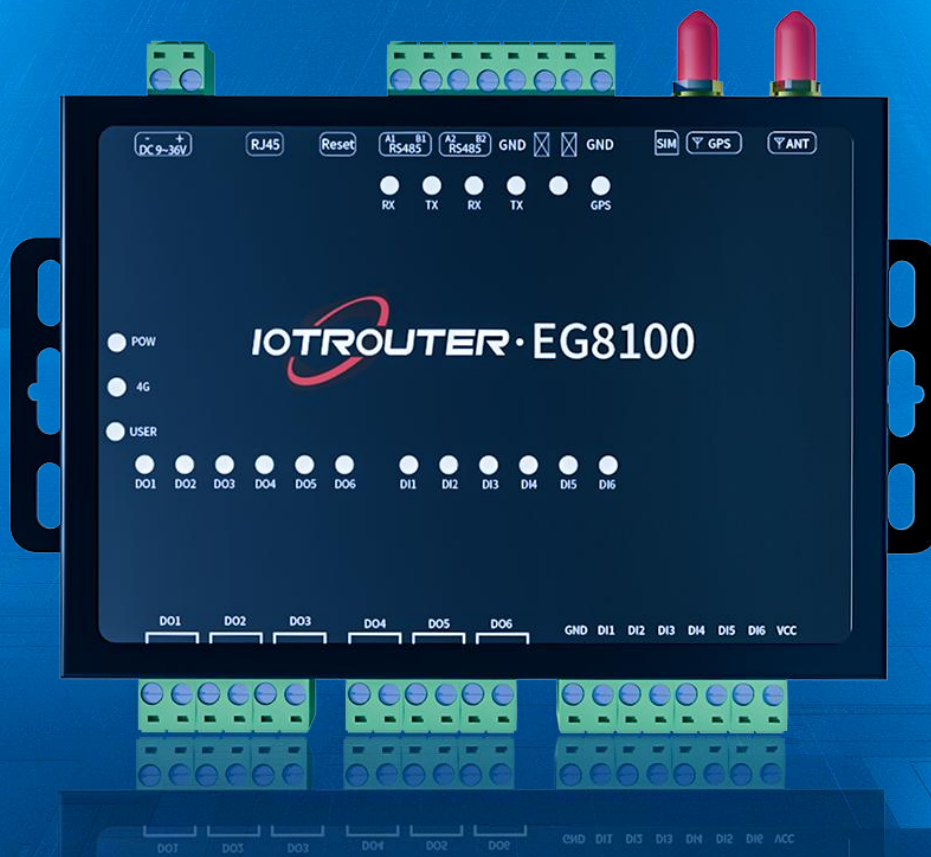


# Edge Computing Gateway

EG8100

Quick Start Instructions





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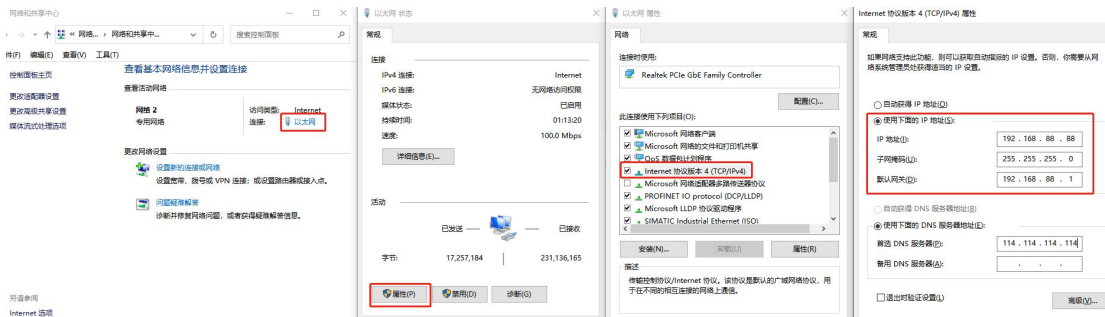
## 一、EG8100 power supply and connection

### 1. Powered by

Use DC12V to connect to the power supply terminal. After power on, you will see the ACT light flashing.

### 2. Ethernet connection

Use an Ethernet cable to connect the computer network port and the device. The LAN port of the EG8100 is connected to the LAN port. The default IP of the LAN port of the EG8100 is 192.168.88.1. Configuration needs to set the LAN port IP of the computer and EG8100 to the same IP address segment, otherwise the device and computer cannot communicate. As shown below:



## 二、EG8100 use

### 1. Login interface

Open your browser and enter 192.168.88.1 in the address bar. Enter Login interface, the management password defaults to **EG12345678** (can be modified after logging in).



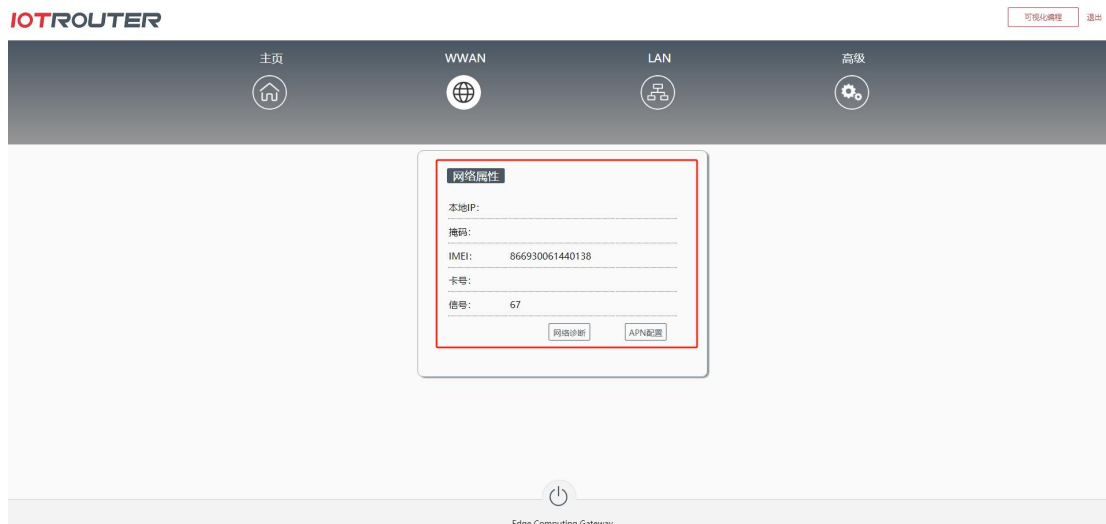
- Management password: Enter the management password **EG12345678**  
Enter the device management interface

