# Web Management Guide (WAP-8131)



## Web Management Guide

**WAP-8131** 

AX1800 Dual Band Wi-Fi 6 PoE Wireless Access Point

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## **Default Settings**

AP provides Web-based management login, you can configure your computers IP address manually to log on to the AP. The default settings of the AP are shown below.

Note: WAP-8131 cannot be managed with Wireless LAN Controller (WAC-2000 / WAC-2003)

| IP Address | 192.168.188.253 |  |
|------------|-----------------|--|
| Password   | admin           |  |

## Logging on to the equipment

- Connect the RJ-45 interface cable of a switch with a computer using a network cable.
- Set the TCP/IP properties of the computer.

## **Windows**

 Click Start—> Control Panel—> Network and Internet—> Network and Sharing Center—> Change adapter settings, right click Local connection and select Properties;



2. Double-click Internet Protocol 4 (TCP/IPv4); Set the computer's IP address:

The computer's IP address should be any one of the following free IP addresses  $192.168.188.2 \sim 192.168.188.252$ , and then click **OK**, to return to the previous page, click **OK**.

| Local Area Connection Properties   | Internet Protocol Version 4 (TCP/IPv4) Properties   |
|--|---|
| Networking Authentication  | General   |
| Connect using:   | You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. |
| This connection uses the following items:  Client for Microsoft Networks  Ndisrdwm LightWeight Filter  Solution  File and Protects Sharing for Microsoft Networks  | Qubtain an IP address automatically Use the following IP address: IP address: IP address: IP address: ISUBAL TARK   |
| <ul> <li>✓ ci. Internet Protocol Version 6 (TCP/IPv6)</li> <li>✓ ci. Internet Protocol Version 4 (TCP/IPv4)</li> <li>✓ ci. Link-Layer Topology Discovery Mapper I/O Driver</li> <li>✓ ci. Link-Layer Topology Discovery Responder</li> </ul> | Default gateway:     Obtain DNS server addressautomatically   |
| Install         Properties           Description   | Use the following DNS server addresses      Preferred DNS server:      Alternate DNS server:  |
|  | Validate settings upon exit Advanced  |
| OK Cancel  | OK  |

3. Logging on to the equipment: Open a browser and type 192.168.188.253 in the address bar, and then press Enter; in the pop-up login interface, enter the factory logon **password "admin"** and click "Login".





## Introduction

This page will show the Wireless AP's default operation mode, channel, connection status, CPU usage, Wireless settings, LAN Setting, Wireless AP's Location, hardware/firmware version. It includes a management agent that allows you to configure the features listed in this manual.



1.Different operation modes are slightly different on the Home screen. The example below is AP Mode. Can set the location of the remark AP, which is convenient for future management (Note: Device name can only be letters, numbers, underscores, middle horizontal lines; length 1-10 bits)



2.Confirm whether the location just set is displayed on the login page, which is convenient for future identification and management



3.Different operation modes are slightly different on the Home screen. The example below is Gateway Mode. set the hardware accelerate. but enabling the hardware forwarding will cause user traffic statistics, some firewall, and flow control to fail.

| le            | velone              |                                  |  |   |  | ⊞ E>  |
|---------------|---------------------|----------------------------------|--|---|--|---|
| Home          | Mode Gateway Mode   | Online User 2                    | Flow 1b  |   | WAN Down Stream -O-                      | WAN Up Stream -O-   |
| <b>Vizard</b> | Hardware accelerate |                                  | 0b   |   |  |   |
| (a.           |                     |                                  | 0b   |   |  |   |
| WIFI          |                     |                                  | 0b   |   |  |   |
| Network       | Uptime 01:24:19     | Office_1                         | 0<br>15:56:11 15:                                    | 56:15 15:56:20  | 15:56:25                                 | 15:56:30  |
| Firewall      | Device Info         | 🗎 La                             | n Info   | 🗎 Wan Info  | 2.4GHz WiFi                              | 5GHz WiFi   |
| Manage        | 3%                  | 5% IP Add<br>Subne<br>STP<br>MAC | tress 192.168.188.253<br>at 255.255.255.0<br>On<br>4 | Internet Mode     PPPOE ♥       IP Address     61       Gateway     211       DNS     168.95.1.1 1.1. | Status<br>SSID<br>Channel<br>1.1 Encrypt | On 0<br>Wireless 2.4G_AC3EA5<br>6<br>WPA2/WPA3PSK-TKIPAES |
|               | CPU Me              | HCP DHCP                         | Server On  | MAC Address 4   | MAC                                      | Aldinen sicilitati  |

| lev   | elone                            |   |   |  |   |   | 88 [→   |
|---|----------------------------------|---|---|--|---|---|---|
| (And the second | Mode Gateway Mode Or             | nline User 2 Flow                                 |   |  | WAN D   | own Stream -O-                              | WAN Up Stream -O-   |
| Home<br>Cer<br>Wizard<br>WiFi   | Hardware accelerate              | Onine Us<br>SN<br>1<br>2                          | Name  | IP Address<br>192.168.188.3<br>192.168.188.1                 | MAC<br>76:1   | Link count<br>154<br>1                      | ×   |
| Network   | Uptime 02:51:25                  | office_1     Total 2     Ean Info                 |   | 🗎 Wan Info   |   | < 1<br>2.4GHz WiFi                          | > 17:23:35  |
| Manage  | 4% 489<br>CPU Mem                | IP Address<br>Subnet<br>STP<br>MAC<br>DHCP Server | 192.168.188.253<br>255.255.255.0<br>On<br>44: | Internet Mode<br>IP Address<br>Gateway<br>DNS<br>MAC Address | PPPoE<br>614<br>614<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615<br>615 | Status<br>SSID<br>Channel<br>Encrypt<br>MAC | On 1<br>Wireless 5.8G, AC3EA5<br>Auto [36]<br>WPA2/WPA3PSK-TKIPAES<br>441 |
|   | Version WAP-8131-AP-V1.0-6220416 | 6   |   |  |   |   |   |

#### 4.Can view the current Wireless Online User

5.Can view the current wireless online users of 2.4G or 5G respectively



# Section II Wizard

Click Wizard in Status page, will pop up following page to configure the operation mode and there are explanation for each operation mode for better application.

