ICP DAS

# IOP760AM FAQ

**FAQ Version 1.30**

**ICP DAS Co., Ltd.**

**2022-12-1**

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# Table of Contents

Q1: How do I connect IOP760AM without Wi-Fi router? ..... 3
Q2: The roaming interval is not stable. How to make it better? ..... 4
Q3: How do I check the Wi-Fi connection status? ..... 5
Q04: How to set VAP function? ..... 6
Q05: How to set the Virtual COM? ..... 8
Q06: How to export or import the configuration files from IOP760AM? ..... 10
Q07: How to restore IOP760AM into factory setting? ..... 12
Q08: Can the IOP760AM work with 2.4 / 5 GHz at the same time? ..... 12
Q09: The IOP760AM will disconnect with AP when the AP has change the Wi-Fi channel. How to avoid it? ..... 13
Q10: How to enable Modbus gateway function in IOP760AM ..... 15
Q11: How to emulate a com port when the IOP760AM is set in the virtual com server mode? ..... 18
Q12: How to intall the Wi-Fi antenna? ..... 20
Q13: How to make the IOP reboot everyday? ..... 20
Q14: It does not recover to the factory default when I press the reset button. ..... 21

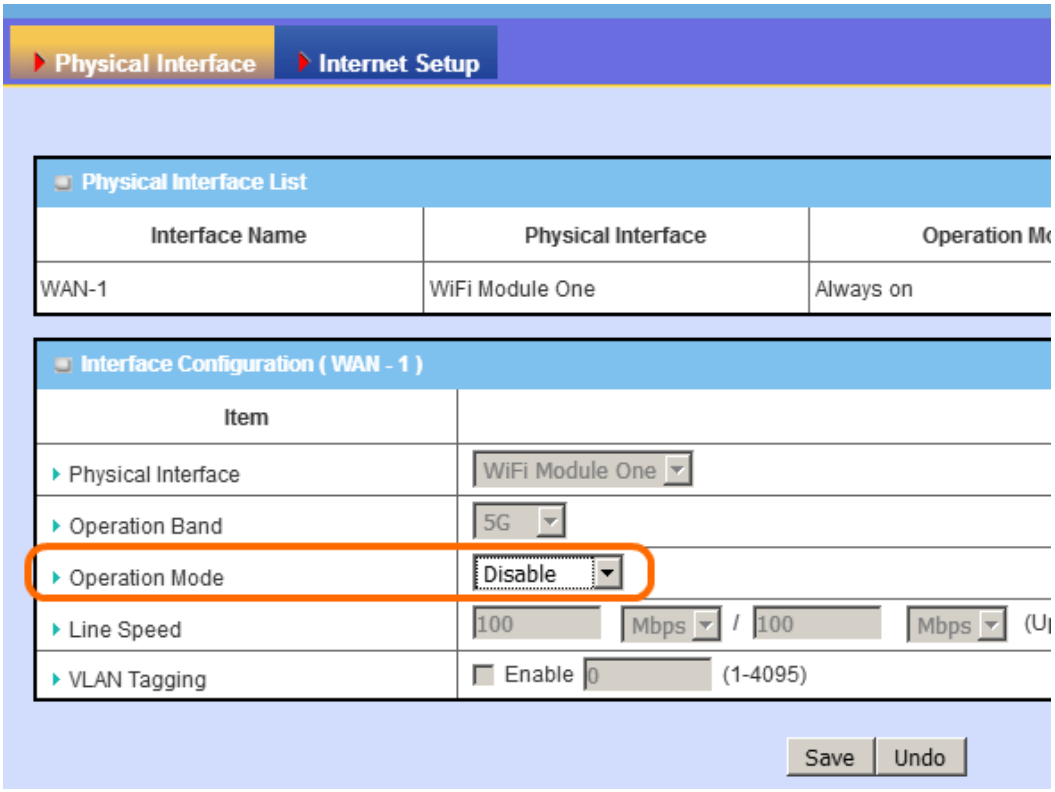


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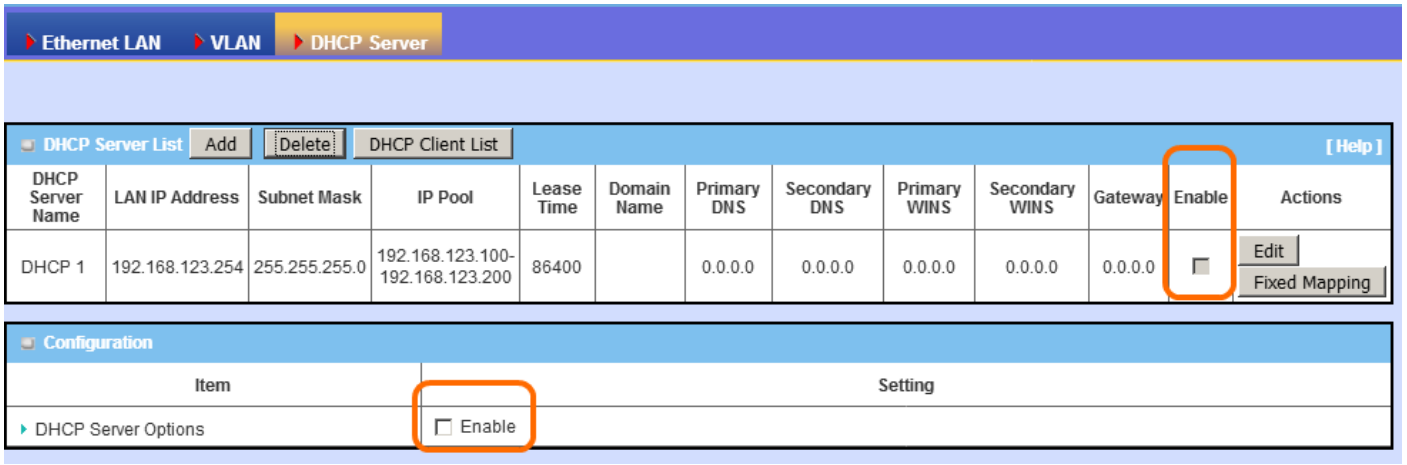
**Q1: How do I connect IOP760AM without Wi-Fi router?**

A1: The point-to-point connection can be implemented by the "WDS Hybrid" mode. Please refer to the following steps.

(1) Disable WAN




(2) Disable LAN DHCP.

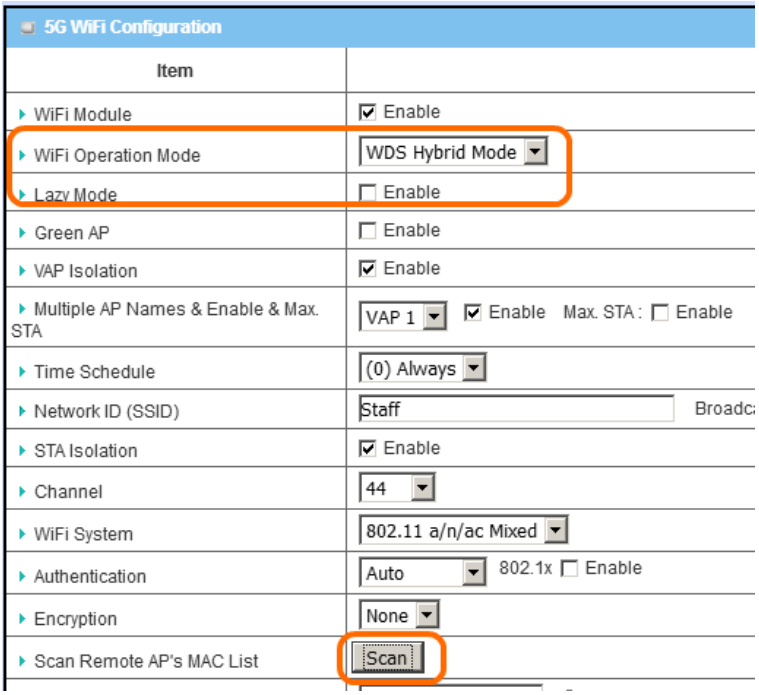



(3) Set WDS hybrid mode on Wi-Fi configurations.

(4) Enable lazy mode on server side. Disable lazy mode on client side, and scan the server side.



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(5) If the LAN Port IP is 192.168.123.254(default setting), the Ethernet device that you connect with IOP760AM must be set with the same IP area (192.168.123.xxx).

**Q2: The roaming interval is not stable. How to make it better?**

A2: 使Users can add the profiles to their Wi-Fi configurations. This function is just like a back-up connection of the Wi-Fi. When the signal strength of all APs are lower than the roaming threshold, the IOP760AM select the strong one and connect it. Please refer to the following steps,

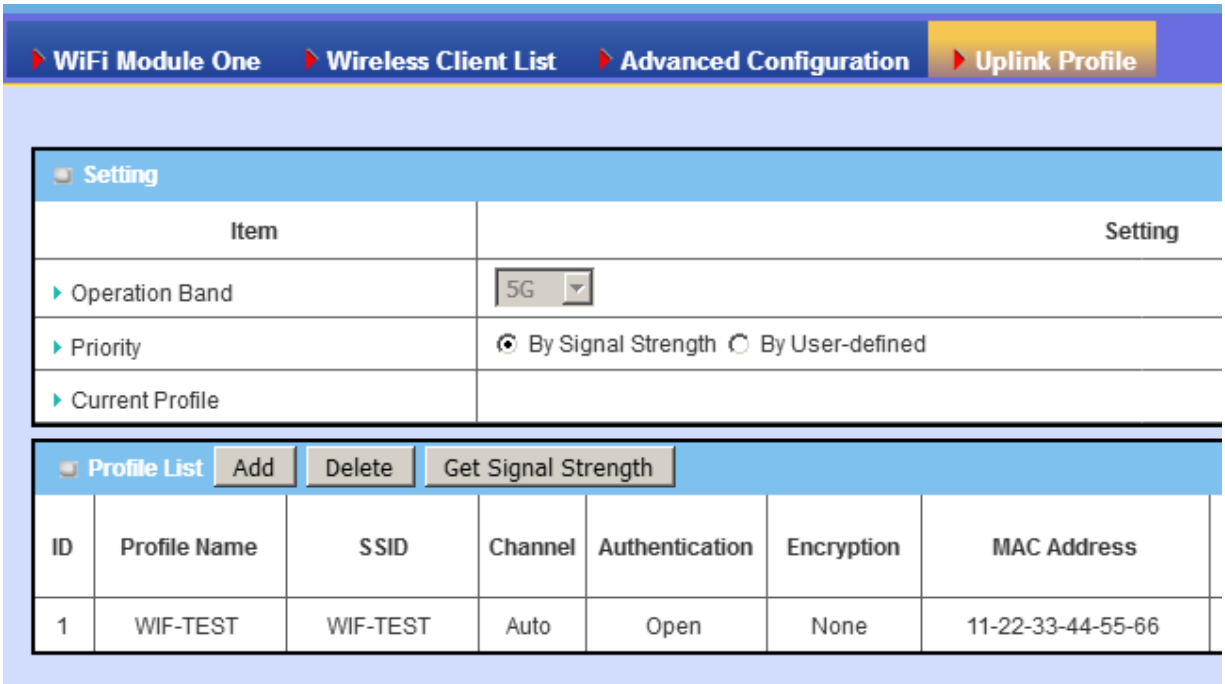
(1) Enable the profile function on the “WiFi Module One” page.






