

Communication between two WiFi products

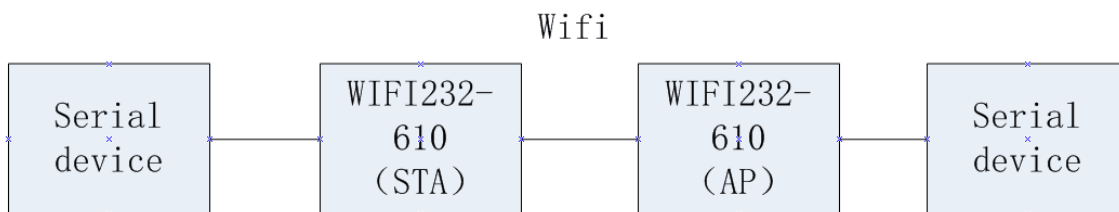
File Version: V1.0.0

Overview

This manual introduces the method to establish communication between two WiFi products. The method can be applied to WiFi serial servers: USR-W610 , USR-W600, USR-W630,USR-WIFI232-602 V2, USR-WIFI232-604 V2, USR-WIFI232-610 V2, USR-WIFI232-630, And this method can also be applied to WiFi modules: USR-WIFI232-A2, USR-WIFI232-B2, USR-WIFI232-D2.

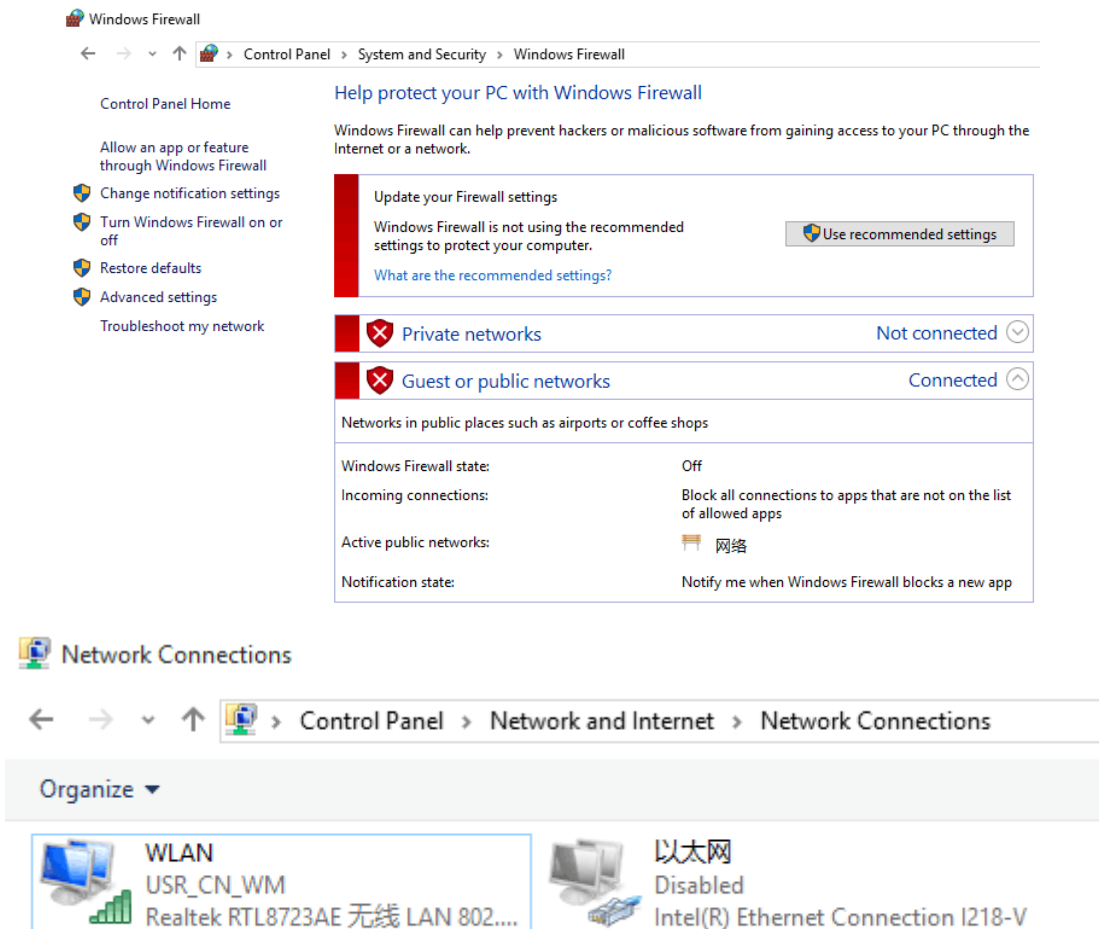
And we take USR-WIFI232-610 V2 as example to configure.