## 2. System message



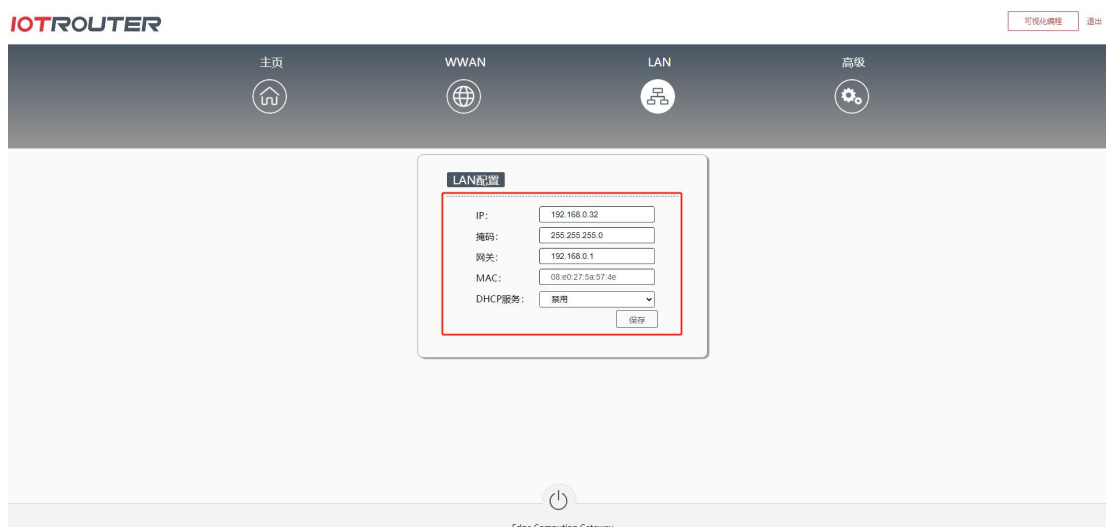
- Model: EG8100
- Version: 2012.23100801 (version has updated iterations)
- Device SN: The unique number of the device, which is required for remote management.
- System time: RTC clock, click to calibrate
- Networking method: The default is 4G. If it is the Ethernet version, you need to set the gateway of the LAN port to connect to the Internet through Ethernet.

### 3. WWAN (4G) properties



- Local IP: IP obtained by 4G
- Mask: automatically generated
- IMEI: 4G module IMEI number
- Card number: SIM card number
- Signal: Current signal strength (range 0-100, the larger the value, the stronger the signal)
- APN: Support APN setting, click APN configuration to enter the APN setting interface

### 4. LAN configuration



- IP: Default 192.168.88.1 (can be changed after logging in to the configuration interface)
- Mask: automatically generated
- Gateway: Not set by default (configured as the routing IP of the network segment when networking)

through LAN)

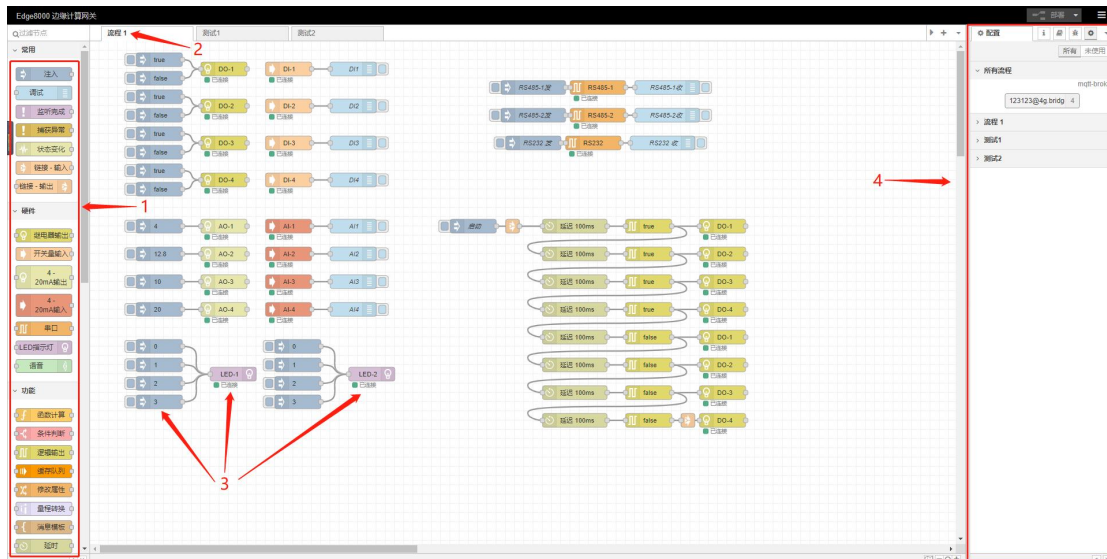
- MAC: LAN port MAN address
- DHCP service: Disabled by default. Click to enable. You can set a DHCP pool for external network supply. After setting, save it and it will take effect.

## 5. Advanced



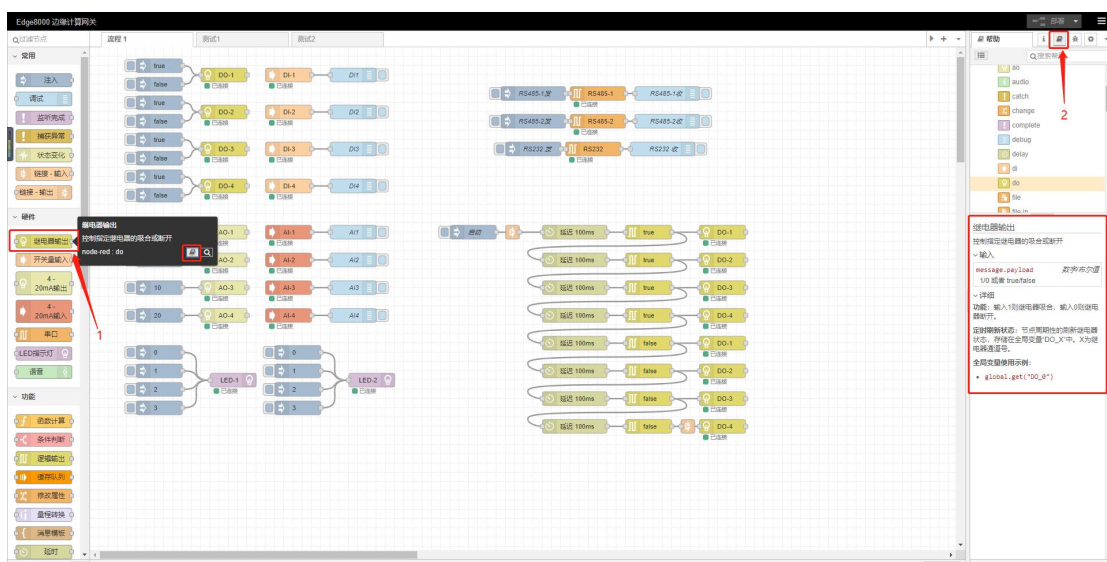
- Administrator password: change the login password,
- Factory Restore: Restore to the device factory configuration, you can also use RESET reset button to reset
- DNS: domain name resolution, you can modify the DNS server yourself
- NTP: Synchronize the NTP server time when connected to the Internet. Prioritize the NTP server connection with the \* number. The private network can modify the \* address by itself.
- Visual programming: Click Visual Programming to enter the programming interface of the device