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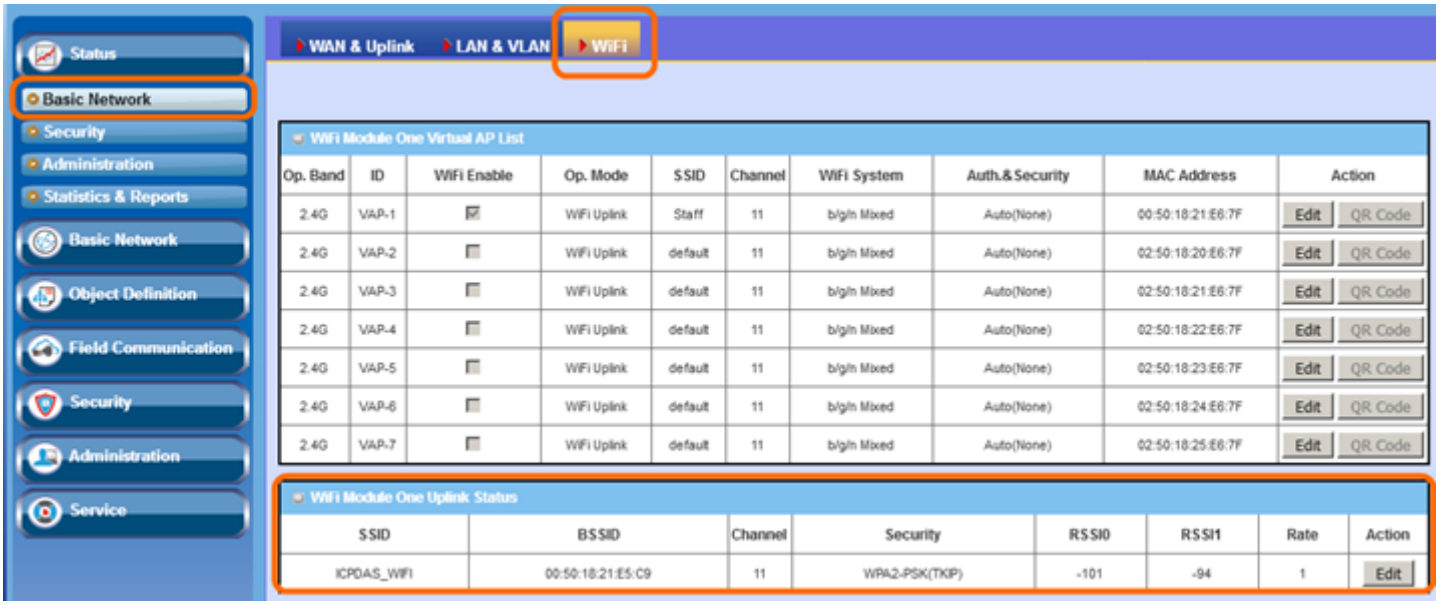
(2) Add the AP's information and save, and set the priority to "By Signal Strength".




## Q3: How do I check the Wi-Fi connection status?

A3: Users can observe the Wi-Fi connection status via Web UI.

In Web UI, the Wi-Fi connection is shown in the "Status -> Basic Network -> WiFi -> WiFi Module One Uplink Status" page. If the connection is successful, the BSSID and its RSSI value will be shown in this page.



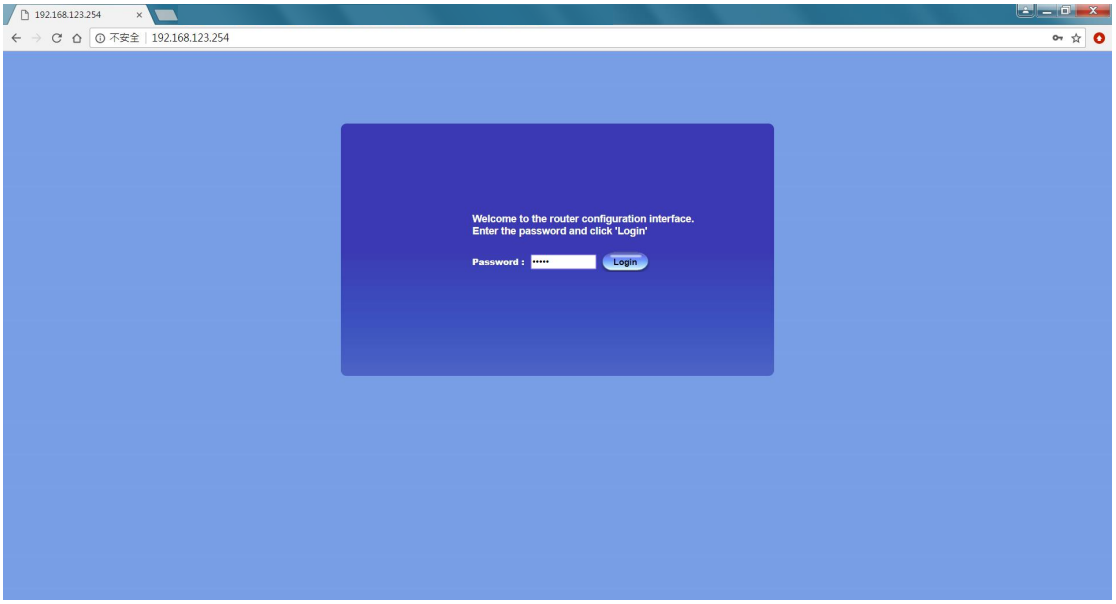



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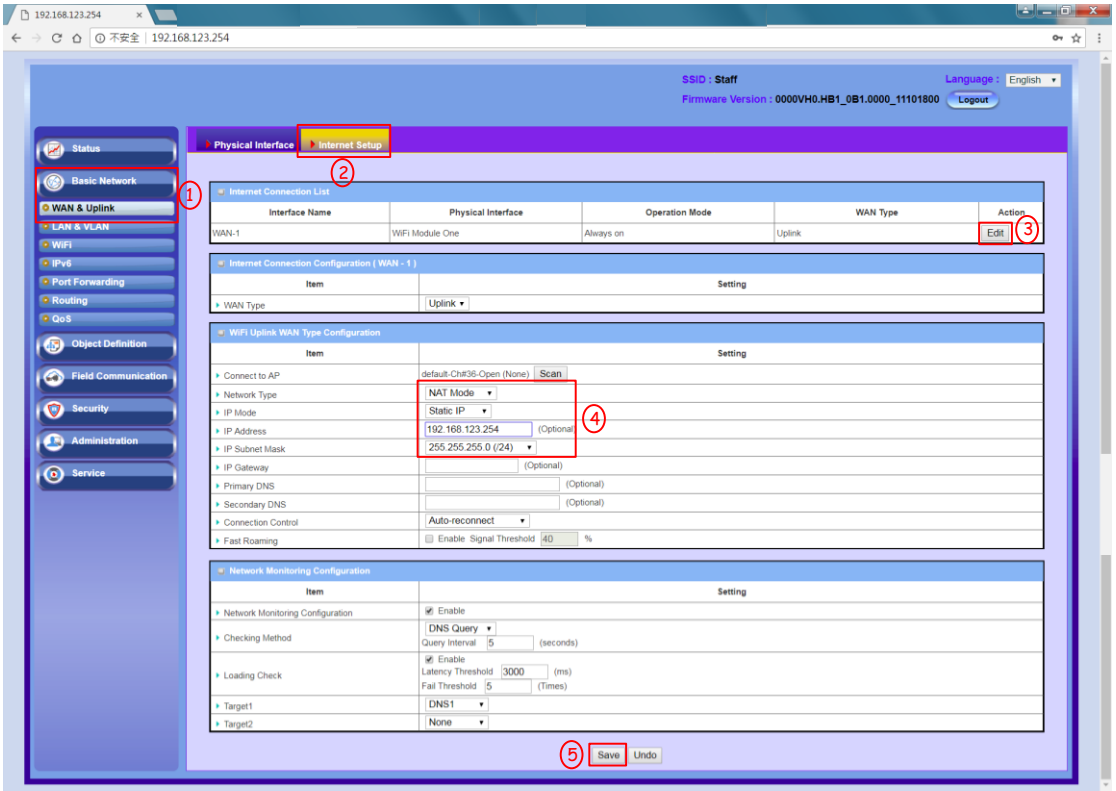
## Q04: How to set VAP function?

A04: Please refer to the following steps,

(1) You can use the browser to connect web UI, and type in the IP Address (http://192.168.123.254 ). The default password is admin.




(2) Set network type to “NAT Mode” or “Bridge Mode” (4). Basic Network => WAN & Uplink (1) => Internet Setup (2).



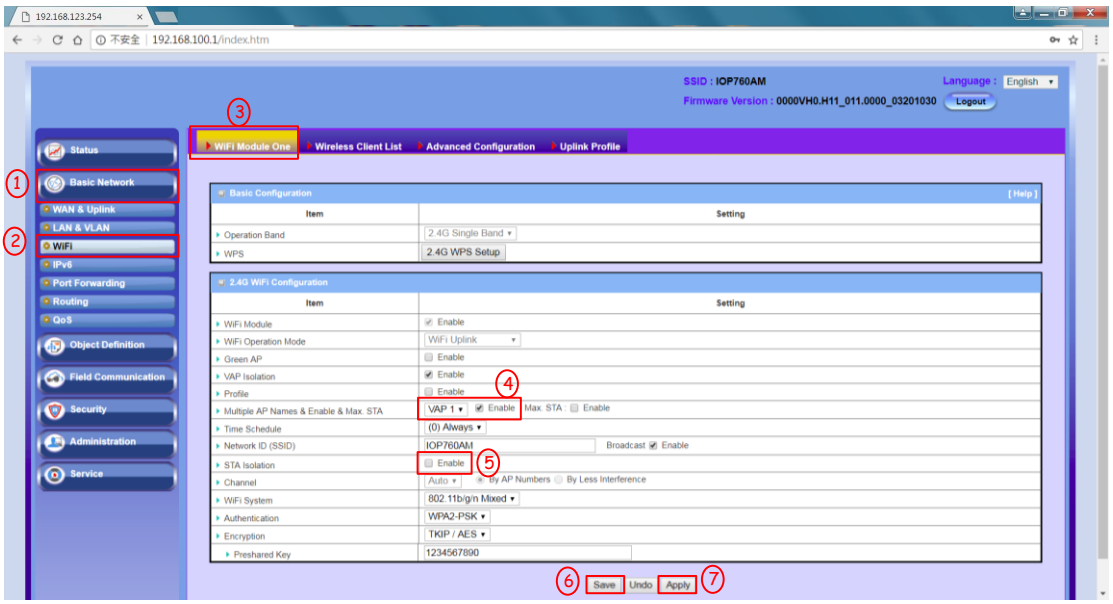

(3) Enable VAP function.

1. Going to the VAP setting page Basic Network(1) => WiFi(2) => WiFi Module One(3).

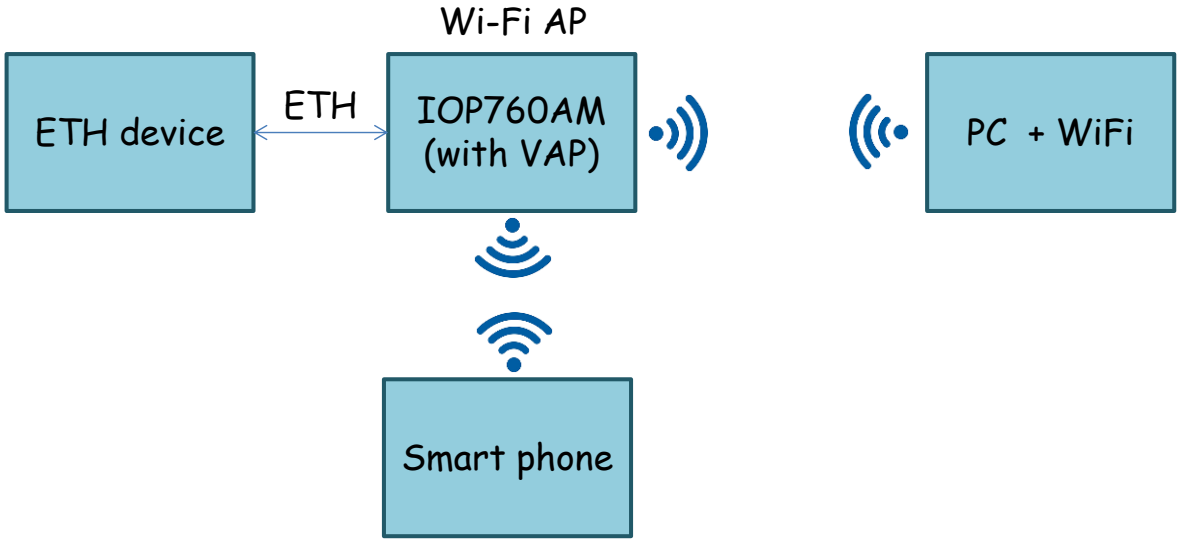


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2. Please click the box to enable the VAP function(4)
3. The STA isolation means that stations which associated to the same VAP cannot communicate with each other (5).
4. Please click the “Save” and “Apply” to store the parameter. The IOP760AM will reset after the setting is finishing.




(4) You can connect IOP760AM by the smart phone or other devices. The PC and smart phone can ping the ETH device successful after connecting to the VAP of IOP760AM.



