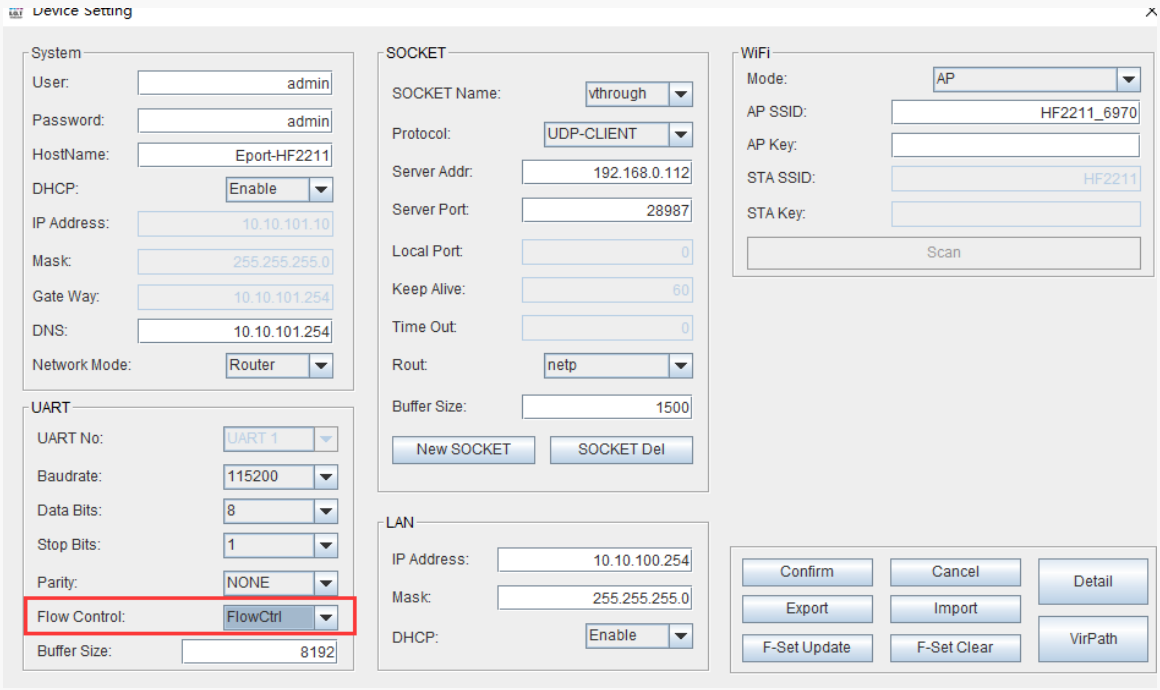
10. WHY RS232 CAN NOT COMMUNICATE ?

Answer : Check the serial port parameters, check the serial port cable, serial cable requires 2-3 cross. It is recommended to use the serial cable we provide.

Pin Number	Name	Description
2	RXD	Receive Data
3	TXD	Send Data
5	GND	GND
7	RTS	Request to Send
8	CTS	Clear to Send