## 6. Visual Programming



- 1: Function node
- 2: Process tab
- 3: Node
- 4: Sidebar

## 7. Node usage instructions

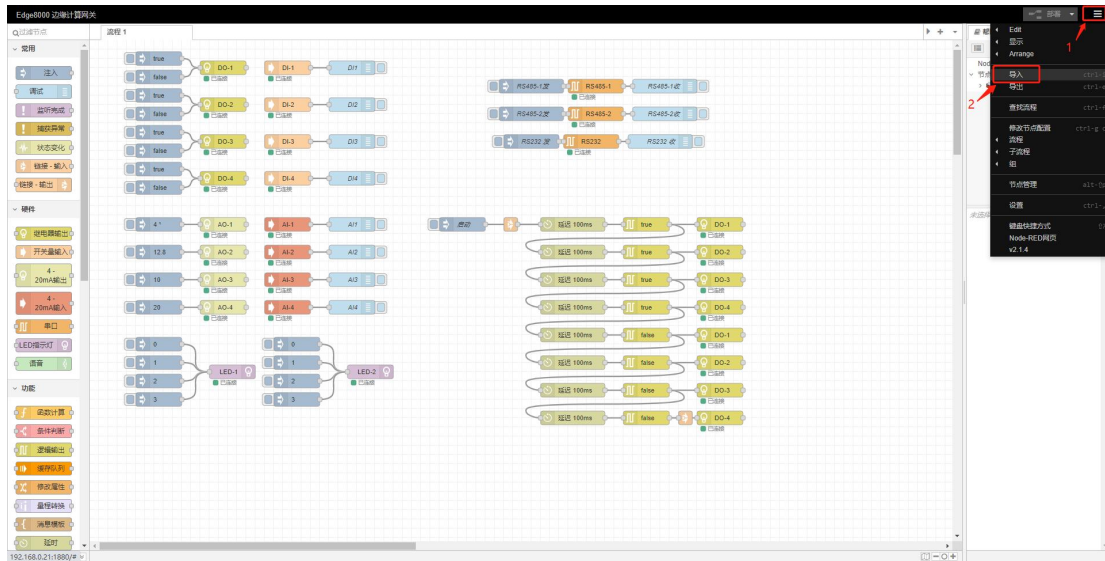


- 1: Click on the node
- 2: Click Help to view the instructions corresponding to the node.

### 三、 Visual programming - process import and export

#### 1. Process import

##### 1.1 Enter the import function interface

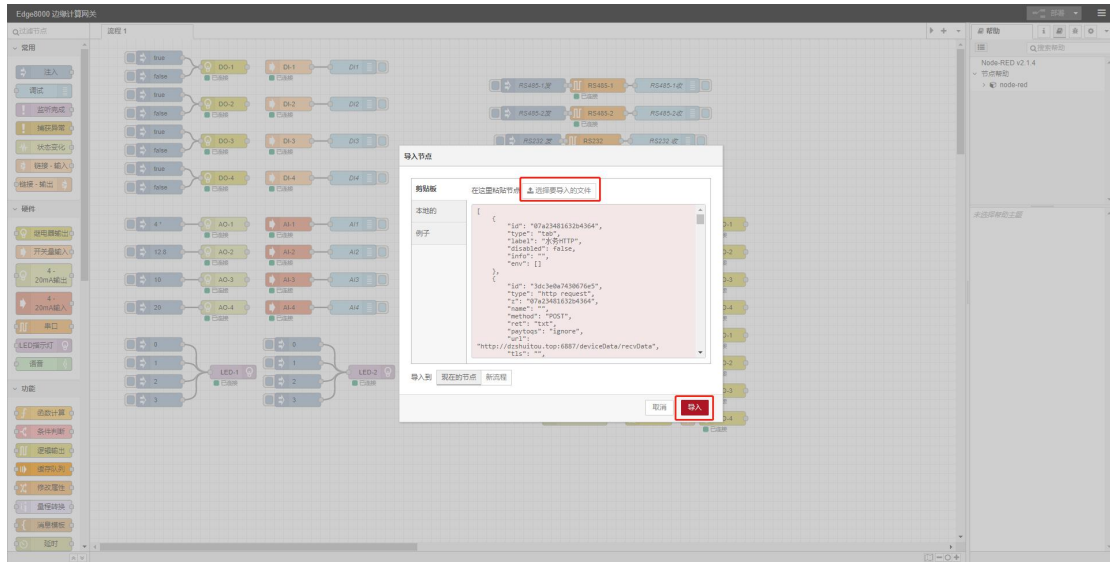


As shown above:

- 1) Click on the icon in the upper right corner
- 2) Click the Import button



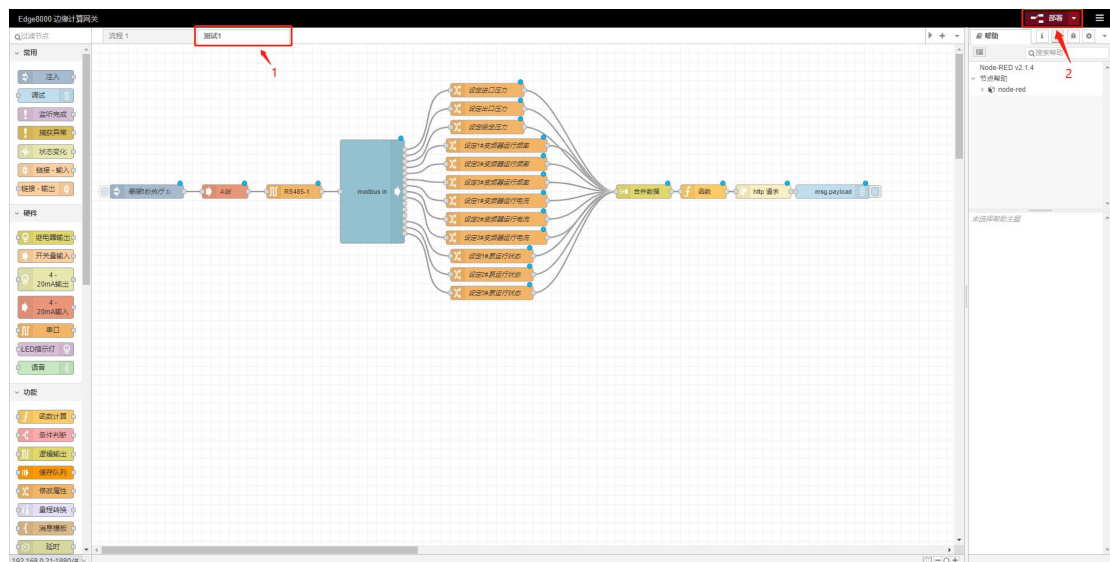
## 1.2 Select process and import



As shown above:

- 1) Select file to import
- 2) Click to import

## 1.3 Deployment process



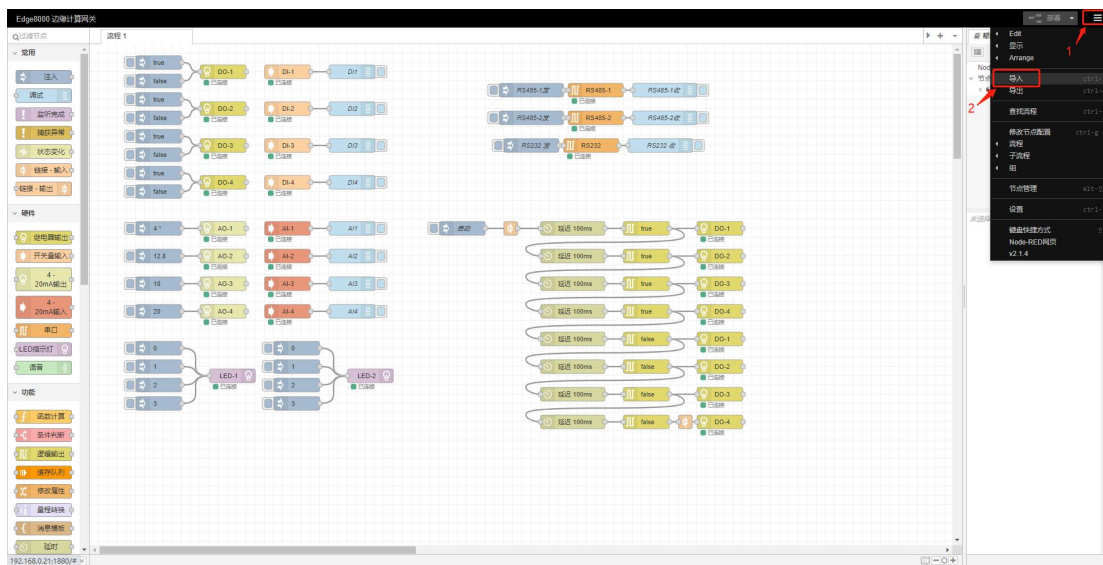
As shown above:

- 1) "Test 1" is the imported process file
- 2) Click Deploy and the import is successful.