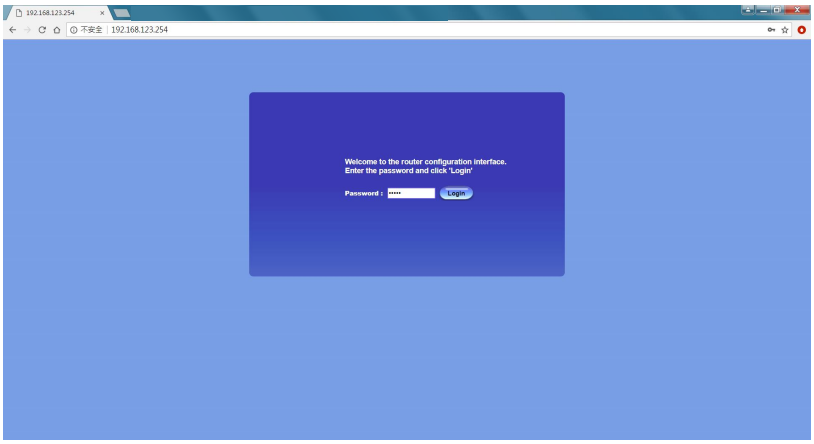



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## Q05: How to set the Virtual COM?

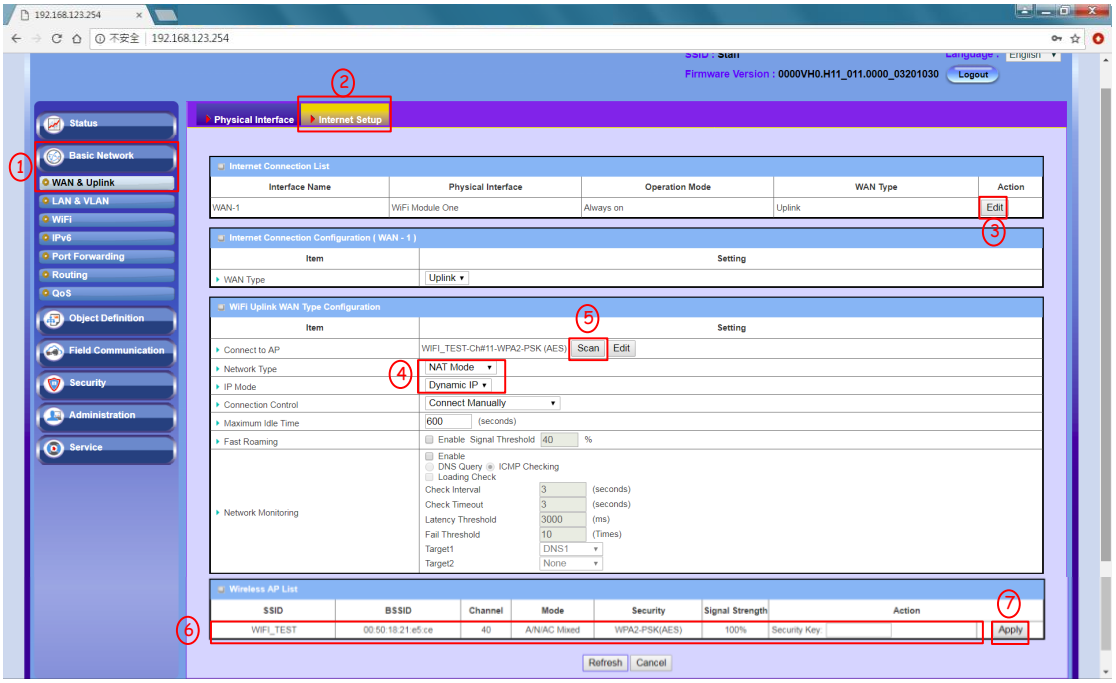
A05: The Virtual COM makes user access serial devices anywhere over a local LAN or the Internet. The Virtual COM function only works with the **"NAT mode"**. It's also can work with the VAP.

(1) You can use the browser to connect web UI, and type in the IP Address (http://192.168.123.254 ). The default password is admin.




(2) It needs to set the network type and AP on the Internet Setup page.

1. Going to the Wi-Fi setting page. Basic Network / WAN & Uplink (1) => Internet Setup (2) => Click the "Edit" button (3).
2. The next step changes the network type to NAT mode. If the AP have DHCP that setting the IP mode to the Dynamic IP. Otherwise setting the IP mode to the static IP.
3. Please click the "scan" button (5). The scan result will appear below the page, and then connect to the Wi-Fi AP (6~7).



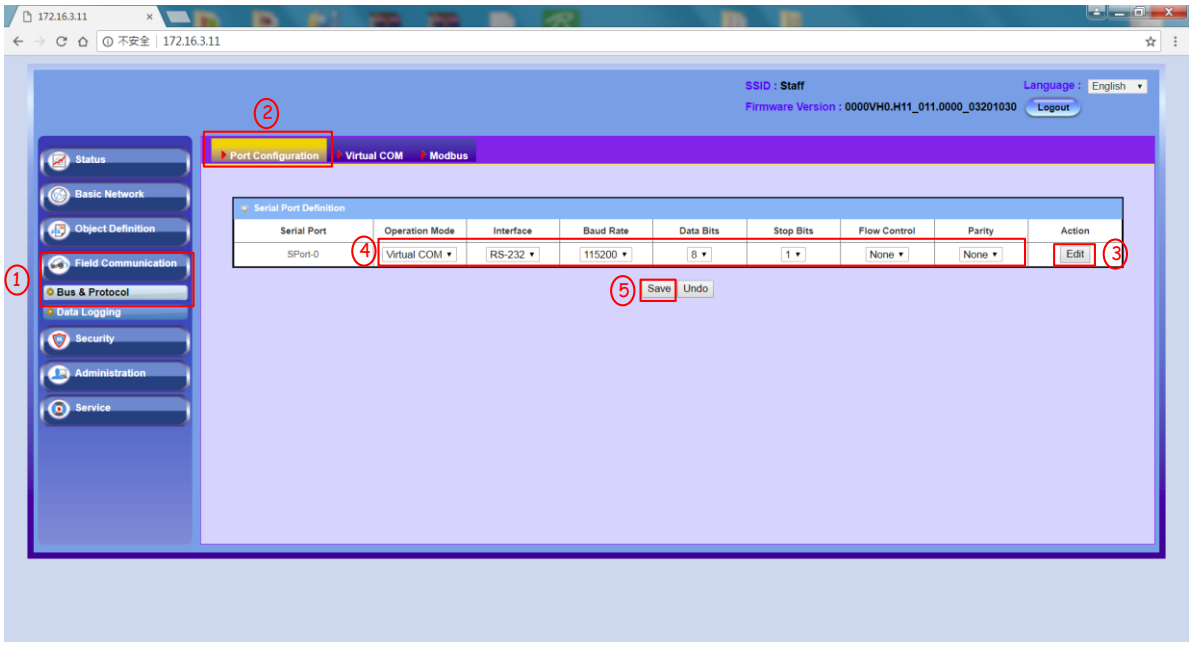

(3) Port Configuration

1. Going to the "Port Configuration" page. Field Communication (1) => Bus & Protocol => Port Configuration (2).



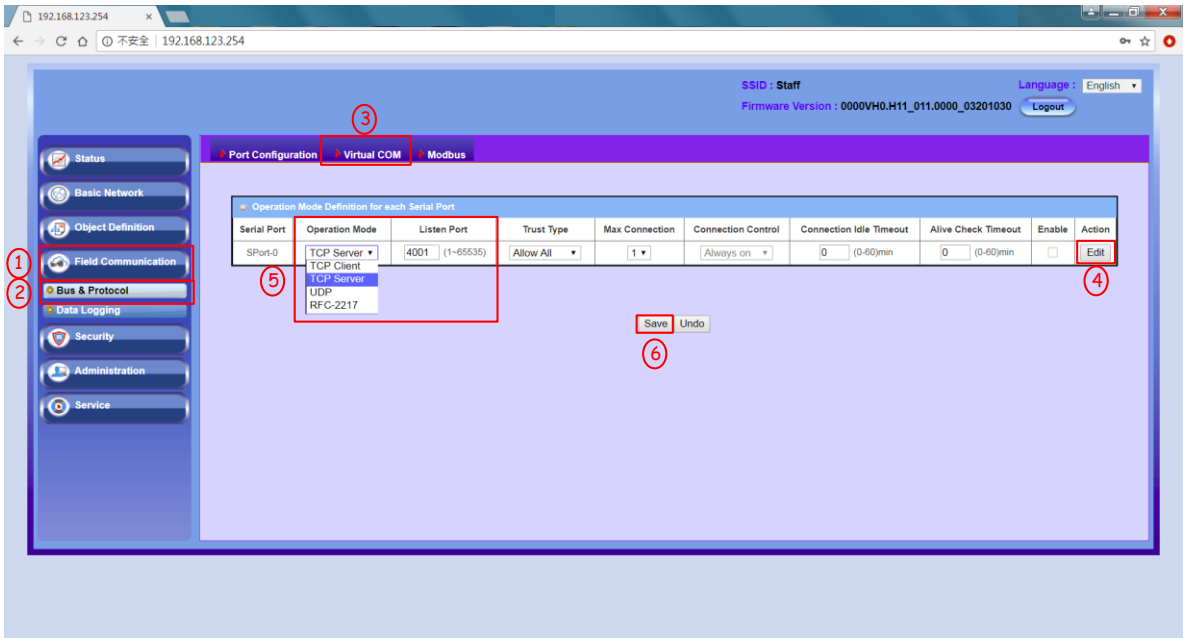
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2. Please click the “Edit” button, and the set the COM parameter (4), and then click the “Save” button (5).



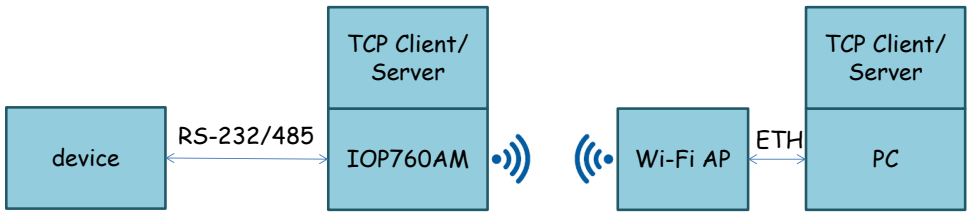

(4) TCP Server/Client Configuration

1. Going to the “Virtual COM” page. Field Communication (1) => Bus & Protocol (2) => Virtual COM (3)
2. Please click “Edit” button (4), and then set the operation mode (5).
3. The next step clicks the “Save” button to store the configuration (6).




(5) Create TCP client or server on your computer

1. It needs to create a TCP connection between IOP760AM and PC.
2. The IOP760AM will send data to the RS-232/485 when TCP receives the data from the peer.






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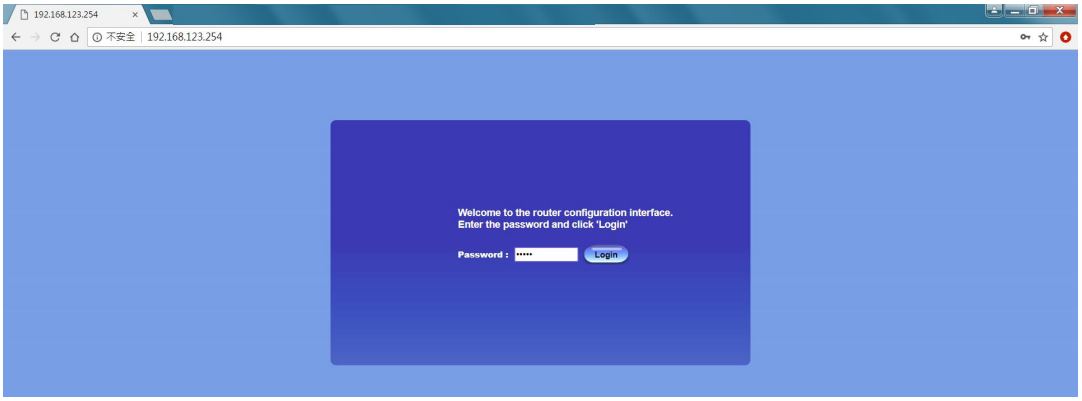
## Q06: How to export or import the configuration files from IOP760AM?