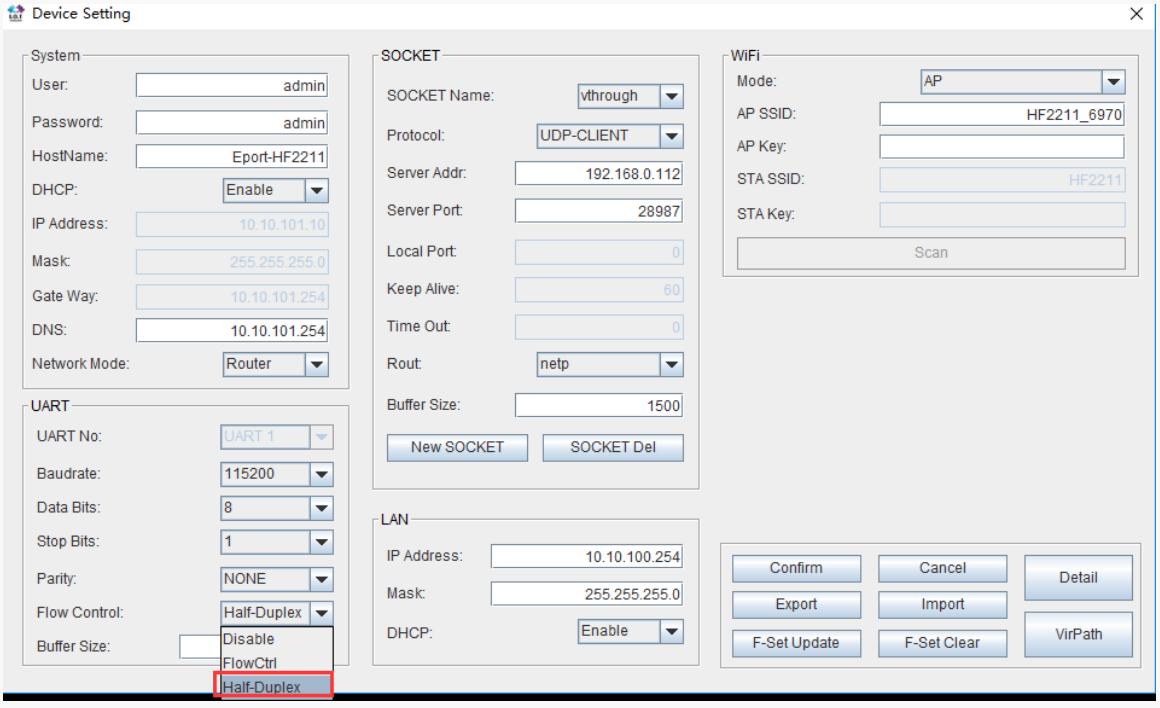
11. WHY RS232 FLOW CONTROL FUNCTION CAN NOT BE USED ?

Answer : Check the serial port parameters and the serial cable. Serial cable requires 2-3 cross, 7-8 cross. The serial cable we provide is 2-3 cross, and 7-8 cross does not cross, such as the need for 7-8 cross.Please in advance contact us.



12. WHY RS232 CAN COMMUNICATE, BUT RS485 CAN NOT COMMUNICATE ?

Answer : Check the serial port parameters, RS485 communication. The serial port needs to be set to half-duplex mode, as shown below.



13. HOW TO ENABLE STA MODE ROAMING FUNCTION OF HF2211 ?

Answer : Enter the Cli command mode, and following is the command to enable

roaming function. Take effect after restart. The parameters are as follows.

Roaming: Enable / disable roaming function.

ScanRssi: scan threshold, the unit of percentage value, the current signal strength below is the set value, start the scan.

ScanInterval: scan interval, in seconds, scan for a period of time whether there is a stronger signal strength AP of the same name.

ReconnectRssi: reconnection signal strength threshold. The current signal strength is lower than ScanRssi. Start the scan, when scanning to the proportion of signal with stronger strength, the switch is connected to a new AP. The switching process may take some time.

```
EPORT/WIFI>Roaming Enable
SET-OK
EPORT/WIFI>Roaming
Roaming:Enable
ScanRssi:40
ScanInterval:5
ReconnectRssi:60
EPORT/WIFI>Roaming Enable 50 6 70
SET-OK
EPORT/WIFI>Roaming
Roaming:Enable
ScanRssi:50
ScanInterval:6
ReconnectRssi:70
```