## 2. Case import

The device has a variety of commonly used process cases built-in. Users can select the required cases according to classification for reference or call, helping you to build powerful applications more efficiently!

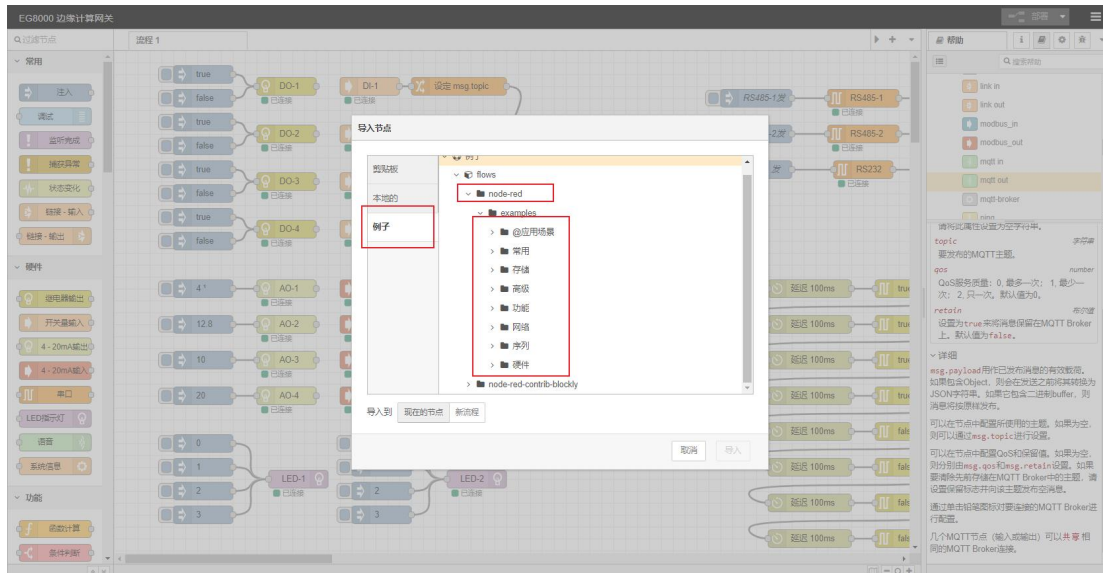
### 2.1 Enter the import function interface



As shown above:

- 1) Click on the icon in the upper right corner
- 2) Click the Import button

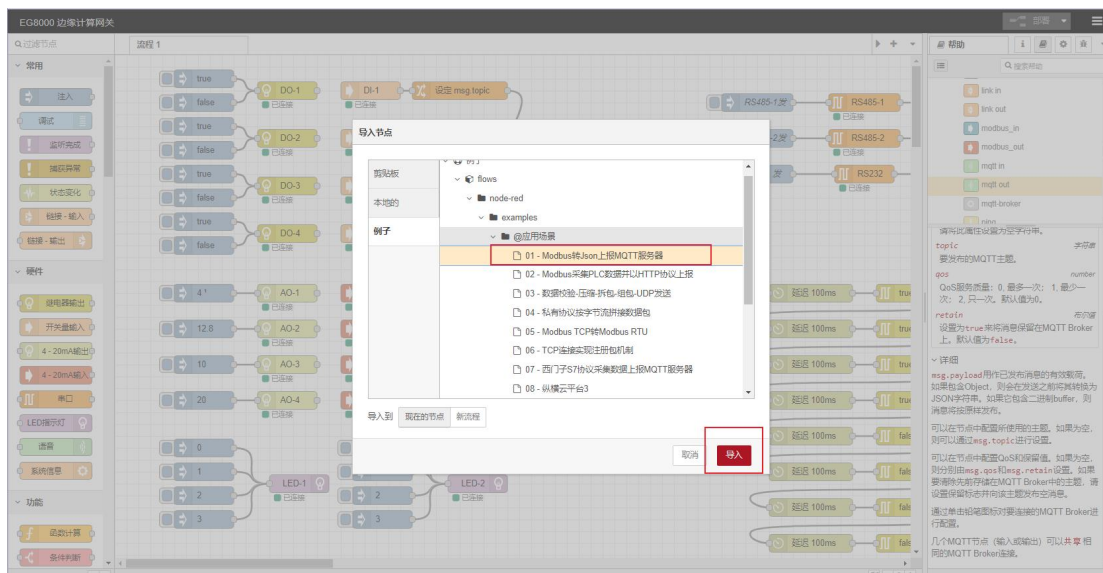
## 2.2 Select case



As shown above:

- 1) Click for example
- 2) Select examples under node-red
- 3) Select the desired example based on the folder name

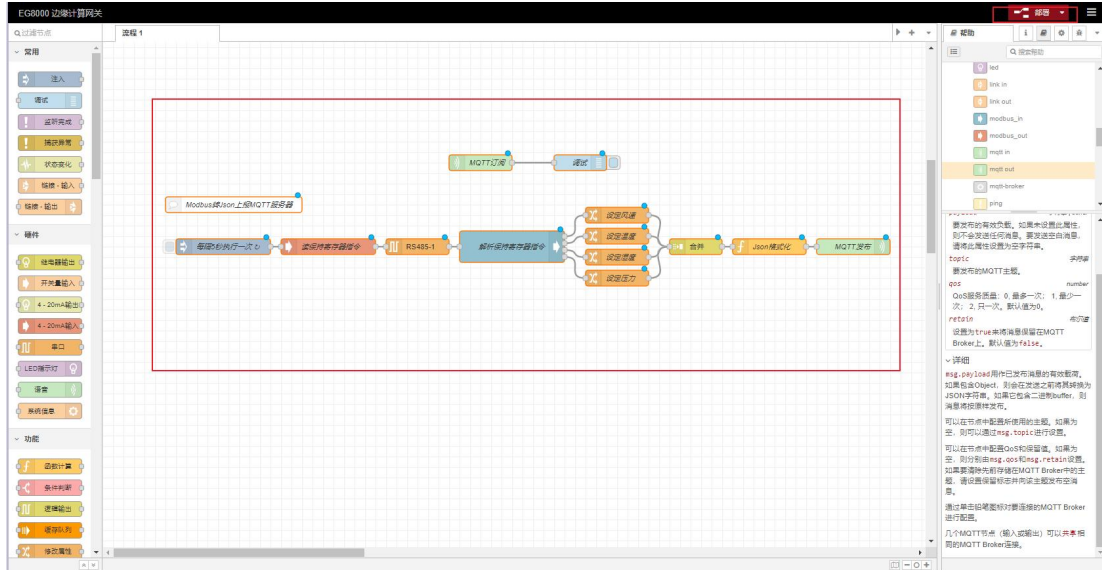
## 2.3 Import case



As shown above:

- 1) Click on the corresponding example
- 2) Click to import

## 2.4 Deployment case

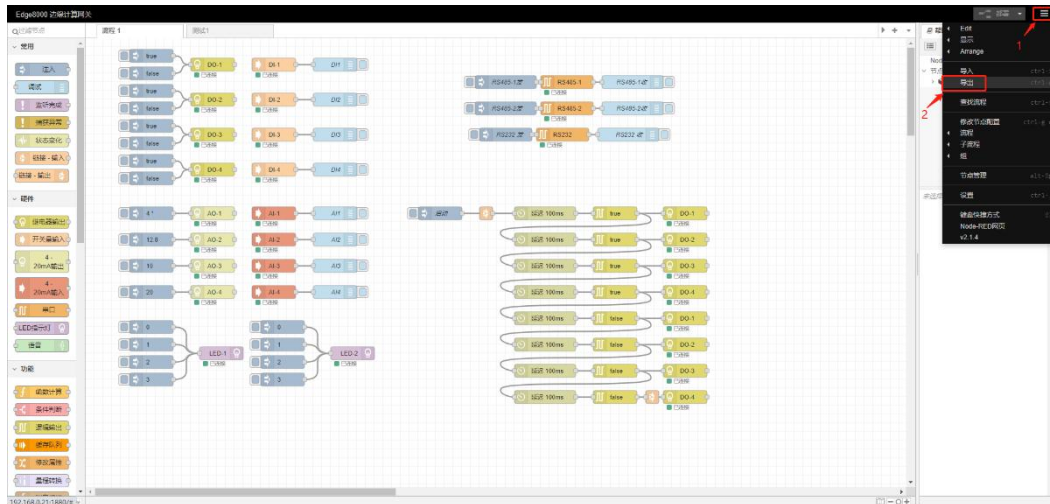


As shown above:

- 1) After importing, the case will appear on the canvas
- 2) Click Deploy and the application will take effect

## 3. Process export

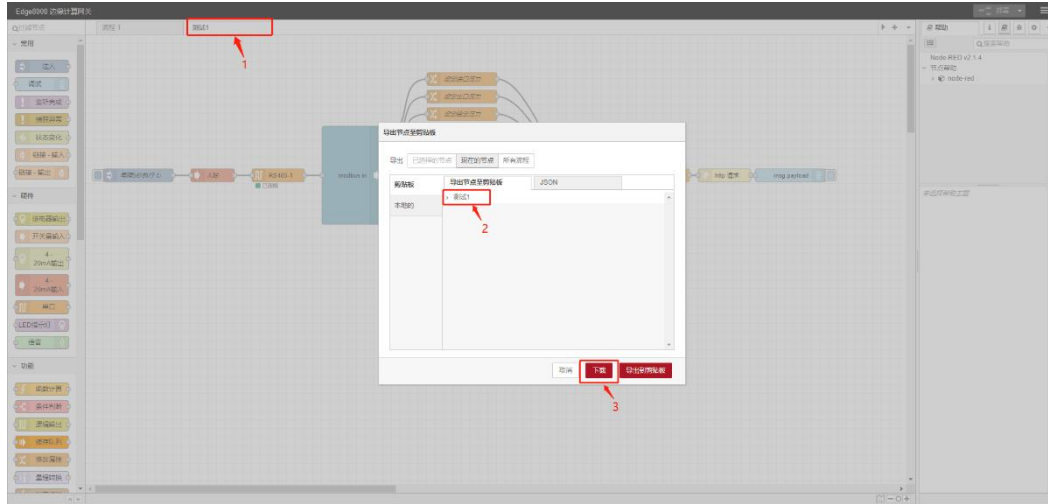
### 3.1 Enter the export function interface



Here we take exporting "Test 1" as an example, as shown above:

- 1) Click on the icon in the upper right corner
- 2) Click the export button

### 3.2 Select process and export



As shown above:

- 1) Select the process to export
- 2) Confirm that the export node is the required process
- 3) Click to download to generate the corresponding file

## 四、Remote management (EGManager Useillustrate)

### 1. Software download and installation

Go to <https://www.iotrouter.com/product/Website>, click "Download" to enter the download page, where you can download the remote management software of EG8100.

### 2. Account login

Open the EGManager software, log in using your mobile phone number



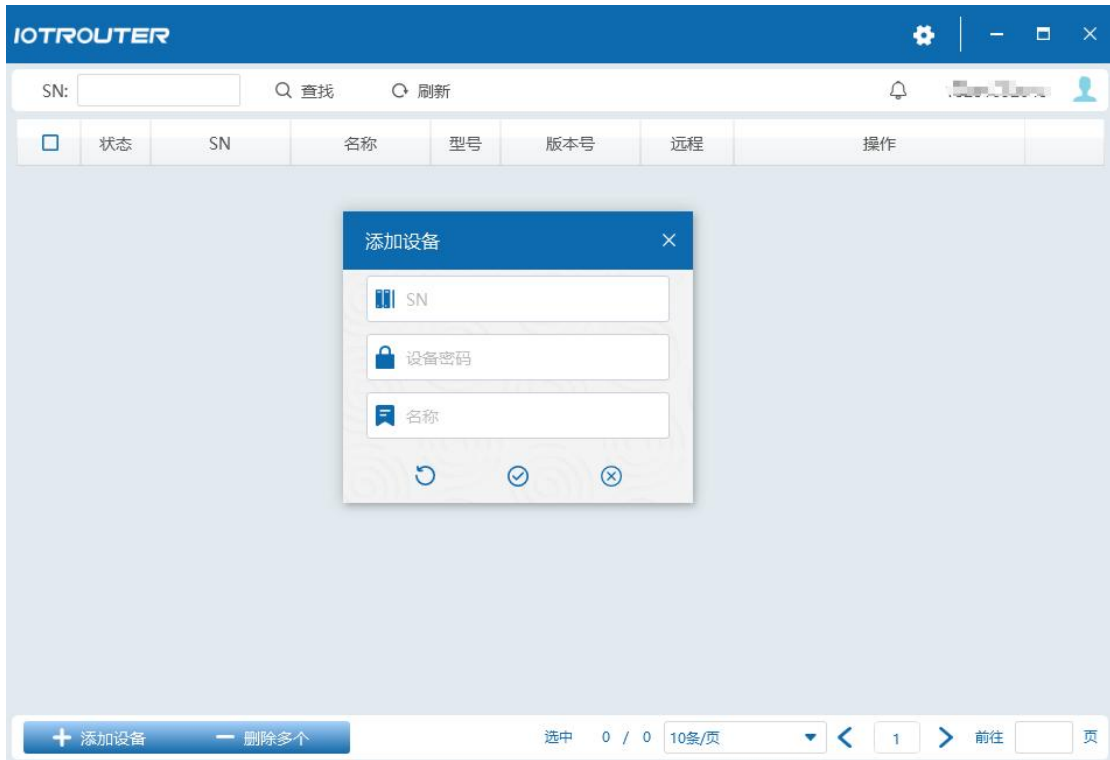
IOTRouter Client

发送验证码

登录

### 3. Add device

After logging in to your account, click on the lower left corner to add a device, where the SN can be viewed in the login of the device, the password is the login password of the web page, and the name is a custom name. After completing the input, click Finish. (Each EG8100 has a unique SN and password. After the EG8100 is bound to the device, others cannot bind it again unless the owner deletes the device under the corresponding account before binding other accounts again)