A06: : The IOP760AM support the function on the Backup & Restore page

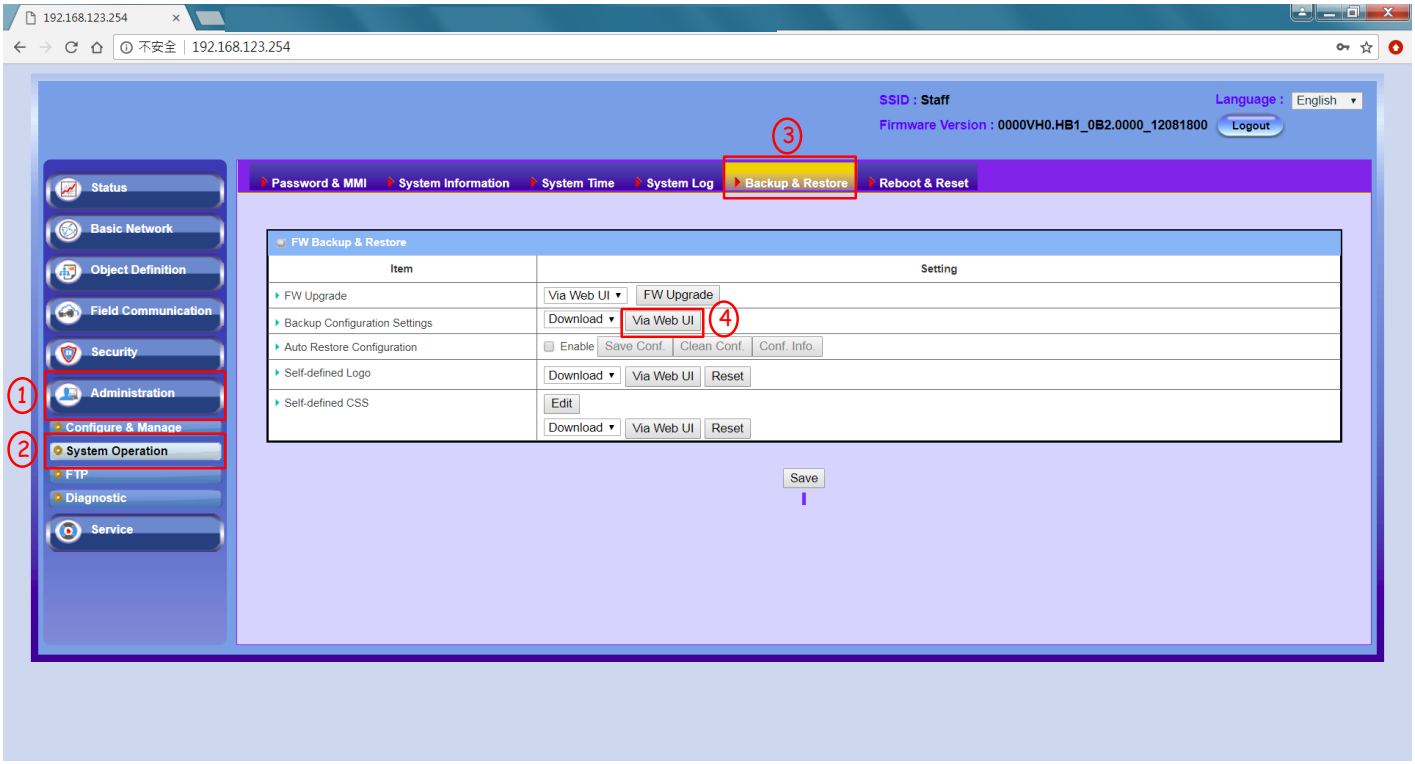
➢ Export the IOP760AM configuration

1. You can use the browser to connect web UI, and type in the IP Address (http://192.168.123.254 ). The default password is admin.

***P.S Please use the Firefox or Chrome as your browser.***




2. Going to the Backup & Restore page. Administration (1) => System Operation (2) => Backup & Restore (3). The IOP760AM configuration can download by the browse. The backup configuration setting is “Download” mode.
3. Please click “Via Web UI” to start the download process (4). The file name of configuration is config.bin.



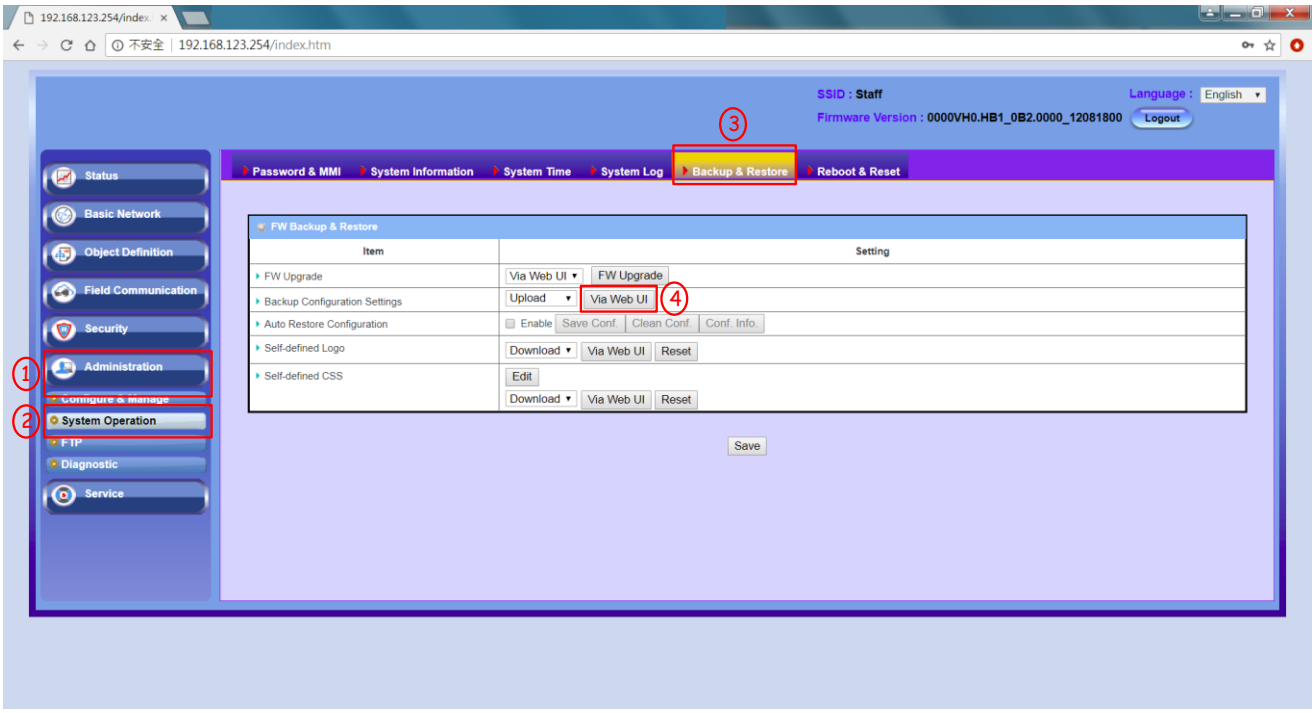

➢ Import the IOP760AM configuration

1. Going to the Backup & Restore page. Administration (1) => System Operation (2) => Backup & Restore (3). The backup configuration setting is “Upload” mode.



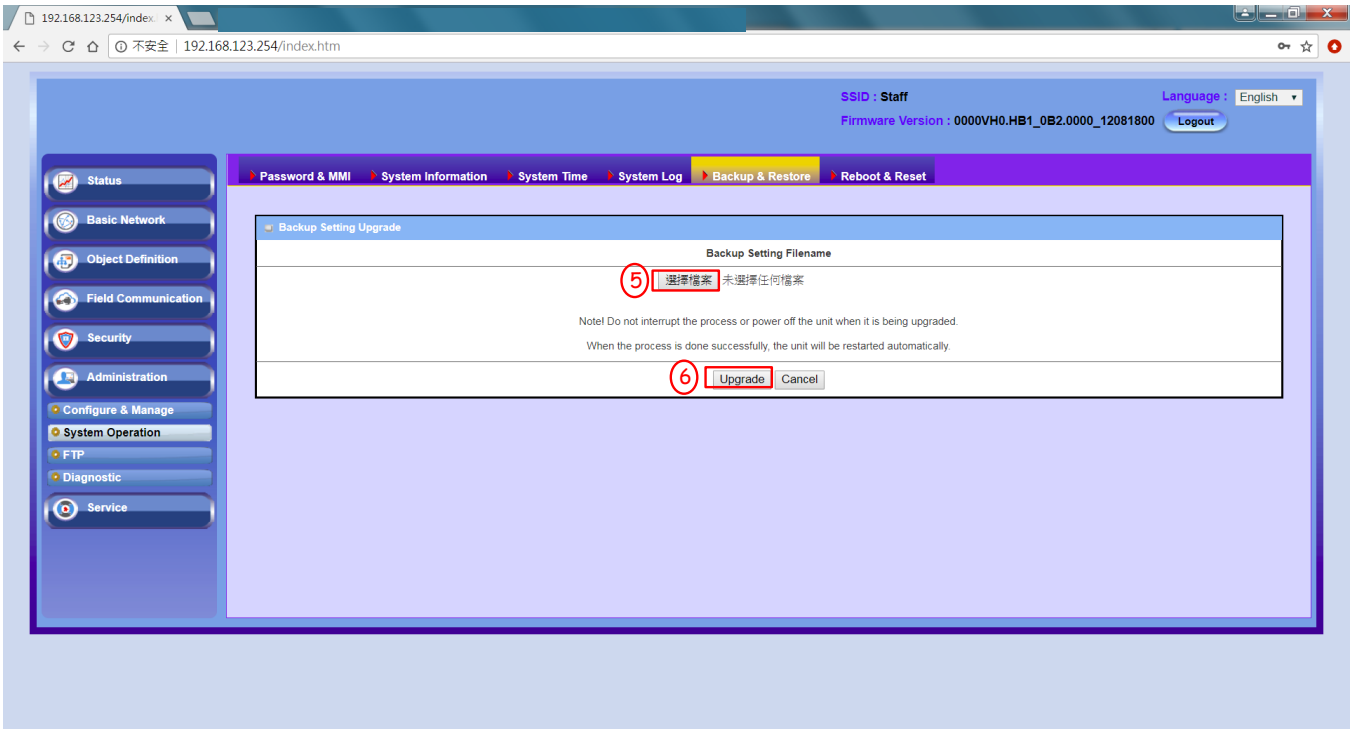
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2. Please click “Via Web UI” to start the download process (4).




3. Pleas chose the path of configuration file on the page, and then click “Upgrade” button to start the upgrade process.

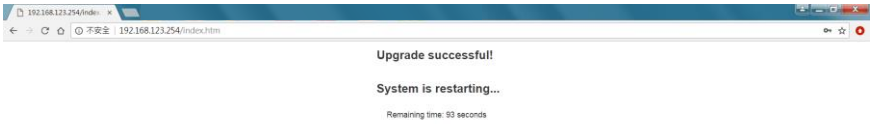
   Doesn’t close the browse or power off the IOP760 until upgrade complete.




4. The IOP760AM will reset itself after upgrade finishing.



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## Q07: How to restore IOP760AM into factory setting?

A07: The IOP760AM support 2 ways to restore configuration. One is reset button on the IOP760, and the other is restarting on the web UI.

➢ Restore Factory Setting by Reset Button

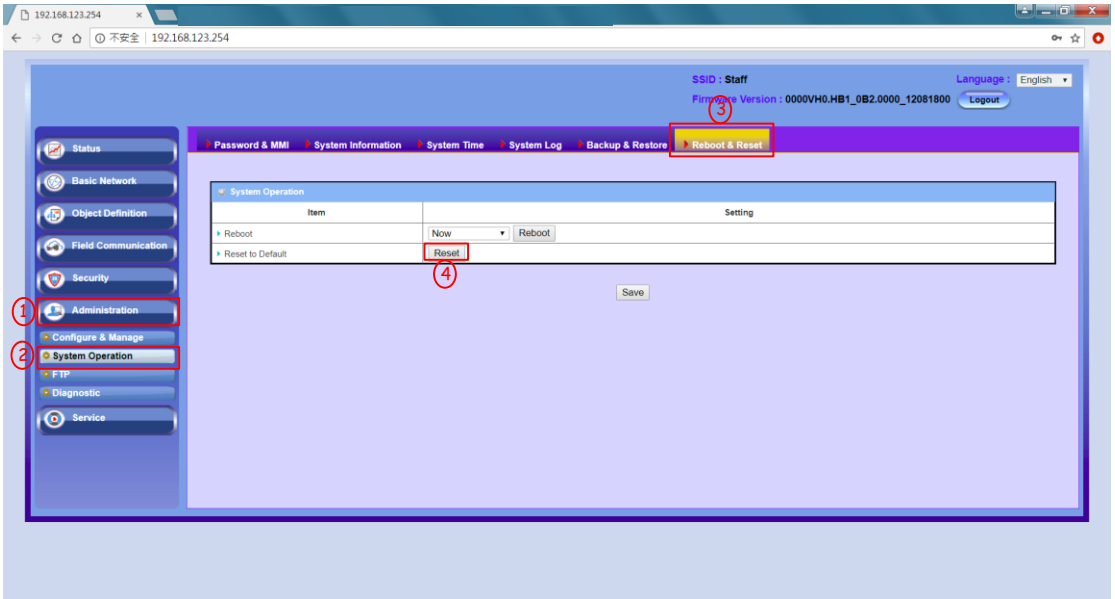
1. Press the RESET button continuously for 6 seconds, and then release it.