## **Gateway Mode**

In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs in LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPOE, DHCP client or static IP.



## **Static IP setting in Gateway Mode**

1. Sample Static IP mode setting method, then click next to continue. (Please contact with ISP for correct IP address and DNS address)

| 1             | 2             | 3 |
|---------------|---------------|---|
| ≒ WAN         |               |   |
| Internet Mode | Static IP     |   |
| IP Address    | 192.168.1.230 |   |
| Subnet        | 255.255.255.0 |   |
| Gateway       | 192.168.1.254 |   |
| Primary DNS   | 168.95.1.1    |   |
| Secondary DNS | 1.1.1.1       |   |
|               |               |   |
|               |               |   |
|               |               |   |
|               |               |   |
|               | Next          |   |

#### 2. Wireless 2.4GHz Setting, Click Next

| 0             | 2                    | 3 |
|---------------|----------------------|---|
| 🚖 2.4GHz WiFi |                      |   |
| WiFi Status   |                      |   |
| SSID          | Wireless 2.4G_AC3EA5 |   |
|               | Hide WiFi SSID?      |   |
| Wireless Mode | 11AXG_GHE40 V        |   |
| Channel       | 6 ~ ~                |   |
| Encrypt       | WPA2PSK-AES $\lor$   |   |
| Password      | 1qaz2wsx3edc         |   |
|               |                      |   |
|               |                      |   |
|               |                      |   |
|               | Back Next            |   |

## 3.Wireless 5GHz Setting, Click Next

| 0                | <b></b>              | 3 |
|------------------|----------------------|---|
| ≒ 5GHz WiFi      |                      |   |
| WiFi Status      |                      |   |
| SSID             | Wireless 5.8G_AC3EA5 |   |
|                  | Hide WiFi SSID?      |   |
| Wireless Mode    | 11AXA_AHE80          |   |
| Channel          | Auto                 |   |
| Encrypt          | WPA2PSK-AES          |   |
| Password         | 1qaz2wsx3edc         |   |
| Timed Reboot     |                      |   |
| Restart Interval | 1Day                 |   |
|                  |                      |   |
|                  | Back Next            |   |
|                  |                      |   |

#### 4.Please wait for the configuration to finis

| The device is restarting. Please do not disconnect the power |  |
|--|--|
|  |  |
|  |  |

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|---------------|----------------------------------|--|--|---|--------------------------------------|--|--------|
| Home          | Mode Gateway Mode Online Us      | er O F   | Flow<br>1b                               | WAN   | Down Stream -O-                      | WAN Up Stream – <del>O</del> –                   |        |
| <b>Vizard</b> | Hardware accelerate              |  | 0b                                       |   |                                      |  |        |
| WIFI          |                                  |  | 0b                                       |   |                                      |  |        |
| Network       | Uptime 00:02:41                  | office 1                                       | 06                                       |   |                                      |  |        |
|               | •                                |  | 13:51:50 13:51:                          | 55 13:52:00   | 13:52:05                             | 13:  | :52:09 |
| Firewall      | Device Info                      | 🗎 Lan Infe                                     | fo                                       | 🗎 Wan Info  | 2.4GHz WiFi                          | 5GHz WiFi  |        |
| Manage        | 3% 45%                           | IP Address<br>Subnet<br>STP<br>MAC<br>DHCP Ser | s 192.168.188.253<br>255.255.255.0<br>On | Internet Mode Static IP C<br>IP Address 192.168.1.230<br>Gateway 192.168.1.254<br>DNS 168.95.1.11.1.1.1 | Status<br>SSID<br>Channel<br>Encrypt | On 0<br>Wireless 2.4G_AC3EA5<br>6<br>WPA2PSK-AES |        |
|               | Version WAP-8131-AP-V1.0-6220416 | 2.1101 0.01                                    |  |   | MAC                                  |  |        |

#### 5. This page will show the connection Static IP status

## PPPoE(ADSL, VDSL ) setting in Gateway Mode

1.Sample PPPoE mode setting method, then click next to continue.

(Please contact with ISP for correct PPPoE Name and Password)

| 1             | 2                   | 3 |
|---------------|---------------------|---|
| 🚎 WAN         |                     |   |
|               |                     |   |
| Internet Mode | PPPoE V             |   |
| Username      | activities          |   |
| Password      | 143000000           |   |
| Server Name   | No Need, Don't fill |   |
| Service Name  | No Need, Don't fill |   |
|               |                     |   |
|               |                     |   |
|               |                     |   |
|               |                     |   |
|               |                     |   |
|               | Next                |   |

2.Wireless 2.4GHz Setting in Gateway Mode (PPPoE), Click Next

| 0             | 2                    | 3 |
|---------------|----------------------|---|
| 😄 2.4GHz WiFi |                      |   |
| WiFi Status   |                      |   |
| SSID          | Wireless 2.4G_AC3EA5 |   |
|               | Hide WiFi SSID?      |   |
| Wireless Mode | 11AXG_GHE40 V        |   |
| Channel       | 6 ~                  |   |
| Encrypt       | WPA2PSK-AES $\lor$   |   |
| Password      | 1qaz2wsx3edc         |   |
|               |                      |   |
|               |                      |   |
|               |                      |   |
|               | Back Next            |   |