1. Application diagram



2. Procedure

Step 1: Close Windows firewall and antivirus program on PC. Disable PC's Ethernet network.



Windows Firewall

Control Panel > System and Security > Windows Firewall

Help protect your PC with Windows Firewall

Windows Firewall can help prevent hackers or malicious software from gaining access to your PC through the Internet or a network.

Update your Firewall settings
Windows Firewall is not using the recommended settings to protect your computer. [Use recommended settings](#)

Private networks: Not connected

Guest or public networks: Connected

Networks in public places such as airports or coffee shops

Windows Firewall state: Off

Incoming connections: Block all connections to apps that are not on the list of allowed apps

Active public networks: 网络

Notification state: Notify me when Windows Firewall blocks a new app

Network Connections

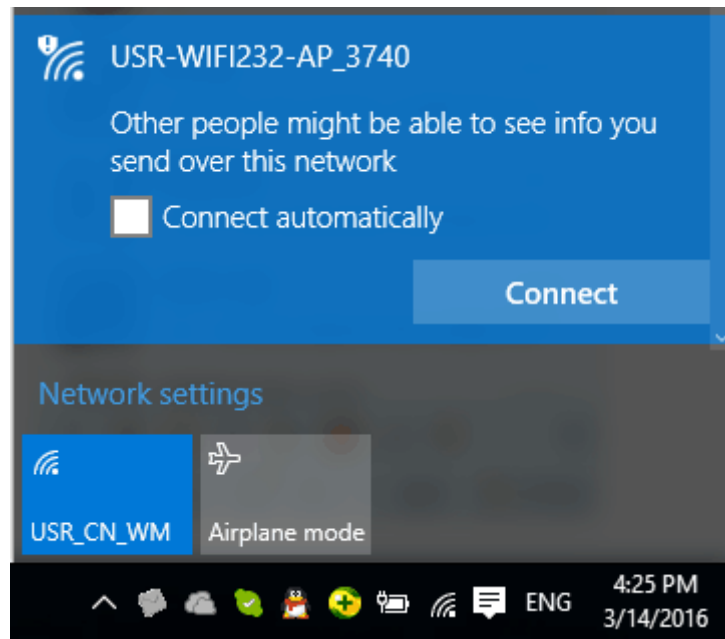
Control Panel > Network and Internet > Network Connections

Organize

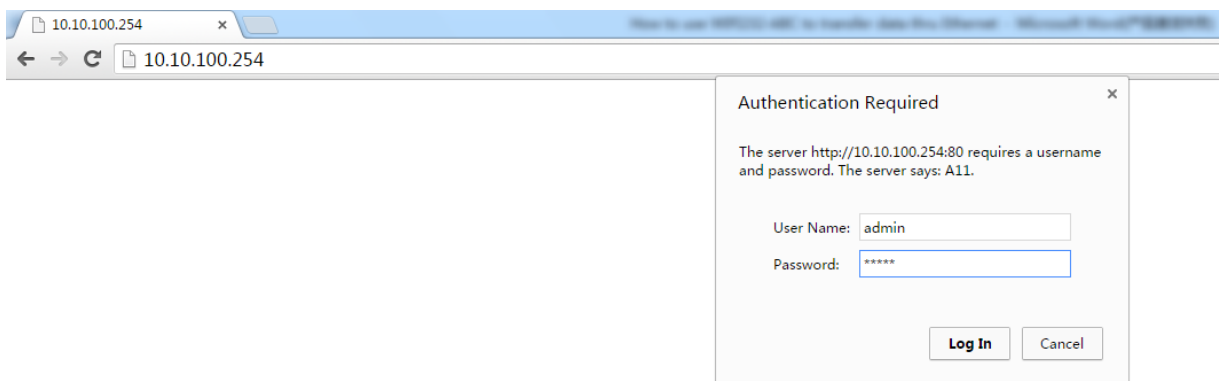
WLAN: USR_CN_WM, Realtek RTL8723AE 无线 LAN 802.... (Enabled)

以太网: Disabled (Intel(R) Ethernet Connection I218-V)

Step 2: Link to the first USR-WIFI232-610(610 should in AP mode), the SSID is USR-WIFI232-AP_XXXX(XXXX is last 2 byte of MAC address).