2. The power source LED ( ) will flash when the reset is starting.

➢ Restore Factory Setting by WEB UI

1. Login the web UI, and then going to “Reboot & Reset” page. Administration => System Operation => Reboot & Reset (1~3).
2. Please click the “Reset” button.




## Q08: Can the IOP760AM work with 2.4 / 5 GHz at the same time?

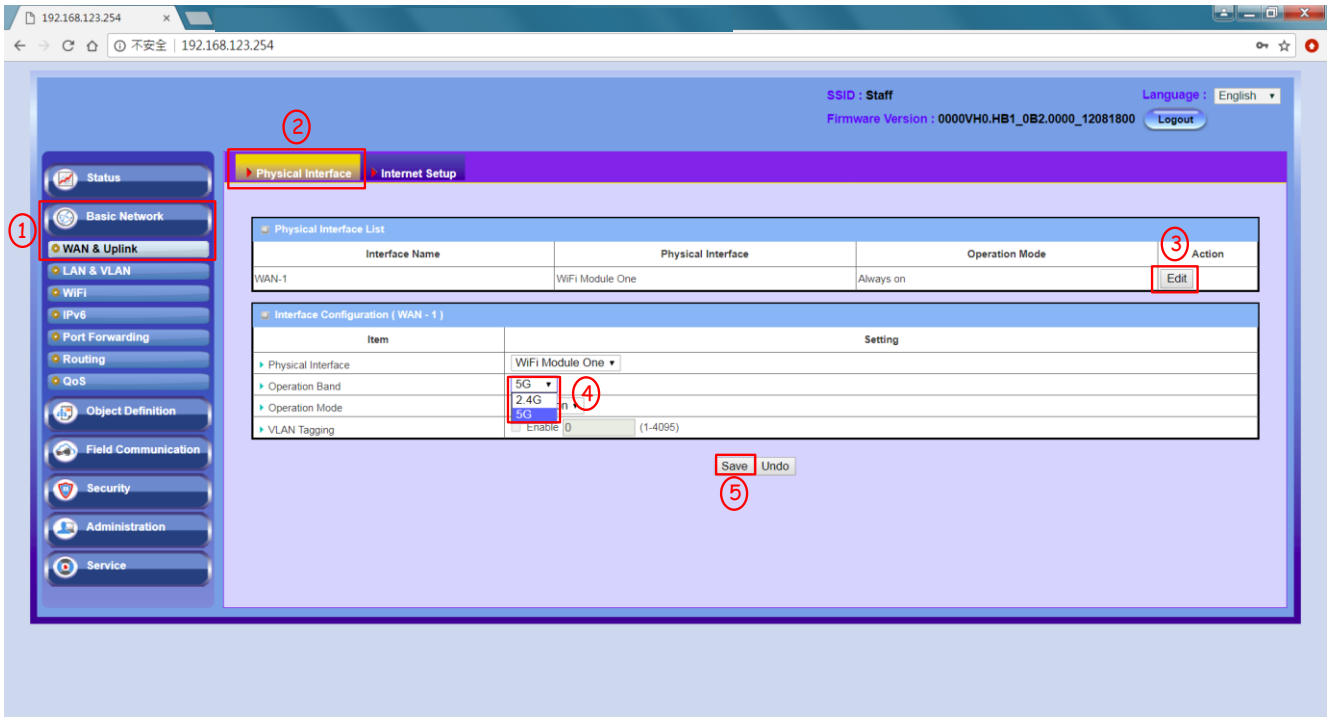
A08: The IOP760AM only can work one frequency at the same time. You can change the frequency band by web UI.

1. Going to the “Physical Interface” page, and then click the “Edit” button. Basic Network (1) => WAN & Uplink (1) => Physical Interface (2).



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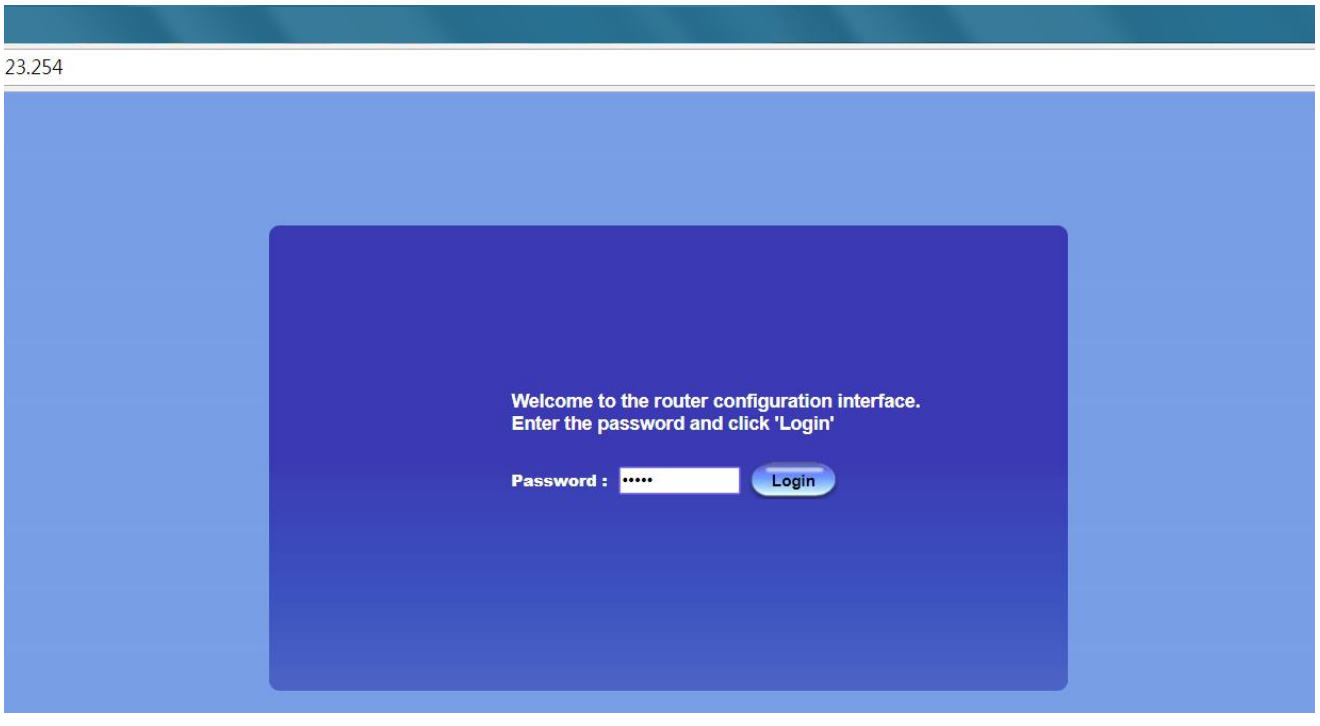
2. The frequency can change on the “Operation Band” (4)




**Q09: The IOP760AM will disconnect with AP when the AP has change the Wi-Fi channel. How to avoid it?**

A09: The WAN & Uplink will scan the same AP’s configuration in the same channel. Therefore it need to enable “Profile” function in the IOP760AM. The “Profile” function can reconnect to the AP when the AP in the different channel. The setting step of IOP760AM was shown as following step:

(1) You can use the browser to connect web UI, and type in the IP Address (http://192.168.123.254 ). The default password is admin.

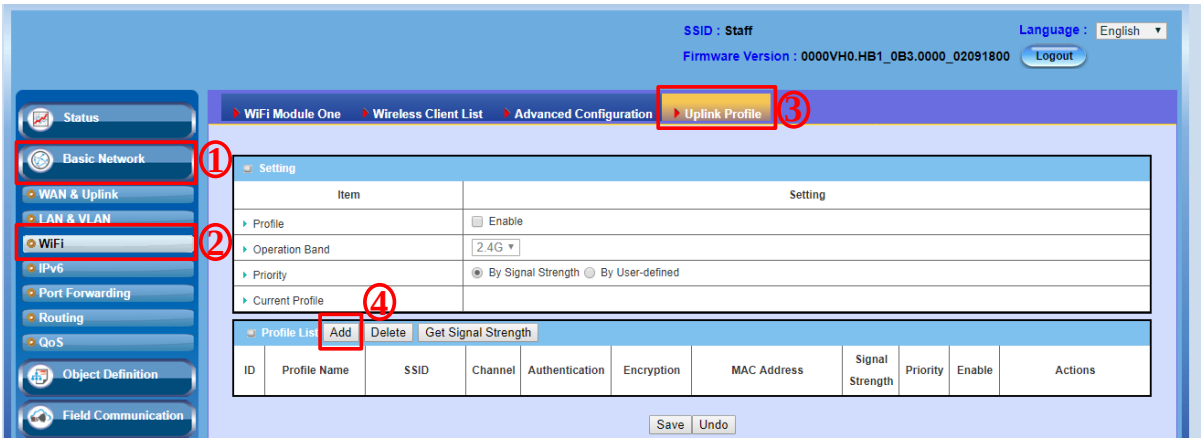



(2) Enter to the Profile setting page



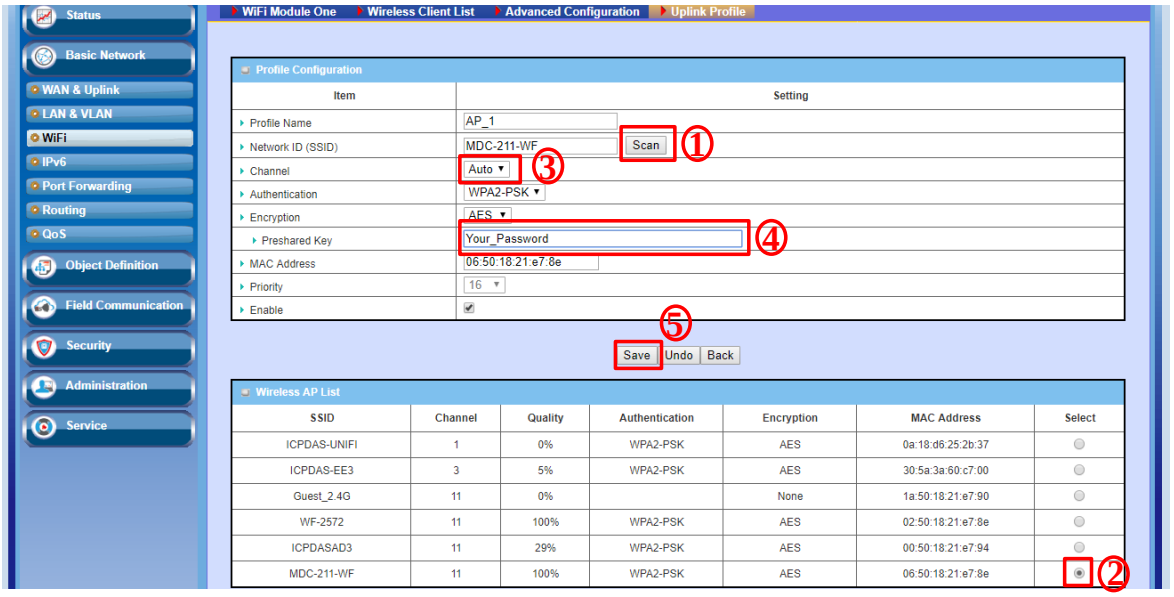
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The setting can enter form “Basic Network(1) => Wi-Fi(2) => Uplink(3)” and click the “Add” button(4) to add a Wi-Fi AP.

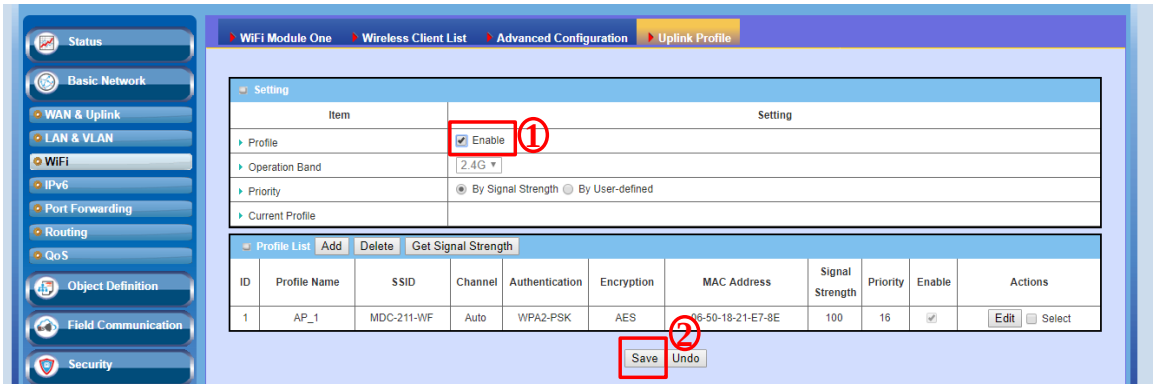



(3) Scan a Wi-Fi AP

1. Please click the “Scan” button (1). The results will be displayed below the WEB page.
2. Please choose a AP (2).
3. Changing a channel to “AUTO” (3).
4. Enter AP’s password (4).
5. Click “Save” button to save the configuration(5).