#### 3.Wireless 5GHz Setting in Gateway Mode (PPPoE), Click Next

| <b>O</b>             | 3                                       |
|----------------------|---|
|                      |   |
|                      |   |
| Wireless 5.8G_AC3EA5 |   |
| Hide WiFI SSID?      |   |
| 11AXA_AHE80 $\sim$   |   |
| Auto $\checkmark$    |   |
| WPA2PSK-AES $\lor$   |   |
| 1qaz2wsx3edc         |   |
|                      |   |
| 1Day 🗸               |   |
|                      |   |
| Back Next            |   |
|                      | Vireless 5.8G_AC3EA5<br>Hide WiFi SSID? |

#### 4. Please wait for the configuration to finish



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|----------|----------------------------------|---|--|---|--------------------------------------|--|
| Home     | Mode Gateway Mode Online U       | Jser 0 F  | Flow                                     | WAI   | N Down Stream -⊖-                    | · WAN Up Stream -O-                              |
| Wizard   | Hardware accelerate              |   | 0b                                       |   |                                      |  |
| WIFI     |                                  |   | 0b0b                                     |   |                                      |  |
| Network  |                                  |   | 0b                                       |   |                                      |  |
|          | Uptime 00:02:40                  | office_1  | 0<br>13:39:36 13:39:40                   | 13:39:45  | 13:39:50                             | 13:39:55   |
| Firewall | Device Info                      | 🗎 Lan Info                                      | 0  | 🗎 Wan Info  | 2.4GHz WiFi                          | 5GHz WiFi  |
| Manage   | 3% 44%                           | IP Address<br>Subnet<br>STP<br>MAC<br>DHCP Serv | s 192.168.188.253<br>255.255.255.0<br>On | Internet Mode PPPoE<br>IP Address 61.<br>Gateway 211.<br>DNS 168.95.1.11.1.1.1<br>MAC Address | Status<br>SSID<br>Channel<br>Encrypt | On 0<br>Wireless 2.4G_AC3EA5<br>6<br>WPA2PSK-AES |
|          | Version WAP-8131-AP-V1.0-6220416 | 5101 001  |  |   | MAC                                  |  |

#### 5. This page will show the connection PPPoE status

## **DHCP Setting in Gateway Mode**

1. Sample DHCP mode setting method, then click next to continue. (Please contact with ISP for correct IP address and DNS address)

| Gateway Mode |               |      |   |   |
|--------------|---------------|------|---|---|
| 1            |               | 2    |   | 3 |
| 🚎 WAN        |               |      |   |   |
|              | Internet Mode | DHCP | ~ |   |
|              |               |      |   |   |
|              |               |      |   |   |
|              |               |      |   |   |
|              |               |      |   |   |
|              |               |      |   |   |
|              |               |      |   |   |
|              |               | _    |   |   |
|              |               | Next |   |   |

2. Wireless 2.4GHz Setting in Gateway Mode (DHCP), Click Next

| <b>Ø</b>      | 2                    | 3 |
|---------------|----------------------|---|
| 😄 2.4GHz WiFi |                      |   |
| WiFi Status   |                      |   |
| SSID          | Wireless 2.4G_AC3EA5 |   |
|               | Hide WiFi SSID?      |   |
| Wireless Mode | 11AXG_GHE40 V        |   |
| Channel       | 6 ~ ~                |   |
| Encrypt       | WPA2PSK-AES $\lor$   |   |
| Password      | 1qaz2wsx3edc         |   |
|               |                      |   |
|               |                      |   |
|               |                      |   |
|               | Back                 |   |

3. Wireless 5GHz Setting in Gateway Mode (DHCP), Click Next

| <b>O</b>         | <b>⊘</b>             | 3 |
|------------------|----------------------|---|
| 5GHz WiFi        |                      |   |
| WiFi Status      |                      |   |
| SSID             | Wireless 5.8G_AC3EA5 |   |
|                  | Hide WiFi SSID?      |   |
| Wireless Mode    | 11AXA_AHE80 V        |   |
| Channel          | Auto $\checkmark$    |   |
| Encrypt          | WPA2PSK-AES $\lor$   |   |
| Password         | 1qaz2wsx3edc         |   |
| Timed Reboot     |                      |   |
| Restart Interval | 1Day $\lor$          |   |
|                  |                      |   |
|                  | Back Next            |   |

## 4. Please wait for the configuration to finish



#### 5. This page will show the connection DHCP status

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|--------------------|---------------------------|-----------------------|---|--|--|--|
| Home               | Mode Gateway Mode         | Online User 0         | Flow 1b   |  | WAN Down Stream -C                         | - WAN Up Stream -O-                              |
| <b>c</b><br>Wizard | Hardware accelerate       |                       | 0b  |  |  |  |
| WIFI               |                           |                       | 0b  |  |  |  |
| Network            | Uptime 00:01:35           | <pre> office_1 </pre> | 0b<br>0<br>11:49:28 11:49:30                    | 11:49:35   | 11:49:40                                   | 11:49:45 11:49:47                                |
| Firewall           | Device Info               | 🗎 La                  | in Info   | 🗎 Wan Info   | 2.4GHz WiFi                                | 5GHz WIFI  |
| Manage             | 2%                        | 44%                   | dress 192.168.188.253<br>et 255.255.255.0<br>On | Internet Mode         DHCP ♥           IP Address         192.168.1.10           Gateway         192.168.1.1           DNS         168.95.1.11 | Status<br>SSID<br>Channel<br>1.1.1 Encrypt | On 0<br>Wireless 2.4G_AC3EA5<br>6<br>WPA2PSK-AES |
|                    | Version WAP-8131-AP-V1.0- | -6220416              | - Server UN                                     | MAG Address  | MAC  |  |