Step 3: Open browser on PC, type in 610 's IP address(default is 10.10.100.254), user name and password both are admin.



Step 4: Change the SSID to AP and configure work mode as TCP server , port as 8899.

Quick Configure

1F WI-FI Setting [【Modify】](#)

Wifi Mode	
Mode	AP Mode ▾
Wireless configuration	
Network Name(SSID)	AP <input type="checkbox"/> Hidden
BSSID	AC:CF:23:2F:37:40
Security Mode	Disable ▾

- [➔ Quick Configure](#)
- [➔ Mode Selection](#)
- [➔ AP Interface Setting](#)
- [➔ STA Interface Setting](#)
- [➔ Application Setting](#)
- [➔ Ethernet Setting](#)
- [➔ HTTPD Client Mode](#)
- [➔ WEB IO](#)
- [➔ Advanced](#)
- [➔ Device Management](#)

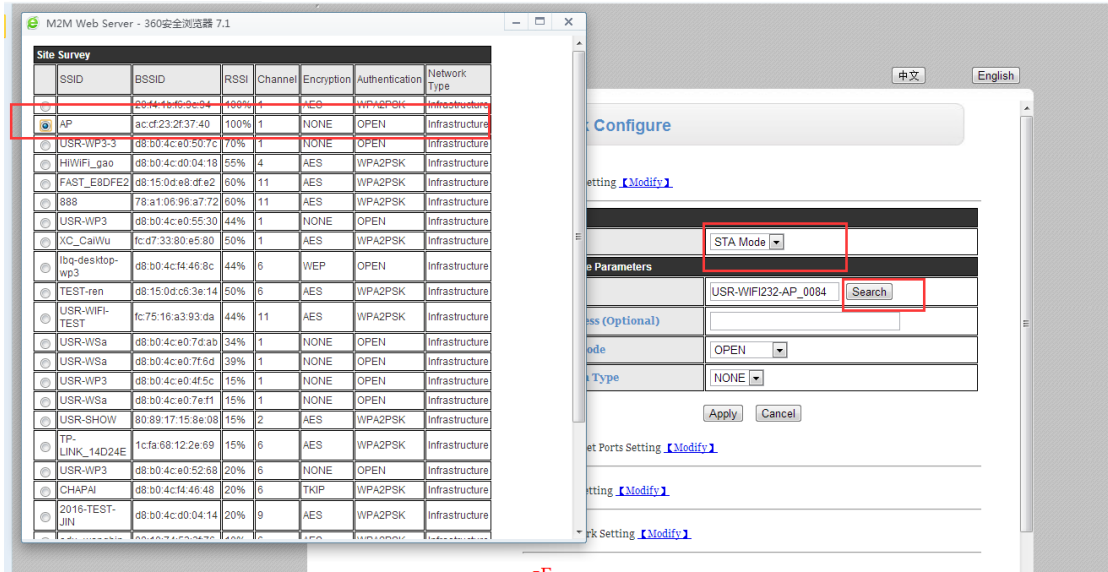
2F Ethernet Ports Setting [【Modify】](#)

3F Uart Setting [【Modify】](#)

4F Network Setting [【Modify】](#)

Network A Setting	
Mode	Server ▾
Protocol	TCP ▾
Port	8899
Server Address	clouddata.usr.cn
MAX TCP Num.(1~32)	32
TCP Time out (小于600 秒)	0
TCP connection password authentication	Disable ▾

Step 5: Then link to second 610, open the Web Server as **Step 3**. Configure the second 610 into STA mode, search the AP(the first 610) and link to it. Configure module work as TCP client. Destination IP should be 10.10.100.254 (the first 610's IP address) and port number is 8899.