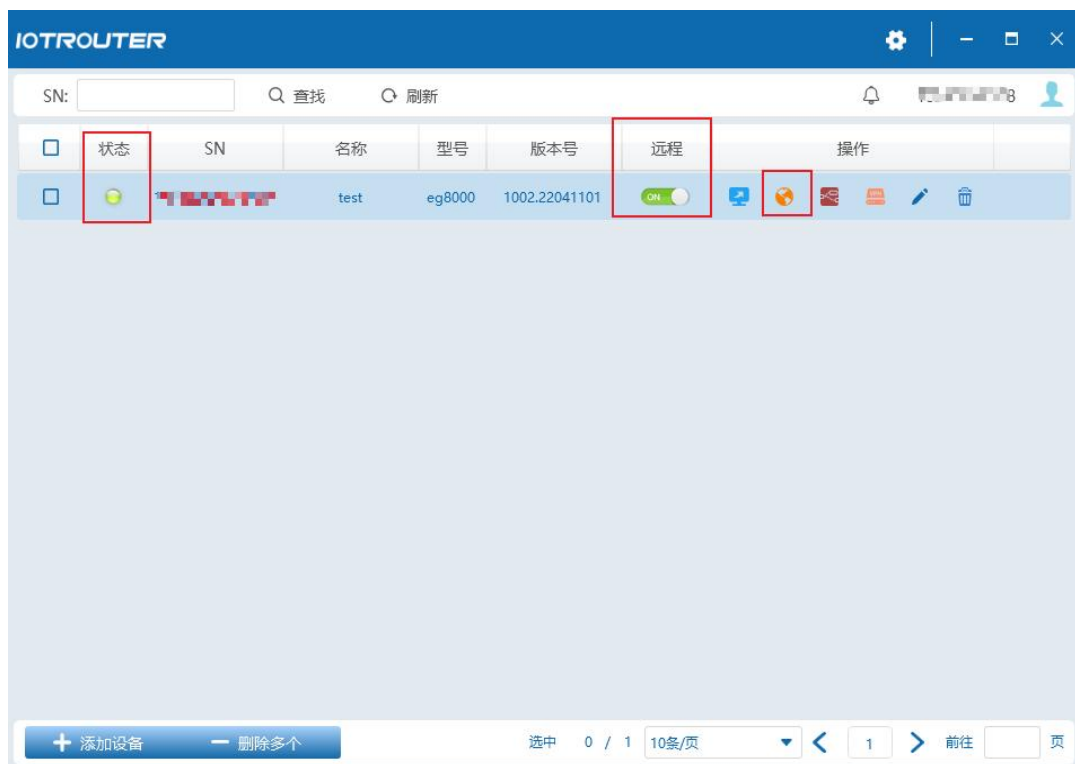
#### 4. Remote upgrade

When the EG8100 firmware is updated, click Remote Upgrade to automatically upgrade the firmware.

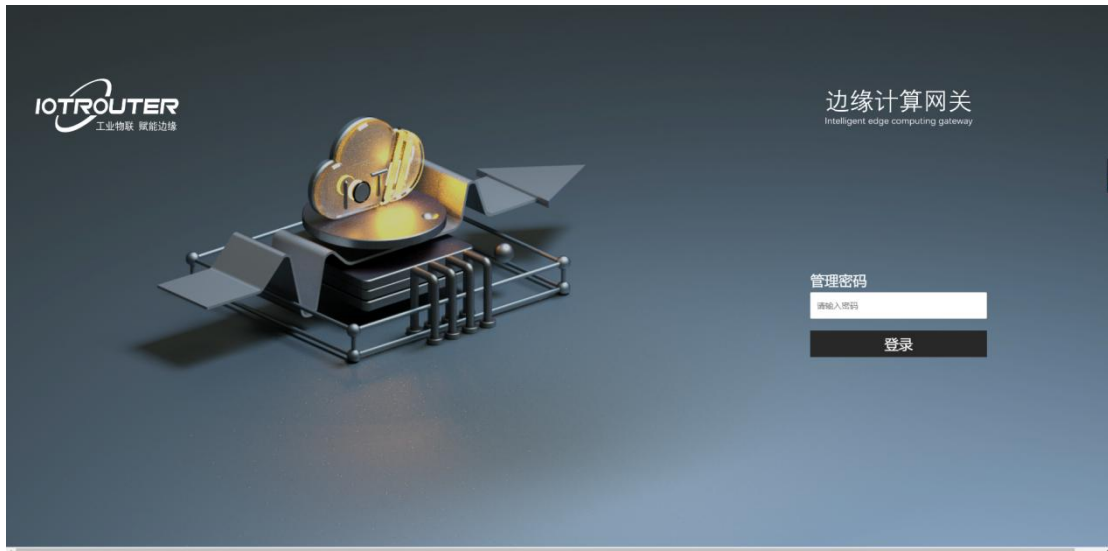
#### 5. Remote configuration and programming

- remote configuration

First, make sure the device is online and the status is green. Click the remote button to enable the remote function. Clicking the remote configuration will automatically open the browser and jump to the web configuration interface.