## Repeater mode

In this mode, the user can access wireless AP, devices can be connected to other wireless network using the wireless, all interfaces are bridged together. Without NAT, firewall and all network related functions



1.Can choose to relay the front-end 2.4G or 5G wireless signal to extend the wireless signal range. Select the AP's SSID want to bridge, take "wireless 5G" for example, then input the AP's key, click Scan AP

| 1            | 34               |
|--------------|------------------|
| \Xi Repeater |                  |
| Select Ra    | io Use 5GHz ^    |
| S            | ID Use 2.4GHz    |
| Lock BSS     | ID Use 5GHz      |
| Wireless Mo  | de 11AC_VHT80 V  |
| Encr         | pt WPA2PSK-AES V |
| Passwo       | rd 1gaz2wsx3edc  |
| Р            | 2P 🚺             |
|              |                  |
|              |                  |
|              |                  |
|              | Next             |

#### 2.Please select WIFI SSID to connect

| 1 |   |  |
|---|---|--|
| Ħ | 6001-cam1_5.8G<br>Channel[44] MAC[78:D3:8D:EB:A9:F6]<br>Signal[-26dBm] WPA/WPA2PSK-AES          |  |
|   | LevelOne 8121 5.8G<br>Channel [48] MAC[ 44:D1:FA:05:82:5F ]<br>Signal[ -34dBm ] WPA3PSK-TKIPAES |  |
|   | cam-6001-2 Channel[48] MAC[D8:EC:E5:78:89:26] Signal[-44dBm] WPA3PSK-TKIPAES                    |  |
|   | cam-6001-3<br>Channel[48] MAC[DA:26:E5:78:89:27]<br>Signal[-45dBm] WPA3PSK-TKIPAES              |  |
|   | Next  |  |

3. Enter the WIFI SSID password to be linked, When click Next.

| Repeater Mode |              |                    |        |   |
|---------------|--------------|--------------------|--------|---|
| 1             | 2            | 3                  |        | 4 |
| \Xi Repeater  |              |                    |        |   |
| s             | ielect Radio | Use 5GHz           |        |   |
|               | SSID         | LevelOne 8121 5.8G | Scan   |   |
|               | .ock BSSID   | 44:D1:FA:05:82:5F  |        |   |
| Wir           | eless Mode   | 11AC_VHT80         | $\sim$ |   |
|               | Encrypt      | WPA2PSK-AES        |        |   |
|               | Password     | 1gaz2wsx3edc       |        |   |
|               | P2P          |                    |        |   |
|               |              |                    |        |   |
|               |              |                    |        |   |
|               |              |                    |        |   |
|               |              | Next               |        |   |

4. If choose to relay the front-end 5G wireless signal to extend the wireless signal range. Can choose to enable or disable the 2.4G wireless broadcast of the itself.

| Repeater Mode |                      |
|---------------|----------------------|
| 2             | 3 4                  |
| 🚖 2.4GHz WiFi |                      |
| WiFi Status   |                      |
| SSID          | Wireless 2.4G_AC3EA5 |
|               | Hide WiFi SSID?      |
| Encrypt       | WPA2PSK-AES $\lor$   |
| Password      | 1qaz2wsx3edc         |
|               |                      |
|               |                      |
|               |                      |
|               |                      |
|               |                      |
|               | Back Next            |

5. Can choose to enable or disable the 5G wireless broadcast of the itself.

| <b>o</b>         | 3                    | 4 |
|------------------|----------------------|---|
| ≒ 5GHz WiFi      |                      |   |
| WiFi Status      |                      |   |
| SSID             | Wireless 5.8G_AC3EA5 |   |
|                  | Hide WiFi SSID?      |   |
| Encrypt          | WPA2PSK-AES $\lor$   |   |
| Password         | 1qaz2wsx3edc         |   |
| Timed Reboot     |                      |   |
| Restart Interval | 3Day $\vee$          |   |
|                  |                      |   |
|                  |                      |   |
|                  |                      |   |
|                  | Back Next            |   |

#### 6. Set up the LAN according to the front-end relay 2.4 / 5G wireless signal :

**a)** If the front-end wireless signal is Static IP, you can click "Static IP" to set an unused IP address.

**b)** If the gateway of the front-end wireless signal will automatically assign an IP address, you can click "Get IP From Gateway"

| Repeater Mode |                     |   |
|---------------|---------------------|---|
| 0-0-          |                     | 4 |
| ≒ LAN         |                     |   |
| Connection    | Get IP From Gateway |   |
|               | Static IP           |   |
|               | Get IP From Gateway |   |
|               |                     |   |
|               |                     |   |
|               |                     |   |
|               |                     |   |
|               |                     |   |
|               | Back Next           |   |



7.Please click the ok button, After the switch mode, the device will reboot

#### 8.Please wait more than 40 seconds



| lev        | velone                           |  |  | <b>₩</b> [→  |
|------------|----------------------------------|--|--|--|
| Home       | Mode Repeater Mode               | Flow<br>18Kbps   | Repeater Up  | Stream -O- Repeater Down Stream -O-                    |
| ්          |                                  | 15Kbps   |  |  |
| Wizard     |                                  | 12Kbps   |  |  |
| WiFi       | (e)<br>(e)                       | 9Kbps<br>6Kbps   |  |  |
| Network    |                                  | 3Kbps  |  |  |
| <b>0</b> - | Uptime 00:01:41                  | 0 16:57:35   | 16:57:40 16:57:45  | 16:57:50 16:57:54                                      |
| Manage     | Device Info                      | Lan Info   | Repeater Info  | 2.4GHz WiFi 5GHz WiFi                                  |
|            | 3% 44%                           | Connection         Get IP From Gateway           IP Address         192.168.188.140           Subnet         255.255.255.0 | SSID LevelOne 8121 5.8G<br>Channel 48<br>BSSID Chante 5.6650 | Status On O<br>SSID Wireless 5.8G_AC3EA5<br>Channel 48 |
|            | CPU Memory                       | Gateway 192.168.188.253<br>MAC   | Signal -35dB<br>Link Quality 100%                            | MAC WPA2PSK-AES  |
|            | Version WAP-8131-AP-V1.0-6220416 |  |  |  |