- ➔ Quick Configure
- ➔ Mode Selection
- ➔ AP Interface Setting
- ➔ STA Interface Setting
- ➔ Application Setting
- ➔ Ethernet Setting
- ➔ HTTPD Client Mode
- ➔ WEB IO
- ➔ Advanced
- ➔ Device Management

1F WI-FI Setting [【Modify】](#)

2F Ethernet Ports Setting [【Modify】](#)

3F Uart Setting [【Modify】](#)

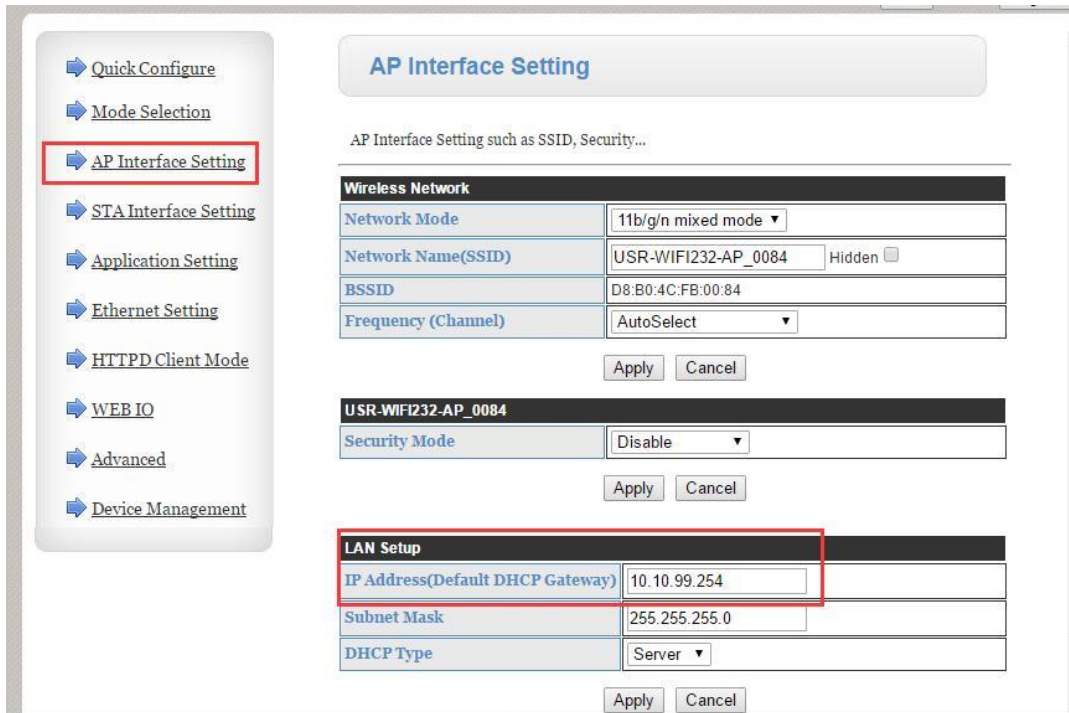
4F Network Setting [【Modify】](#)

Network A Setting	
Mode	Client ▾
Protocol	TCP ▾
Port	8899
Server Address	10.10.100.254
MAX TCP Num.(1~32)	32
TCP Time out (小于600 秒)	0

Apply Cancel

5F Device Management

Step 6: Change the second 610's LAN interface IP address to 10.10.99.254 or other IP address which is not same as the first 610's LAN interface IP address. **Because the second 610's WAN interface address(get from the first 610's LAN interface) and LAN interface address can't in same network segment.**



AP Interface Setting

AP Interface Setting such as SSID, Security...

Wireless Network	
Network Mode	11b/g/n mixed mode ▼
Network Name(SSID)	USR-WIFI232-AP_0084 <input type="checkbox"/> Hidden
BSSID	D8:B0:4C:FB:00:84
Frequency (Channel)	AutoSelect ▼
Apply Cancel	

USR-WIFI232-AP_0084	
Security Mode	Disable ▼
Apply Cancel	

LAN Setup	
IP Address(Default DHCP Gateway)	10.10.99.254
Subnet Mask	255.255.255.0
DHCP Type	Server ▼
Apply Cancel	

Step 7: Restart two 610 and the communication will be established.

3. Contact Us

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4. Disclaimer

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5. Update History

2018-04-12 V1.0.0 established.