14. HOW TO HIDE THE HF2211 AP HOTSPOT ?

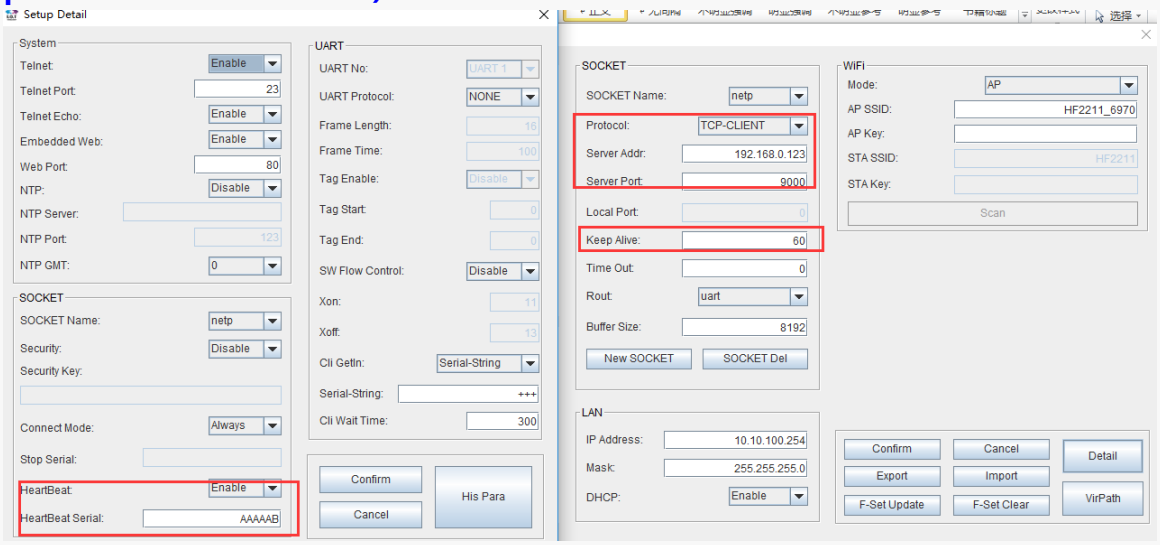
Answer : Enter Cli command mode and enable hidden SSID.

```
EPORT/WIFI>HideSSID On
SET-OK
```