9. Please log in again ,This page will show the connection Repeater mode status

## AP Mode

In this mode, the AP wireless interface and cable interface are bridging together. Without NAT, firewall and all network related functions.

| levelone |   | 88 | Ŀ |   |
|----------|---|----|---|---|
| Home     |   |    |   | ١ |
|          | Current Mode +  |    |   |   |
| Wizard   |   |    |   |   |
| (a)      | Gataway Mode Beneater Mode AP Mode  |    |   |   |
| WiFi     | outerny mode reported mode /a mode  |    |   |   |
| <b>S</b> |   |    |   |   |
| Network  | In this mode, the AP wireless interface and cable   |    |   |   |
| Manage   | Interface are bridging together. Without NAT, firewall and all network related functions. |    |   |   |
|          |   |    |   |   |
|          |   |    |   |   |
|          |   |    |   |   |

#### 1.Set according to LAN environmental requirements :

a) If the front-end is Static IP, you can click "Static IP" to set an unused IP address.

b) If the Router of the front-end will automatically assign an IP address, you can click "Get IP From Gateway"

| 1       | 2                                | 3 |
|---------|----------------------------------|---|
| ≒ LAN   |                                  |   |
| Connect | ion Get IP From Gateway          |   |
|         | Static IP<br>Get IP From Gateway |   |
|         |                                  |   |
|         |                                  |   |
|         |                                  |   |
|         |                                  |   |
|         | Next                             |   |

#### 2.Static IP setting

| AP Mode       | >               |
|---------------|-----------------|
| 1             | 2 3             |
| 芸 LAN         |                 |
| Connection    | Static IP V     |
| IP Address    | 192.168.188.253 |
| Subnet        | 255.255.255.0   |
| Gateway       | 192.168.188.1   |
| Primary DNS   | 8.8.8.8         |
| Secondary DNS | 8.8.6.6         |
|               |                 |
|               |                 |
|               |                 |
|               |                 |
|               | Next            |

3. Configure the 2.4G Wireless SSID and password

| 2                    | 3  |
|----------------------|--|
|                      |  |
|                      |  |
| Wireless 2.4G_AC3EA5 |  |
| Hide WiFi SSID?      |  |
| 11AXG_GHE40 V        |  |
| 6 ~                  |  |
| WPA2/WPA3PSK-TKIPAES |  |
| 1gaz2wsx3edc         |  |
|                      |  |
|                      |  |
|                      |  |
| Back Next            |  |
|                      | 2<br>Wireless 2.4G_AC3EA5<br>Hide WiFi SSID?<br>11AXG_GHE40<br>6<br>WPA2/WPA3PSK-TKIPAES<br>1qaz2wsx3edc<br>1qaz2wsx3edc |

4.Configure the 5G Wireless SSID and password

| AP Mode                    |      |
|----------------------------|------|
| <b>O</b>                   | 3    |
| 5GHz WiFi                  |      |
|                            |      |
| WiFi Status                |      |
| SSID Wireless 5.8G_AC3EA5  |      |
| Hide WiFi SSID?            |      |
| Wireless Mode 11AXA_AHE80  |      |
| Channel Auto               |      |
| Encrypt WPA2/WPA3PSK-TKIPA | es v |
| Password 1gaz2wsx3edc      |      |
| Timed Reboot               |      |
| Restart Interval 1Day      |      |
|                            |      |
| Back                       |      |

#### 5.Please wait more than 30 seconds



#### 6.Check AP Mode Status

|           | Mode AP Mode    | Flow(2G)      |          |   | AP Up Stream -O- AP D   | Iown Stream -O-                        |
|-----------|-----------------|---------------|----------|---|---|--|
| Home      |                 | 16            |          |   |   |  |
| e         |                 | 0b            |          |   |   |  |
| Wizard    | <u></u>         | 0b            |          |   |   |  |
| WIFI      |                 | 0b -          |          |   |   |  |
| $\otimes$ |                 | 0b            |          |   |   |  |
|           |                 |               |          |   |   |  |
| Network   | Uptime 00:09:57 | 0             | 17:01:10 | 17:01:15  | 17:01:20  | 17:0                                   |
| Network   | Uptime 00:09:57 | 0<br>17:01:06 | 17:01:10 | 17:01:15  | 17:01:20<br>2.4GHz WiFi 5                                       | 17:0'<br>iGHz WiFi                     |
| Network   | Uptime 00:09:57 | 0<br>17.01:06 | 17:01:10 | 17:01:15<br>Static IP<br>192.168.188.253<br>255.255.255.0 | 17:01:20<br>2:4GHz WiFi 5<br>Status On<br>SSID Wir<br>Channel 6 | 17:01<br>GHz WiFi<br>eless 2.4G_AC3EA5 |