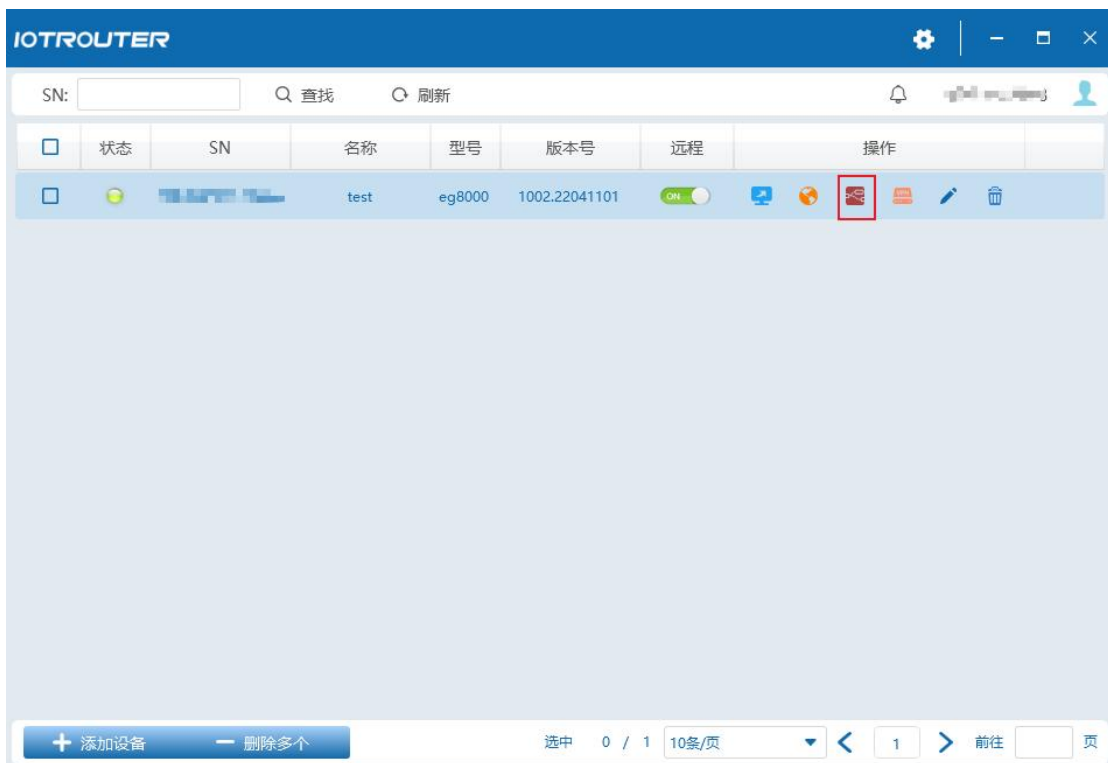


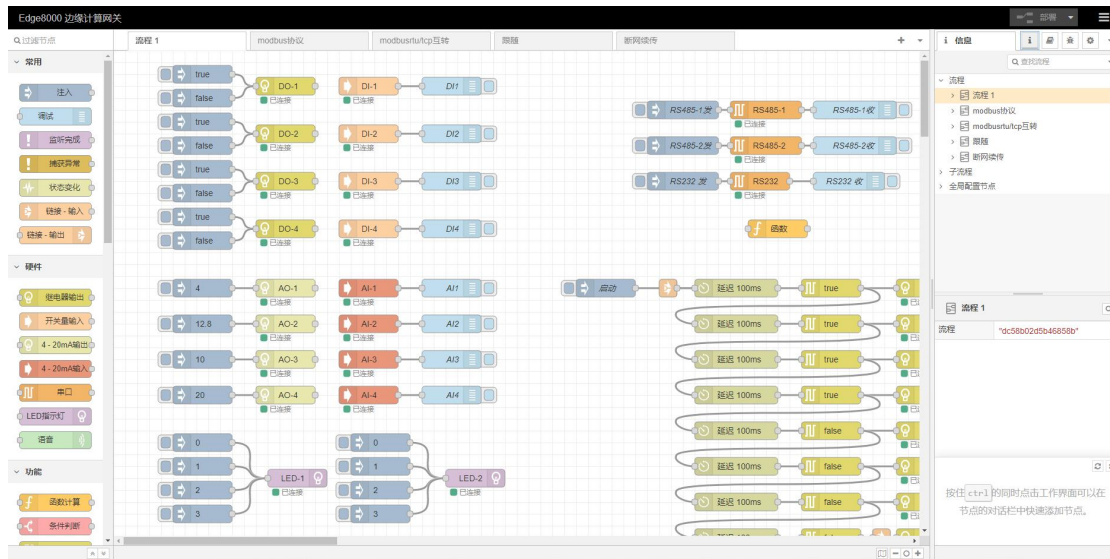




- Remote programming

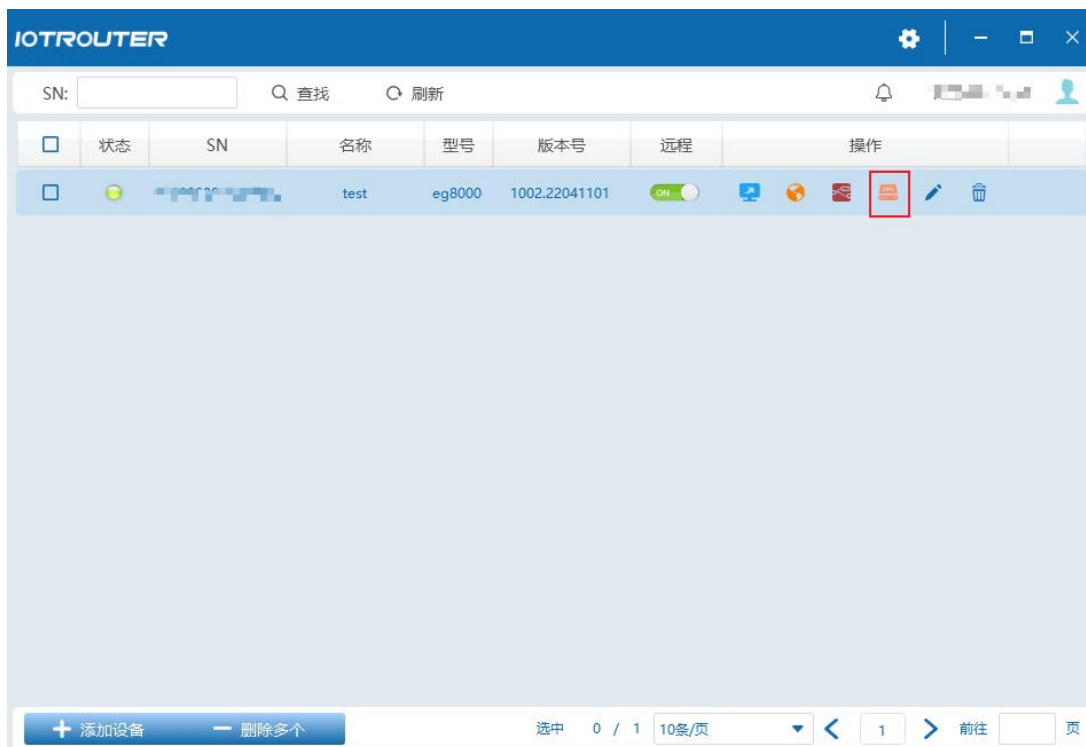
Clicking the remote programming button will automatically jump to the programming interface (remotely cannot click visual programming from the configuration interface to jump to the programming interface, you need to click remote programming in the software to jump directly)





## 6. Intranet penetration

Click Remote LAN to enable intranet penetration. The software will automatically install a virtual network card on this computer. EG8100 will assign an IP to this computer. The network segment of the IP is the same network segment as the LAN port of EG8100 (the LAN port IP can be changed).



```
Microsoft Windows [版本 10.0.19044.1586]
(c) Microsoft Corporation. 保留所有权利。

C:\Users\14771>ipconfig

Windows IP 配置

未知适配器 本地连接:

    连接特定的 DNS 后缀 . . . . . :
    本地连接 IPv6 地址. . . . . : fe80::4595:5e7f:6e87:15ba%25
    IPv4 地址 . . . . . : 192.168.88.240
    子网掩码 . . . . . : 255.255.255.0
    默认网关 . . . . . : 192.168.88.1

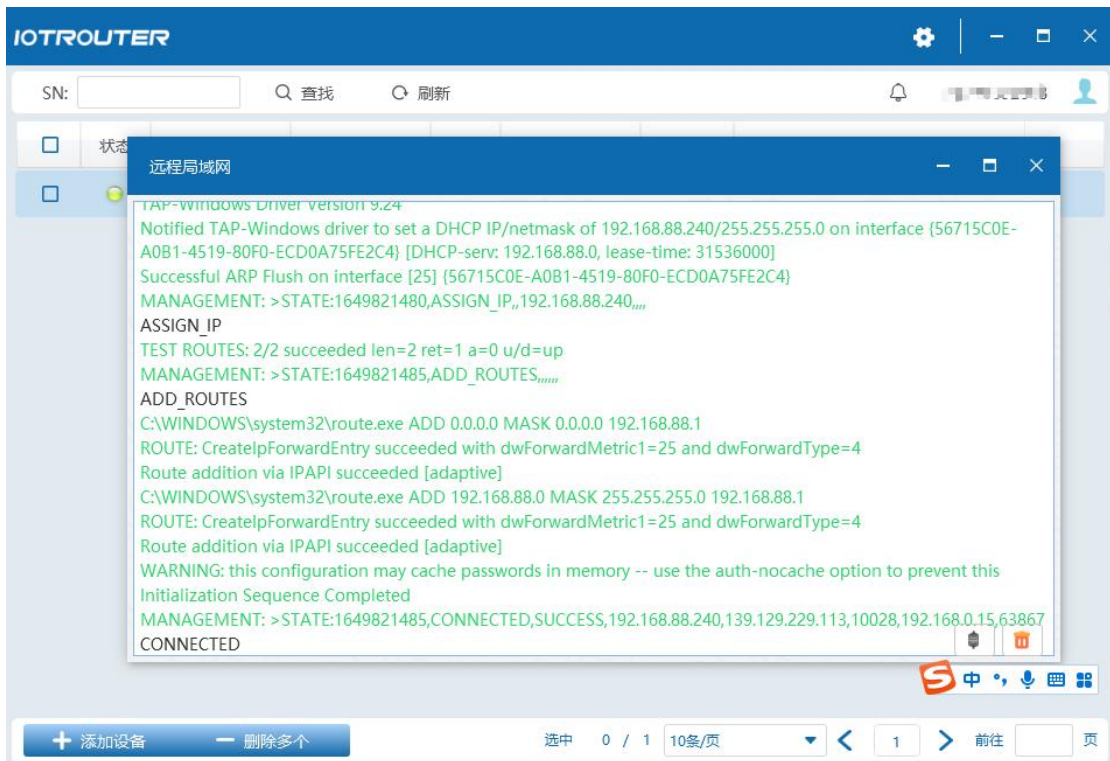
以太网适配器 以太网:

    连接特定的 DNS 后缀 . . . . . :
    本地连接 IPv6 地址. . . . . : fe80::643a:8480:b973:6f02%10
    IPv4 地址 . . . . . : 192.168.0.15
    子网掩码 . . . . . : 255.255.255.0
    默认网关 . . . . . : 192.168.0.1

C:\Users\14771>
```

The IP is assigned successfully and the machine can directly access the LAN where the EG8100 is located.