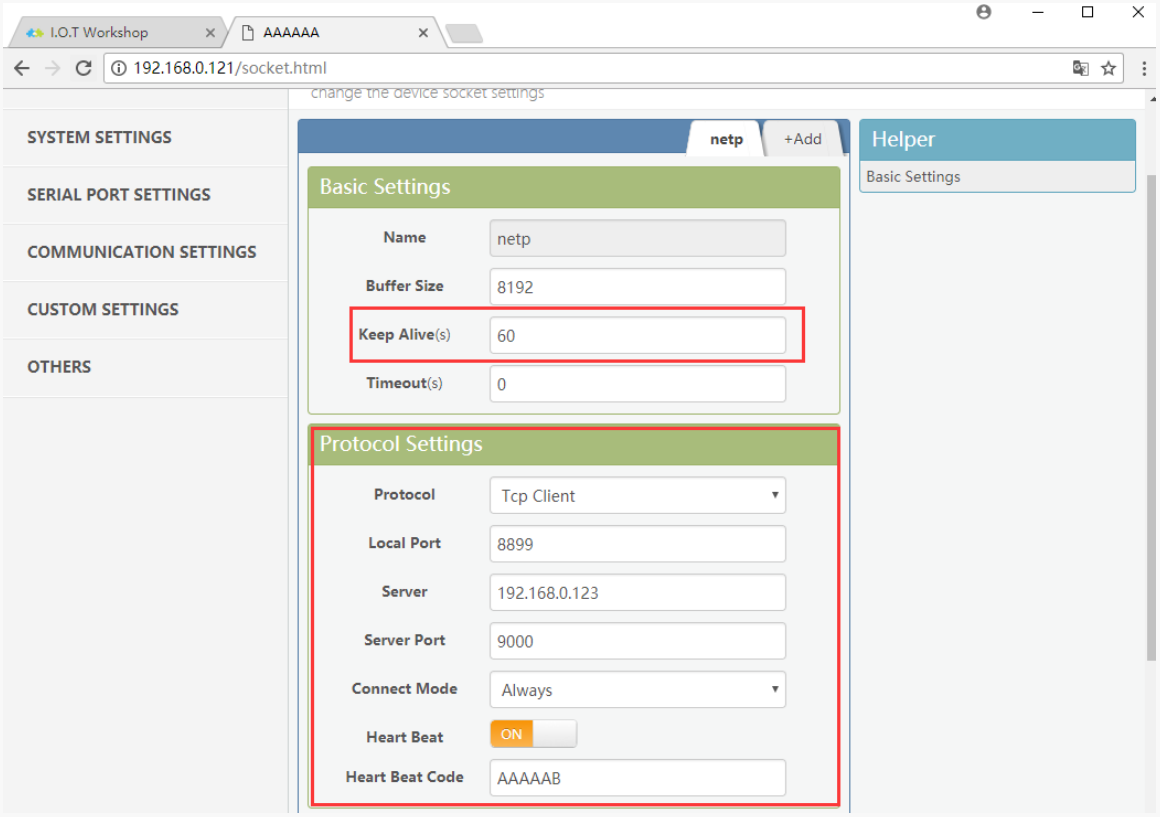

15. HOW TO SET THE HEARTBEAT PACKET (SEND DATA REGULARLY) FUNCTION ?

Answer : Through the IOTService tools, Web page settings.

a)IOTService tool, the device supports TCP client to send heartbeat packets by default, the heartbeat packet interval is keepalive value (same as keepalive packet time in the bottom).



b) Web Pages

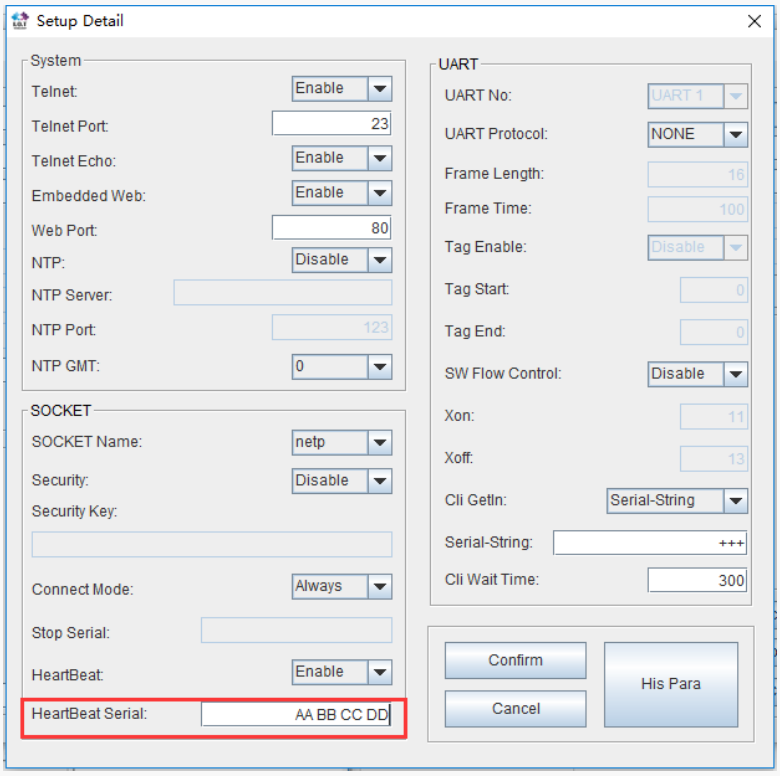


Note :

1、The heartbeat packet up to 12 bytes.

2、If you need to send hexadecimal data, the characters are separated by

spaces, as shown below.



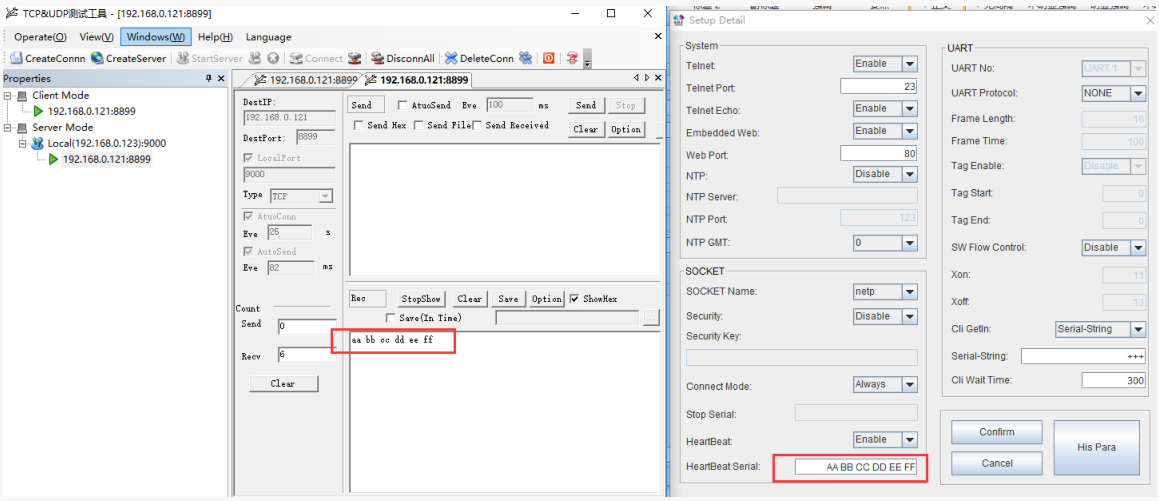
3、heartbeat package function can also be achieved through the script to meet the special needs, such as the following functions can be achieved through the script. Please see "HIS script" application documentation.