# Section III WiFi

## 2.4GHz WiFi

Select the types of 2.4GHz wireless security you want to setup:

| leve     | elone  | E E→            |
|----------|--|-----------------|
| (        |  |                 |
|          | WIFI MAC ACL WIFI Timer                                  |                 |
| Home     | 2.4GHz WiFi 5GHz WiFi Advanced                           |                 |
| 8        | WiFi Status WiFi Analyzer Enable VAP 🗹 VAP 1             | 🗹 VAP 2 🗹 VAP 3 |
| Wizard   | SSID Wireless 2.4G_AC3EA5 VAP 1 VAP 2                    | VAP 3           |
| G        | Hide WiFi SSID? SSID Wireless 2.4                        | 4G Vap1_AC3EA5  |
| WiFi     | Wireless Mode 11AXG_GHE40 V Hide WiFi SSID               | 27              |
|          | Channel 6 V Encrypt WPA2/WPA                             | 3PSK-TKIPAES 🗸  |
| Network  | Encrypt WPA2/WPA3PSK-TKIPAES V Password 1gaz2wsx         |                 |
|          | Password 1qaz2wsx3edc VLAN                               |                 |
| <b>→</b> | Max Station 128 (0 to 256,0 means no limit) VLAN ID 2001 | (1~4094)        |
| Manage   | TX Power Max V   |                 |
|          | VLAN   |                 |
|          | VLAN ID 1000 (1~4094)                                    |                 |
|          |  |                 |
|          | Apply  |                 |



| Hide WiFi SSID? | Hidden SSID :<br>Everyone in this area cannot search for the SSID. You can only<br>connect successfully by manually entering the correct SSID and<br>password.  |
|-----------------|---|
| Wireless Mode   | 11NG_HT20<br>11NG_HT40<br>11AXG_GHE20<br><b>11AXG_GHE40</b>   |
| Channel         | Shows the Channel on which the AP is currently broadcasting.<br>The range of available channels is determined by the mode of the<br>radio interface and the country code setting. If you select Auto for<br>the channel setting, the AP scans available channels and selects a<br>channel where no traffic is detected.<br>The channel defines the portion of the radio spectrum the radio<br>uses for transmitting and receiving. Each mode offers a number of<br>channels, depending on how the spectrum is licensed by national<br>and transnational authorities such as the Federal Communications<br>Commission (FCC) or the International Telecommunication Union<br>(ITU-R). |
|                 | 12<br>13  |

Т

|         | NONE<br>WPA2PSK-AES<br>WPA/WPA2PSK-TKIPAES<br>WPA2/WPA3PSK-TKIPAES   |  |  |  |
|---------|--|--|--|--|
| Encrypt | WPA3PSK-TKIPAES<br>NONE (Open System)<br>An open wireless network is one where you have no password.<br>None of your network traffic will be encrypted which means it's<br>visible to anyone who wants to look.  |  |  |  |
|         | WPA/WPA2-PSK (TKIP/AES)<br>This uses the modern WPA standard with older TKIP encryption.<br>This option isn't very secure, and is only a good idea if you have<br>older devices that can't connect to a WPA2-PSK (AES) network.  |  |  |  |
|         | WPA2/WPA3-PSK (TKIP/AES)<br>This enables both WPA2 and WPA3 with both TKIP and AES. This<br>provides maximum compatibility with any ancient devices you<br>might have, but also ensures an attacker can breach your network<br>by cracking the lowest-common-denominator encryption scheme.<br>This TKIP+AES option may also be called WPA3-PSK "mixed"<br>mode. |  |  |  |
|         | WPA3-PSK (TKIP/AES) (recommended)<br>It's the most secure of the bunch at the moment. It uses WPA3, the<br>latest Wi-Fi encryption standard, and the latest AES encryption<br>protocol. You should be using this option. but doesn't offer<br>compatibility with any ancient devices you might have.   |  |  |  |
|         | If you are sure to use WPA3-Personal Mode, please first check<br>whether your terminal device also supports WPA3. If your device<br>does not support it, your device cannot connect to the wireless<br>network properly. Before you enable other authorization modes<br>with special encryption, such as: NONE(Open System),                                     |  |  |  |

|             | WPA/WPA2PSK-TKIP/AES, WPA2PSK-AES, WPA2/WPA3-PSK                 |  |  |
|-------------|--|--|--|
|             | (TKIP/AES), we recommend you to confirm the compatibility of the |  |  |
|             | end device at the same time. If the terminal device cannot be    |  |  |
|             | connected after changing to the above mode, please change it to  |  |  |
|             | WPA2PSK-AES first to ensure connection.                          |  |  |
|             |  |  |  |
|             | [Note] Terminal devices include mobile phones, computers, lot    |  |  |
|             | devicesetc.  |  |  |
|             | To confirm whether your device supports WPA3 personal            |  |  |
|             | authorization mode, please contact the original product          |  |  |
|             | manufacturer or check on the WiEi Alliance website:              |  |  |
|             | https://www.wi-fi.org/product-finder                             |  |  |
| Bassword    | The key can be a mix of alphanumaria and aposial characters      |  |  |
| Fassword    | The key can be a mix of alphanument and special characters,      |  |  |
|             | The key is case sensitive  |  |  |
| Max Station | Default 128, the maximum number of WiFi device connections       |  |  |
|             | Мах  |  |  |
|             | Efficient  |  |  |
|             | Enhanced   |  |  |
| TX Power    | Standard   |  |  |
|             | Standard   |  |  |
|             | Min  |  |  |
| VLAN        | If your network uses VLANs, you might need to configure the      |  |  |
|             | management VLAN ID or untagged VLAN ID on the WAP-8131 in        |  |  |
|             | order for it to work with your network.                          |  |  |
|             | VLAN   |  |  |
|             | VLAN ID : 1~4094 (Set the management VLAN ID)                    |  |  |
|             | VLAN   |  |  |
|             |  |  |  |

| Enable VAP | Enable VAP 🗹 VAP 1 🔽 VAP 2 🔽 VAP 3   |
|------------|--|
|            | VAP 1 VAP 2 VAP 3  |
|            | SSID Wireless 2.4G Vap3_AC3EA5   |
|            | Hide WiFi SSID?  |
|            | Encrypt WPA2/WPA3PSK-TKIPAES $\lor$  |
|            | Password 1gaz2wsx  |
|            | VLAN   |
|            | VLAN ID 2003 (1~4094)  |
|            | Not activated on the virtual access point by default, You configure<br>secure wireless client access by configuring security for each virtual<br>access point (VAP) that you enable. configure up to 3 VAPs on<br>2.4GHz radio that simulate multiple APs in one physical access<br>point.   |
|            | VAPs segment the wireless LAN into multiple broadcast domains<br>that are the wireless equivalent of Ethernet VLANs. For each VAP,<br>you can customize the security mode to control wireless client<br>access. Each VAP can also have a unique SSID. Multiple SSIDs<br>make a single AP look like two or more APs to other systems on the<br>network. By configuring VAPs, you can maintain better control over |