(4) Please enable the “Profile” and click the “Save” button.



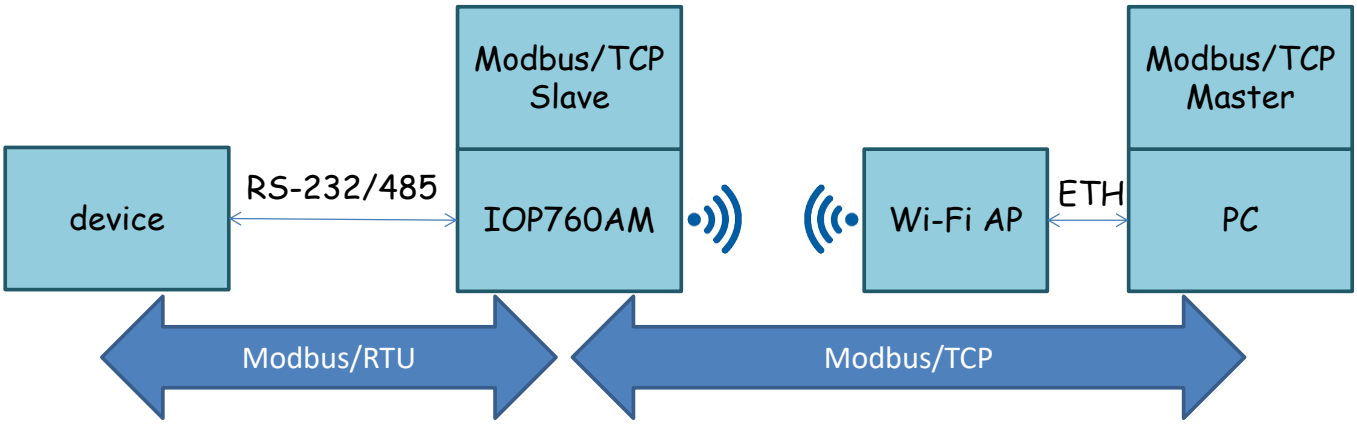



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## Q10: How to enable Modbus gateway function in IOP760AM

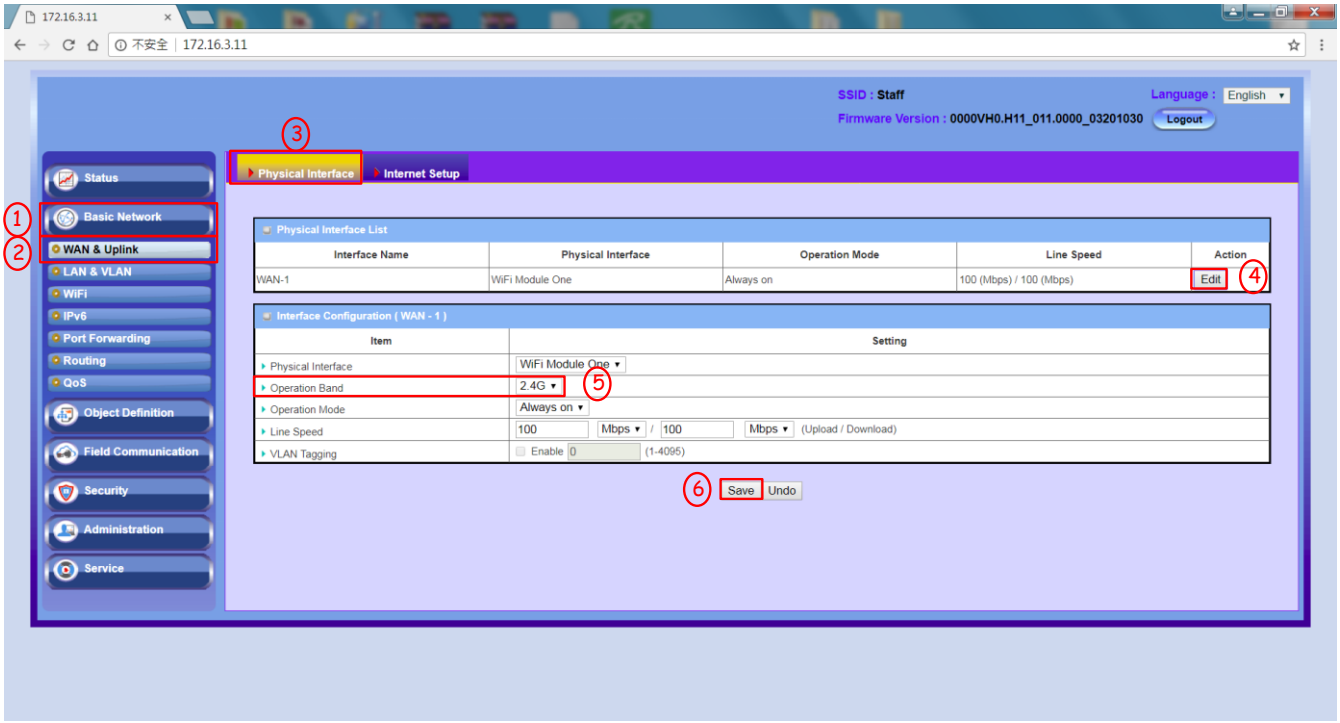
A10: The IOP760AN supports Modbus gateway. The following shown as the system architecture and setting step.

- System Architecture




- Setting Step

(1) Please choose the operation band in IOP760AM. The operation band should be same with Wi-Fi AP.

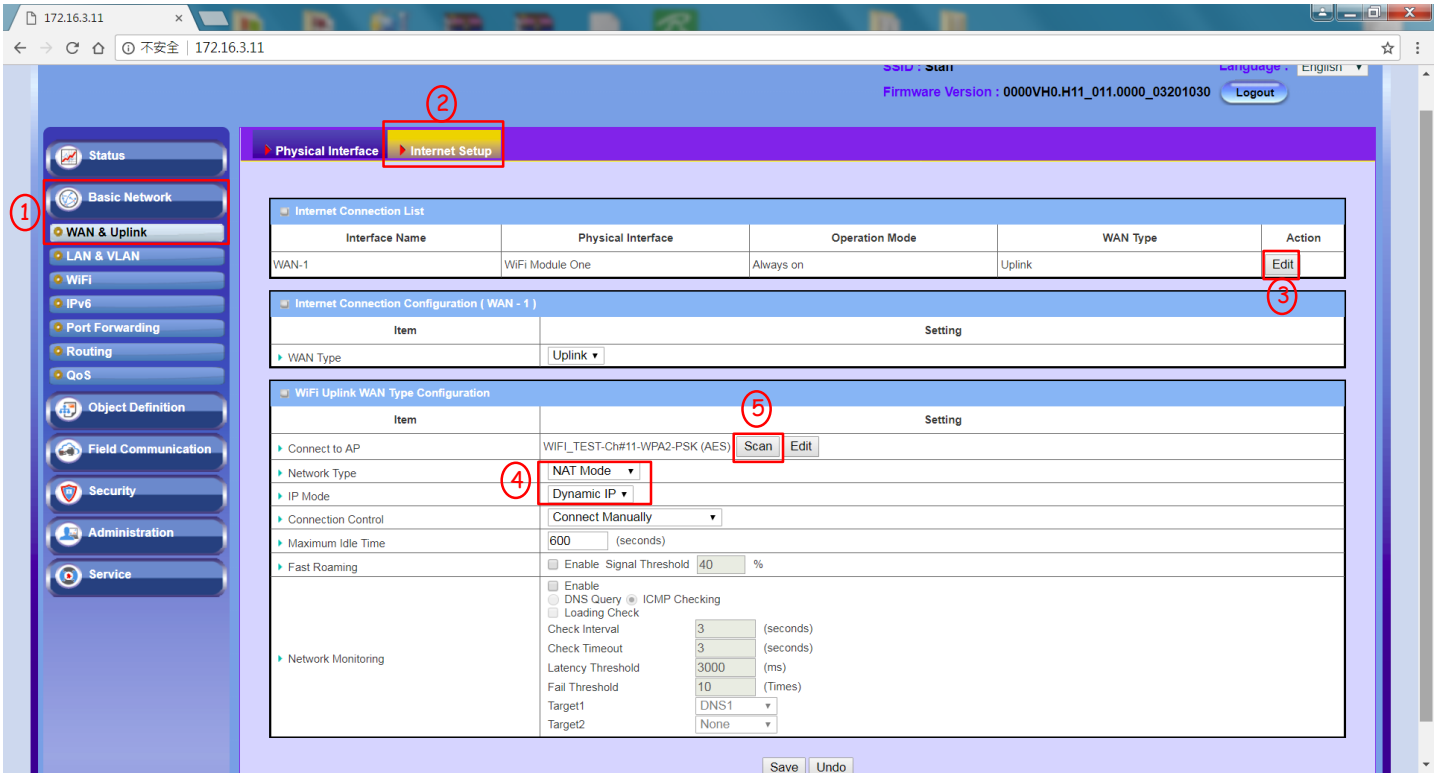



(1) WAN Setting

1. The network type is “NAT Mode”.
2. Please choose the IP mode. The dynamic IP uses for DHCP mode. The static IP uses for static IP mode.
3. Please click the “Scan” button search for Wi-Fi AP.



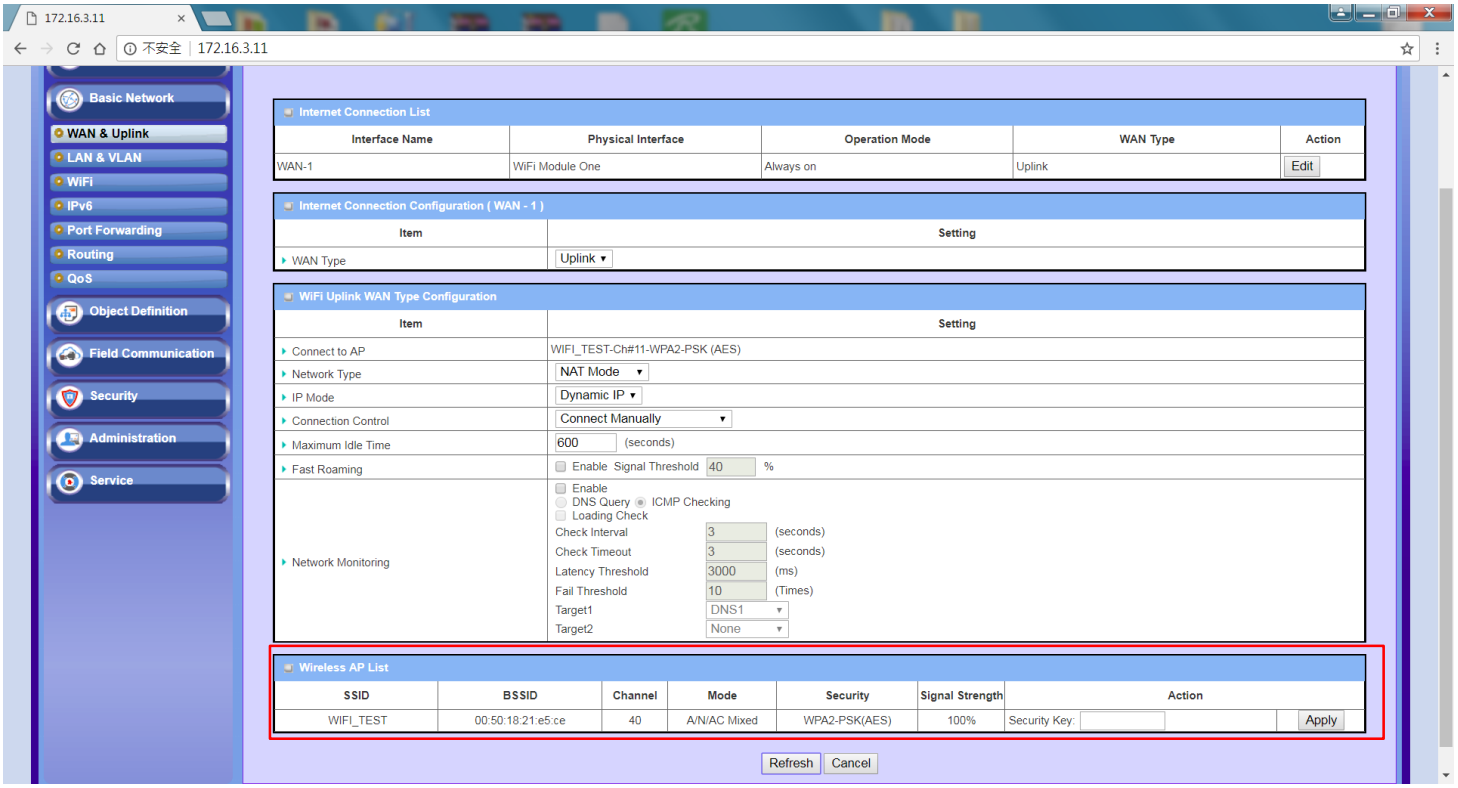
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(2) Choose the AP