A.1. Demands

When netp socket channel has conneted, serial port will send "netp connected" ." netp disconnected" when the network is shut down.

When netp Socket channel is normal, it send "hearbeat data" in every 30 seconds.

Result Show :



16. VPN MODE 1 TO MANY TESTS

Answer : Through the IOTService tools and SecureCRT tools

a) Through the serial port tool, send +++ into cli mode to open each VPN mode HF2421, and set the test VPN server address: 112.124.43.15

```
EPORT>SYS
EPORT/SYS>Network
EPORT/SYS/Network>
Show            DHCP            DNS             HostName        APN
VPN             PortForward     EthMode         Traffic         Traffic
Lan             Mode            Quit
EPORT/SYS/Network>
```

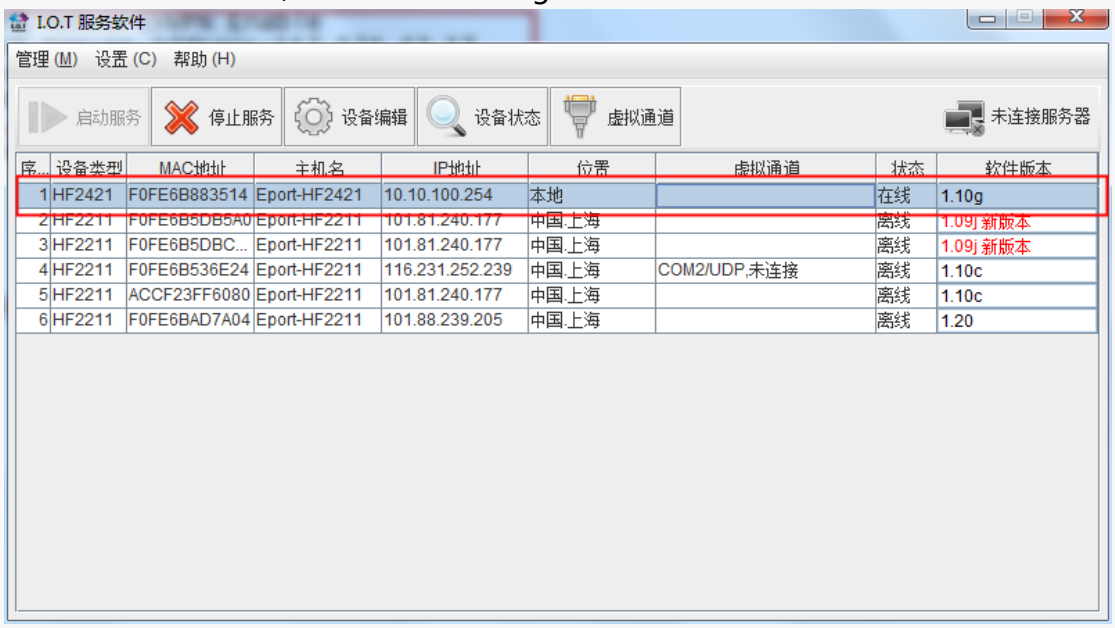
```
EPORT/SYS>Network
EPORT/SYS/Network>VPN Enable
Input NAT Server Address:112.124.43.15
Input User Name[]:hiflying
Input Password:test123
SET-OK
```