## 5GHz WiFi

Select the types of 5GHz wireless security you want to setup:

| leve     | elone              |                                 |                          | ₩ 🕞          |
|----------|--------------------|---------------------------------|--------------------------|--------------|
| â        | WIFI MAC AC        | 3L WiFi Timer                   |                          |              |
| Home     | 2.4GHz WiFi 5GHz W | FI Advanced                     |                          |              |
| e        | WiFi Status        | WiFi Analyzer                   | Enable VAP 🔽 VAP 1 🛛 VA  | IP 2 🔽 VAP 3 |
| Wizard   | SSID               | Wireless 5.8G_AC3EA5            | VAP 1 VAP 2 VAP 3        |              |
| Ca.      |                    | Hide WiFi SSID?                 | SSID Wireless 5.8G Vap1_ | AC3EA5       |
| WIFI     | Wireless Mode      | 11AXA_AHE80 V                   | Hide WiFi SSID?          |              |
|          | Channel            | 157 ~                           | Encrypt WPA2/WPA3PSK-TK  | IPAES 🗸      |
| Network  | Encrypt            | WPA2/WPA3PSK-TKIPAES $\lor$     | Password 1234567890      |              |
|          | Password           | 3EDC2wsx1qaz                    | VLAN                     |              |
| <b>♦</b> | Max Station        | 128 (0 to 256,0 means no limit) | VLAN ID 501              | (1~4094)     |
| Manage   | TX Power           | Max 🗸                           |                          |              |
|          | VLAN               |                                 |                          |              |
|          | VLAN ID            | 500 (1~4094)                    |                          |              |
|          |                    |                                 |                          |              |
|          |                    |                                 | Apply                    |              |

| Basic Features Description |   |  |  |  |  |
|----------------------------|---|--|--|--|--|
|                            | 5GHz Wireless Radio - Select On or Off the radio wave.                                  |  |  |  |  |
|                            | WiFi Status   |  |  |  |  |
|                            | WiFi Status   |  |  |  |  |
| WiFi Status                | <b>WiFi Analyzer :</b><br>Wireless analyzer Look for Unoccupied channel (5GHz)          |  |  |  |  |
|                            | WEF Atabyzer         C ×           WGF4033-2-4/5GHz         6001-0801-0804           40 |  |  |  |  |

| SSID            | Custom 5GHz WiFi Name   |  |  |  |
|-----------------|---|--|--|--|
|                 | Radiate SSID :  |  |  |  |
|                 | Anyone in this area can find SSID   |  |  |  |
|                 |   |  |  |  |
| Hide your SSID? | Hidden SSID :   |  |  |  |
|                 | Everyone in this area cannot search for the SSID. You can only                        |  |  |  |
|                 | nassword  |  |  |  |
|                 | The 80 MHz channel enables higher data rates but leaves fewer                         |  |  |  |
|                 | channels available for use by other 5 GHz devices.                                    |  |  |  |
| Wireless Mode   | 11NA_HT20   |  |  |  |
|                 | 11NA_HT40   |  |  |  |
|                 | 11AC_VHT20  |  |  |  |
|                 | 11AC_VHT40  |  |  |  |
|                 | 11AC_VHT80  |  |  |  |
|                 | 11AXA_AHE20   |  |  |  |
|                 | 11AXA_AHE40   |  |  |  |
|                 | 11AXA_AHE80   |  |  |  |
|                 |   |  |  |  |
|                 | Wireless Mode<br>11NA HT20 (Country Region: FTSI)                                     |  |  |  |
|                 | CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124,                    |  |  |  |
|                 | 128, 132, 136, 140  |  |  |  |
|                 | 11NA HT40 (Country Region: ETSI)  |  |  |  |
|                 | CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124,                    |  |  |  |
|                 | 128, 132, 136, 140  |  |  |  |
|                 | 11AC_VHT20 (Country Region: ETSI)   |  |  |  |
| Channel         | CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124, 128, 132, 136, 140 |  |  |  |
|                 |   |  |  |  |
|                 | 11AC_VHT40 (Country Region: ETSI)   |  |  |  |
|                 | 128, 132, 136, 140  |  |  |  |
|                 |   |  |  |  |