**Note:** The interface opened by the remote software cannot be closed. After closing, the intranet penetration is closed.



## 五、MQTT cloud networking

### 1. EG8000 series networking

This networking mode only supports use between edge computing gateways EG8000/EG8100/EG8000mini series.

### 2. Network parameters

Communication method MQTT cloud network forwarding service

Connection address: bridge.iotrouter.com Port: 1873

ClientID: customized, maximum length 256 bytes, no duplicates allowed

Verification method:

username: Use the SN number of EG8000 series products. The registered device SN must be valid.

Password: Use the device password of EG8000 series products, which is the web page login password.

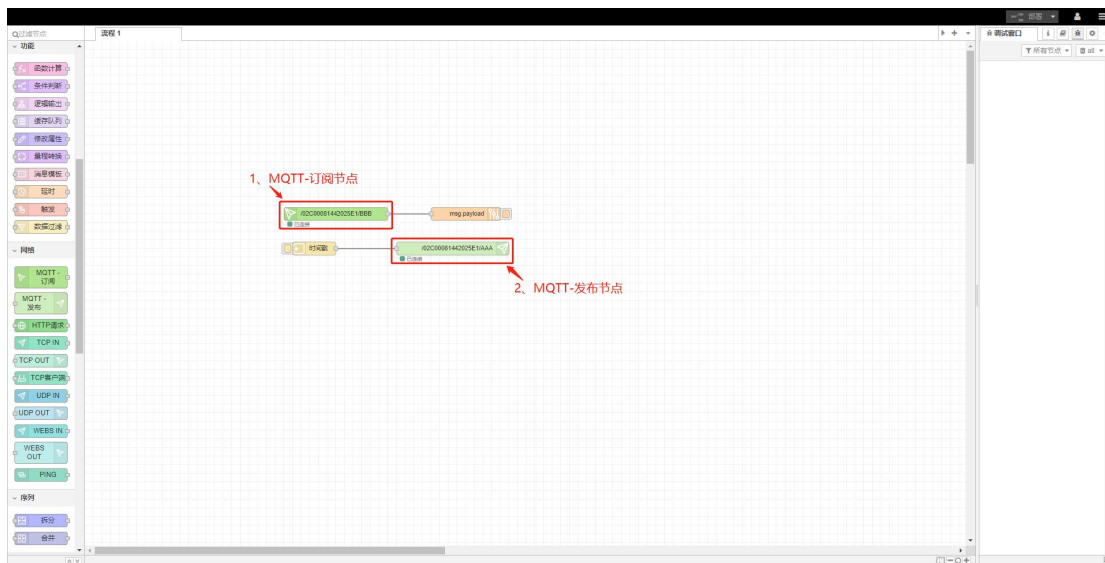
Device topic: The maximum length of the subscription publishing topic is 256 bytes. Wildcard usage is not supported.

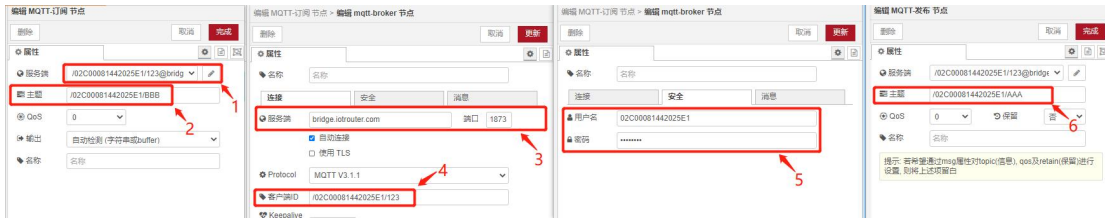
Qos: Support 0/1/2.

Maximum MQTT message for forwarding data packets in cloud networking: 10KB

### 3. Network configuration

Use the MQTT node to configure parameters for the devices in Network A and Network B according to the network parameters.

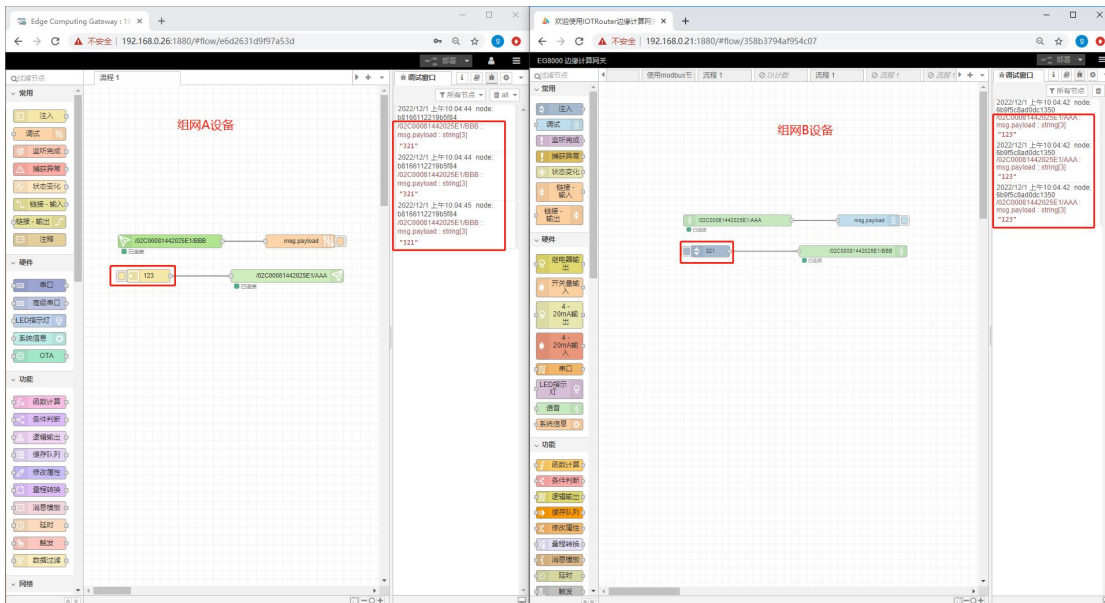




- 1: Edit mqttt-subscription node to add new mqttt-broker
- 2: Set the subscription topic (the devices in Network A and B fill in each other's publishing topics)
- 3: Set the server address and port
- 4: Set the client ID (recommended format /sn/client so that it is not easy to conflict with others)
- 5: Set username and password
- 6: Click mqttt-publish node to set the publishing topic

#### 4. Network presentation

After setting the parameters of the network A and network B devices, you can perform the test as shown below



- 1: As shown in the figure, the data sent by the device in network A/B and the subscription status of network B/A can be successfully received, indicating that the network configuration is successful.