1. Please enter the Wi-Fi password after choosing the Wi-Fi AP.

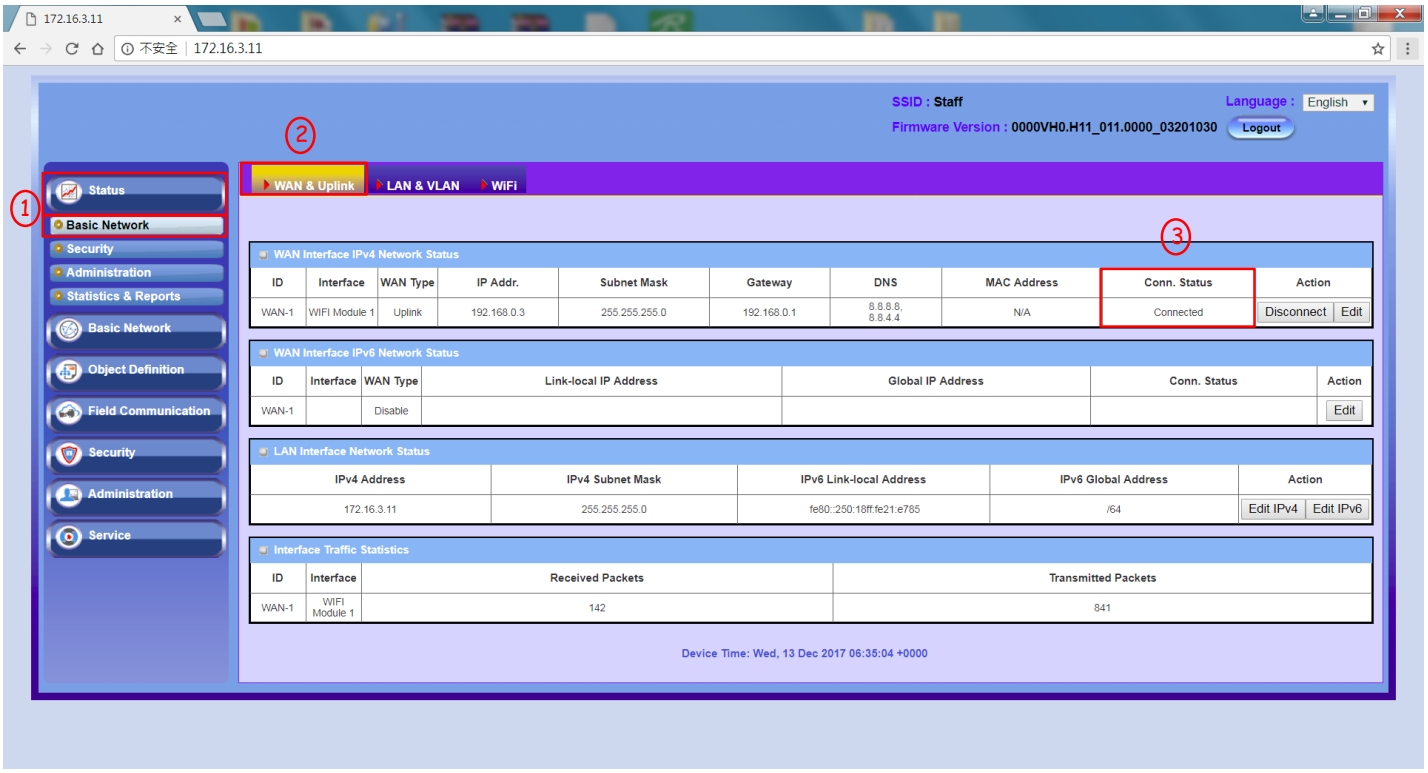
2. The IOP760AM connect to the Wi-Fi after click “Apply” button.





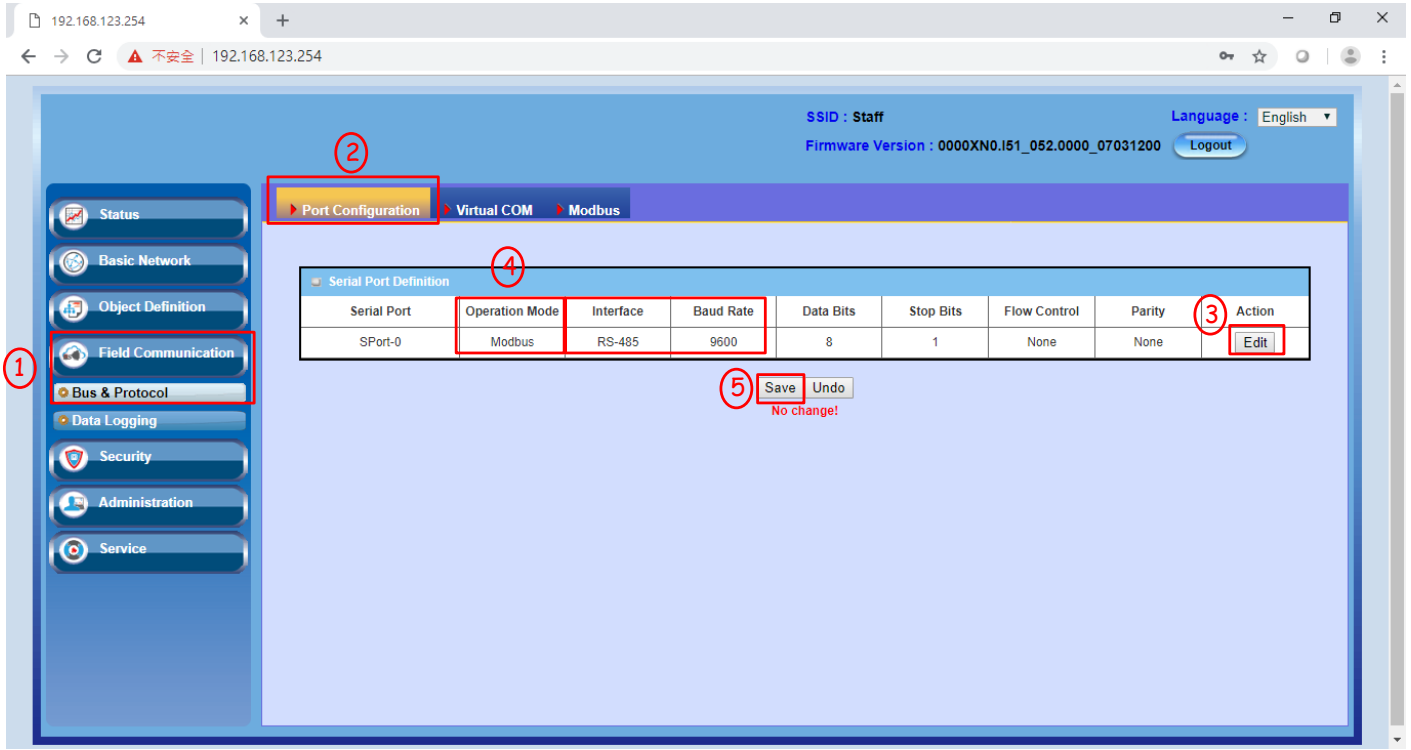

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(3) Connection status with IOP760AM




(4) Change Serial Interface

1. Please change the “Operation Mode” to “Modbus”.
2. Please change the “Interface” to “RS-485”.

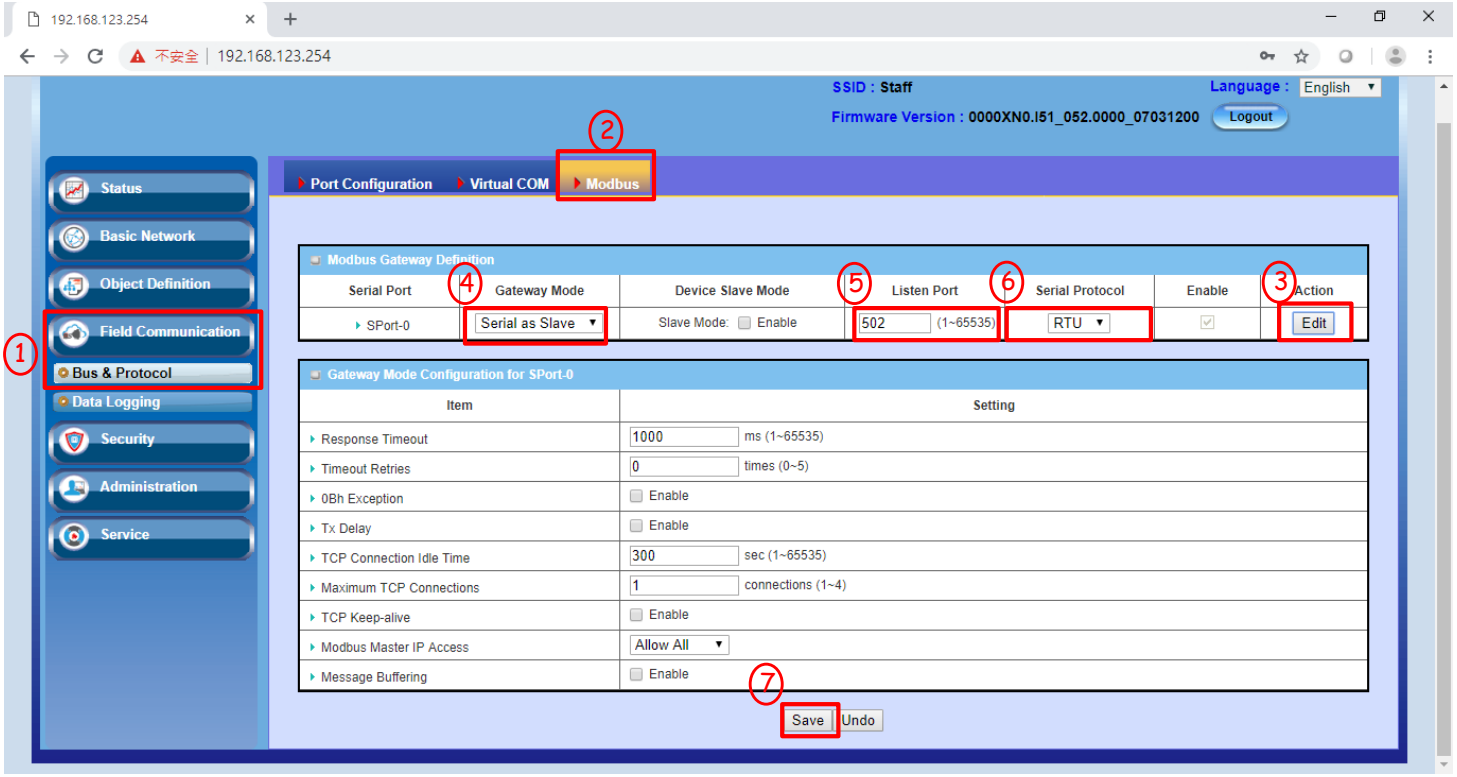





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(5) Setting Modbus Gateway

1. Please change the “Gateway mode” to “Serial as Slave”.




## Q11: How to emulate a com port when the IOP760AM is set in the virtual com server mode?

A11: The virtual com port can be emulated by the tool “com0com” and the “hub4com”. Please download the software from the sourceforge link and then unzip them.

[com0com]:

https://sourceforge.net/projects/com0com/

[hub4com]:

https://sourceforge.net/projects/com0com/files/hub4com/2.1.0.0/hub4com-2.1.0.0-386.zip/download

Please refer to the following steps to emulate the virtual com port.