When set-ok appears, it reboots, indicating that the VPN setting is successful. The same HF2421 is also configured the same way. After the setting is successful, sys / network is queried for the following figure.

```
EPORT/SYS/Network>VPN
Enable
Server:112.124.43.15
Local IP:192.168.18.4
EPORT/SYS/Network>
```

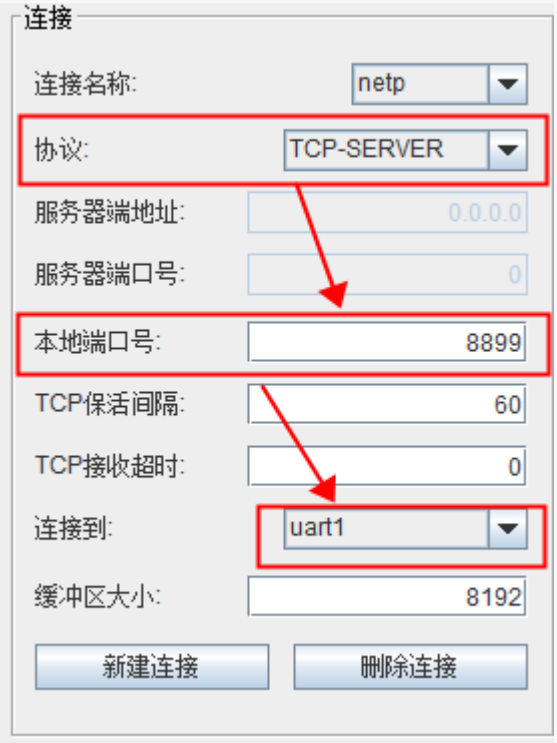
b) Open IOTService tools

The computer connects to the Ethernet network interface of the device 1 through the wifi or network cable of the device 1, and opens the IOTService tool to search for the device, as shown in the figure.



序...	设备类型	MAC地址	主机名	IP地址	位置	虚拟通道	状态	软件版本
1	HF2421	F0FE6B883514	Eport-HF2421	10.10.100.254	本地		在线	1.10g
2	HF2211	F0FE6B5DB5A0	Eport-HF2211	101.81.240.177	中国.上海		离线	1.09j 新版本
3	HF2211	F0FE6B5DBC...	Eport-HF2211	101.81.240.177	中国.上海		离线	1.09j 新版本
4	HF2211	F0FE6B536E24	Eport-HF2211	116.231.252.239	中国.上海	COM2/UDP,未连接	离线	1.10c
5	HF2211	ACCF23FF6080	Eport-HF2211	101.81.240.177	中国.上海		离线	1.10c
6	HF2211	F0FE6BAD7A04	Eport-HF2211	101.88.239.205	中国.上海		离线	1.20

Then enter the device editing interface, set the device 1 as a server.



Settings the device 2 as follow (at this time, the computer is connected to the wifi or Ethernet port of the device 2, same as step b), and use it as a client

After setting, restart the HF2421 and view the information via SecureCRT

The server shows the client IP can be successful when successful connection, you can carry out transparent transmission of data.


```
===SOCK Status===
SOCK Name:netp
State:Connected
Client IP:192.168.18.3
Recv Bytes:0     Recv Frames:0
Send Bytes:0     Send Frames:0
Failed Bytes:0   Failed Frames:0
```

The client shows that it is connected and reads the correct Server ip

```
===SOCK Status===
SOCK Name:netp
State:Connected
Server IP:192.168.18.2
Recv Bytes:32    Recv Frames:10
Send Bytes:14    Send Frames:5
Failed Bytes:0   Failed Frames:0

===WIFI Status===
Mode:AP
AP SSID:HF2421_D408
```

This two devices through the serial port to each other for data transmission.

(Note: One server can allow multiple client devices to connect, enabling one-to-many communication.)

17. HW TO MAKE IOTSERVICE START AUTOMATICALLY?

Answer :

a) Win7&10: Enter into the following directory:
C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Startup.

b) Put IOTService startup icon into this directory.