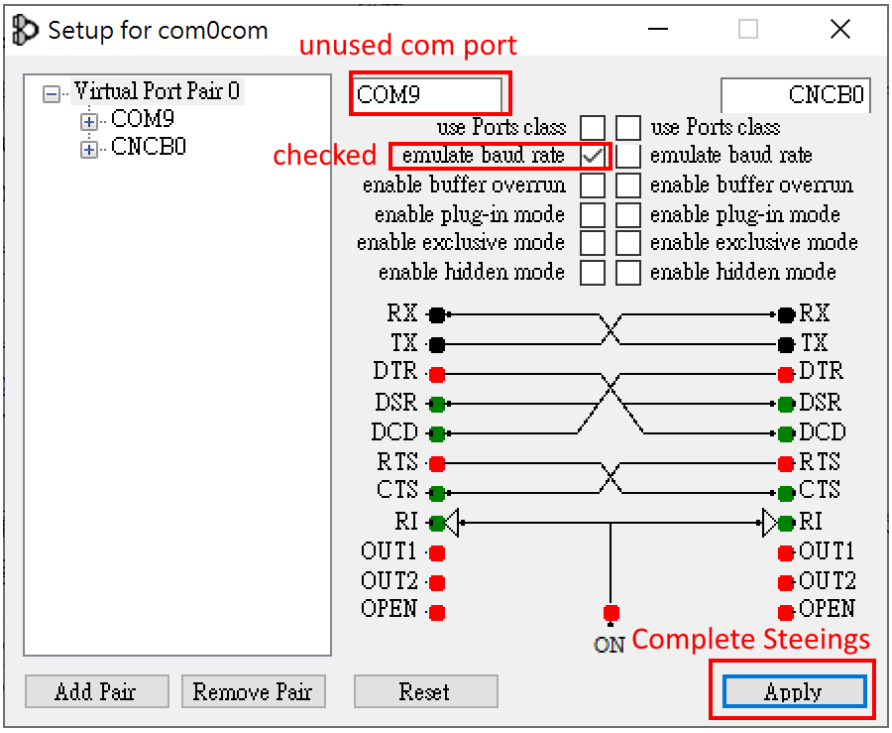
Step 1. Install the “com0com” tool and then reboot the computer.

Setup_com0com_v3.0.0.0_W7_x64_signed
Setup_com0com_v3.0.0.0_W7_x86_signed

Step 2. Run the “com0com” operation file “Setup(setupg.exe)” and type your unused com port number on Virtual Port Pair CNCA0. Select the “emulate baud rate” and click the “Apply” button.

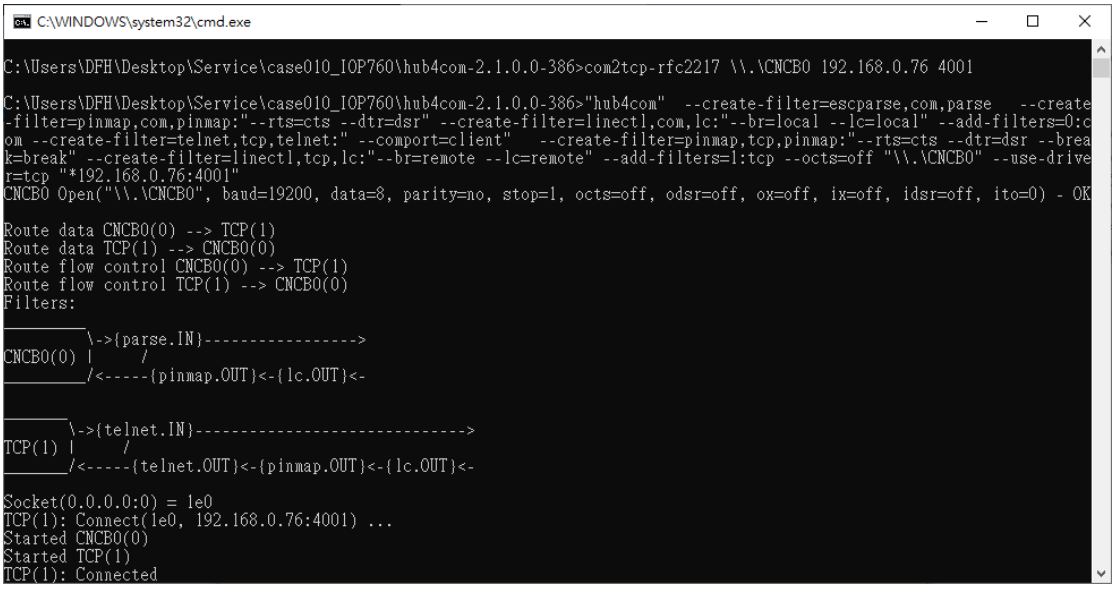


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Step3. Run the command line window and move to the "hub4com" file path. Type the command com2tcp-rfc2217 \\.\CNCB0 192.168.0.76 4001

The IP address 192.168.0.76 is the Virtual COM server of IOP760AM, and the 4001 is the TCP port.



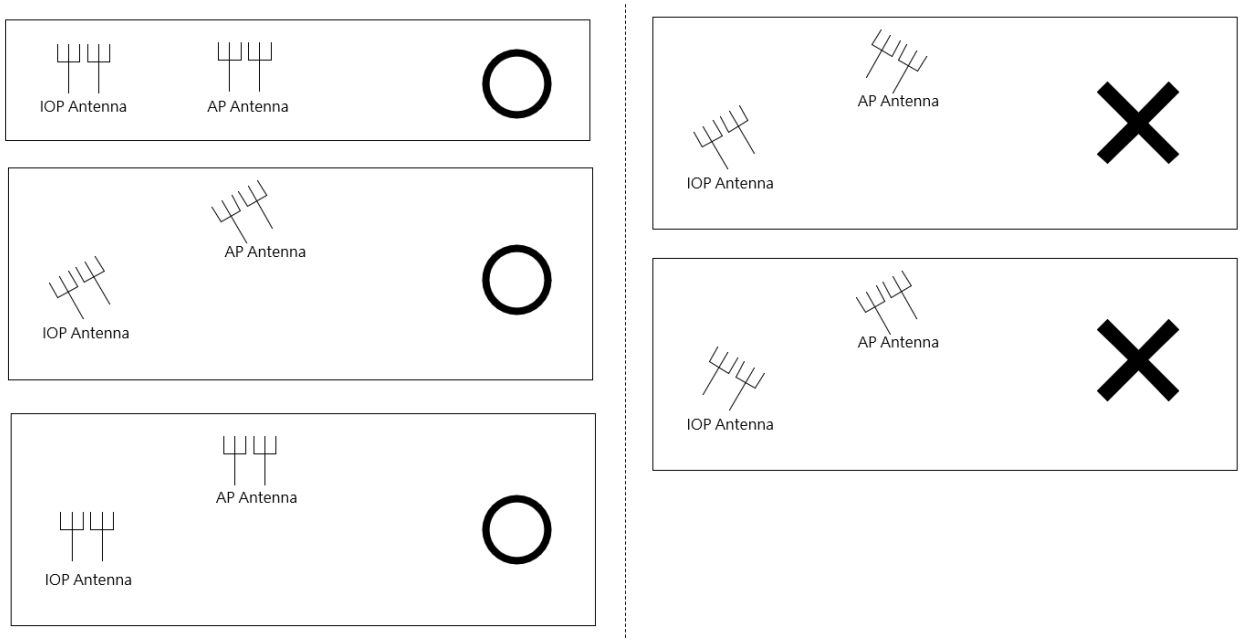

Step4. The com port message can be run over TCP/IP.



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## Q12: How to intall the Wi-Fi antenna?

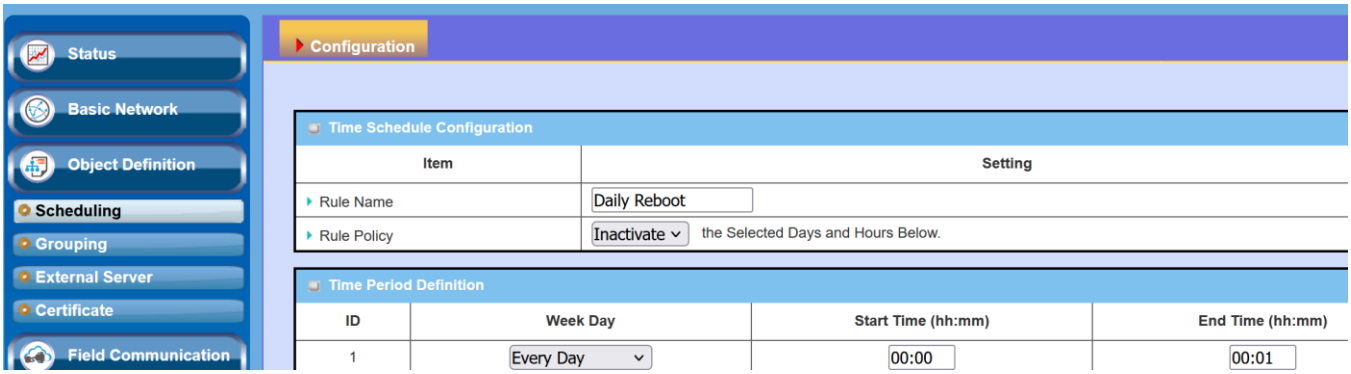
A12: The Wi-Fi antenna should be installed parallel.



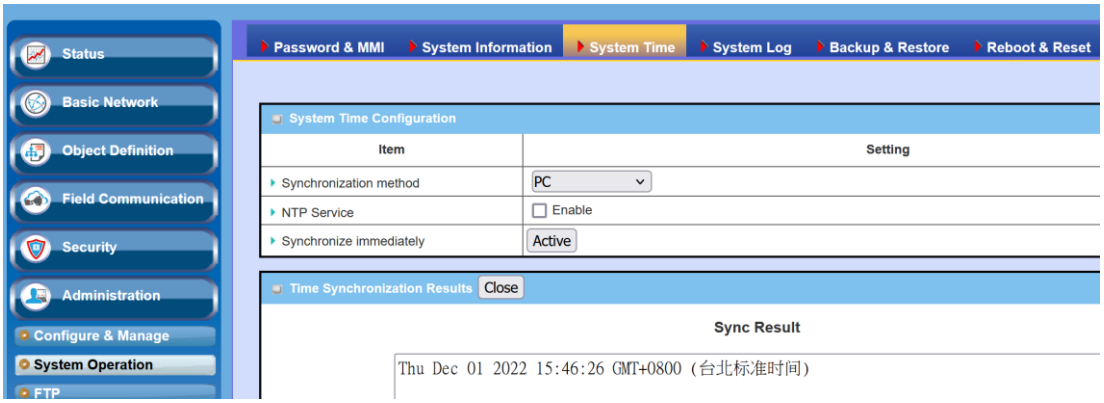

## Q13: How to make the IOP reboot everyday?

A13: Please follow these steps：

(1) Add a schedule to the IOP760. (Object Definition -> Scheduling -> Configuration)



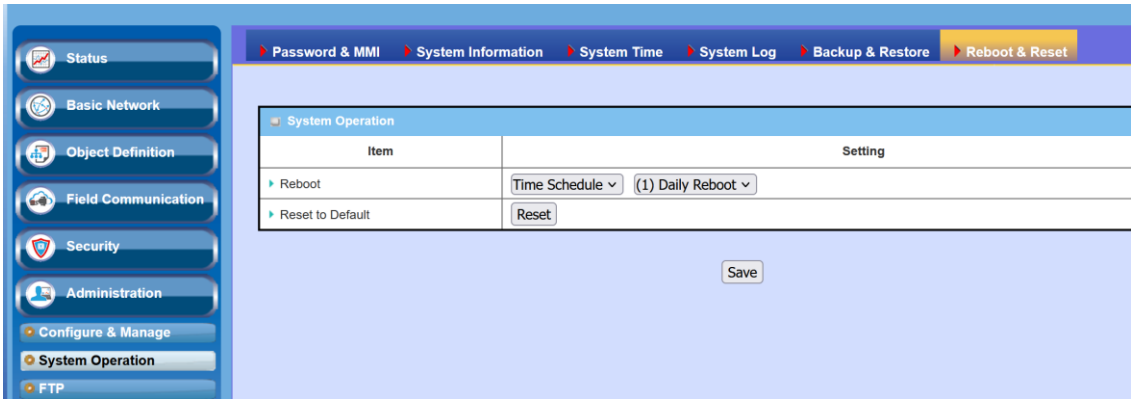

(2) Synchronize with your PC or another NTP server. (Administration -> System Operation -> System Time)




(3) Select the reboot setting to “Time Schedule” and chose the schedule that you add in step 1.



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**Q14: It does not recover to the factory default when I press the reset button.**

A14: Please follow these steps:

(1) Please power recycle the IOP760.

(2) Press reset button in 5 seconds.

(3) Hold the reset button until the power LED blinks in 1 second. (DO not hold the button until the power LED blinks in 0.1 second.)

(4) Release the reset button and power recycle.the IOP760.



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