|         | <b>11AC_VHT80 (Country Region: ETSI)</b><br>CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124,<br>128  |  |  |  |  |
|---------|--|--|--|--|--|
|         | <b>11AXA_AHE20 (Country Region: ETSI)</b><br>CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124,<br>128, 132, 136, 140  |  |  |  |  |
|         | <b>11AXA_AHE40 (Country Region: ETSI)</b><br>CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124,<br>128, 132, 136, 140  |  |  |  |  |
|         | <b>11AXA_AHE80 (Country Region: ETSI)</b><br>CH 36, 40, 44,48, 52, 56, 60, 64, 100,104,108, 112, 116, 120, 124,<br>128   |  |  |  |  |
|         | Shows the Channel on which the AP is currently broadcasting.<br>The range of available channels is determined by the mode of the<br>radio interface and the country code setting. If you select Auto for<br>the channel setting, the AP scans available channels and selects a<br>channel where no traffic is detected.                                  |  |  |  |  |
|         | The channel defines the portion of the radio spectrum the radio<br>uses for transmitting and receiving. Each mode offers a number of<br>channels, depending on how the spectrum is licensed by national<br>and transnational authorities such as the Federal Communications<br>Commission (FCC) or the International Telecommunication Union<br>(ITU-R). |  |  |  |  |
|         |  |  |  |  |  |
|         | NONE   |  |  |  |  |
| Encrypt | WPA2PSK-AES  |  |  |  |  |
|         | WPA/WPA2PSK-TKIPAES  |  |  |  |  |
|         | WPA2/WPA3PSK-TKIPAES   |  |  |  |  |
|         | WPA3PSK-TKIPAES  |  |  |  |  |
|         |  |  |  |  |  |

#### NONE (Open System)

An open wireless network is one where you have no password. None of your network traffic will be encrypted which means it's visible to anyone who wants to look.

#### WPA/WPA2-PSK (TKIP/AES)

This uses the modern WPA standard with older TKIP encryption. This option isn't very secure, and is only a good idea if you have older devices that can't connect to a WPA2-PSK (AES) network.

#### WPA2/WPA3-PSK (TKIP/AES)

This enables both WPA2 and WPA3 with both TKIP and AES. This provides maximum compatibility with any ancient devices you might have, but also ensures an attacker can breach your network by cracking the lowest-common-denominator encryption scheme. This TKIP+AES option may also be called WPA3-PSK "mixed" mode.

#### WPA3-PSK (TKIP/AES) (recommended)

It's the most secure of the bunch at the moment. It uses WPA3, the latest Wi-Fi encryption standard, and the latest AES encryption protocol. You should be using this option. but doesn't offer compatibility with any ancient devices you might have.

If you are sure to use WPA3-Personal Mode, please first check whether your terminal device also supports WPA3. If your device does not support it, your device cannot connect to the wireless network properly. Before you enable other authorization modes with special encryption, such as: NONE(Open System), WPA/WPA2PSK-TKIP/AES, WPA2PSK-AES, WPA2/WPA3-PSK (TKIP/AES), we recommend you to confirm the compatibility of the end device at the same time. If the terminal device cannot be connected after changing to the above mode, please change it to WPA2PSK-AES first to ensure connection.

[**Note**] Terminal devices include mobile phones, computers, lot devices...etc.

To confirm whether your device supports WPA3-personal authorization mode, please contact the original product manufacturer or check on the WiFi Alliance website:

|             | https://www.wi-fi.org/product-finder                                |  |  |  |
|-------------|---|--|--|--|
| Password    | The key can be a mix of alphanumeric and special characters, The    |  |  |  |
|             | key is case sensitive   |  |  |  |
| Max Station | Default 128, the maximum number of WiFi device connections          |  |  |  |
|             | Мах   |  |  |  |
|             | Efficient   |  |  |  |
| TX Power    | Enhanced  |  |  |  |
|             | Standard  |  |  |  |
|             | Min   |  |  |  |
| VLAN        | If your network uses VLANs, you might need to configure the         |  |  |  |
|             | management VLAN ID or untagged VLAN ID on the WAP-8131 in           |  |  |  |
|             | order for it to work with your network.                             |  |  |  |
|             | VLAN  |  |  |  |
|             | VLAN ID : 1~4094 (Set the management VLAN ID)                       |  |  |  |
|             | VLAN  |  |  |  |
|             | VLAN ID (1~4094)  |  |  |  |
| Enable VAP  | Enable VAP 🗹 VAP 1 🗹 VAP 2 🗹 VAP 3                                  |  |  |  |
|             | VAP 1 VAP 2 VAP 3   |  |  |  |
|             | SSID Wireless 5.8G Vap3_AC3EA5                                      |  |  |  |
|             | Hide WiFi SSID?   |  |  |  |
|             | Encrypt WPA2/WPA3PSK-TKIPAES ~                                      |  |  |  |
|             | Password 1gaz2wsx   |  |  |  |
|             | VLAN  |  |  |  |
|             | VLAN ID 5003 (1~4094)   |  |  |  |
|             | Not activated on the virtual access point by default, You configure |  |  |  |
|             | secure wireless client access by configuring security for each      |  |  |  |
|             | virtual access point (VAP) that you enable. configure up to 3 VAPs  |  |  |  |
|             | on 2.4GHz radio that simulate multiple APs in one physical access   |  |  |  |

| point.  |
|---|
| VAPs segment the wireless LAN into multiple broadcast domains     |
| that are the wireless equivalent of Ethernet VLANs. For each VAP, |
| you can customize the security mode to control wireless client    |
| access. Each VAP can also have a unique SSID. Multiple SSIDs      |
| make a single AP look like two or more APs to other systems on    |
| the network. By configuring VAPs, you can maintain better control |
| over broadcast and multicast traffic, which affects network       |
| performance.  |

## Advanced

Advanced related settings of WiFi function, which will be explained in detail below.

| lev      | elone       |           |                    |      |                   |  | 88 | ₽ |
|----------|-------------|-----------|--------------------|------|-------------------|--|----|---|
| -        |             |           |                    |      |                   |  |    |   |
| ඛ        | WiFi        | MAC ACL   |                    |      |                   |  |    |   |
| Home     | 2.4GHz WiFi | 5GHz WiFi | Advanced           |      |                   |  |    |   |
| e        |             |           | Country Region     | ETSI |                   |  |    |   |
| Wizard   |             |           | User Isolation     | On   |                   | 2G(1-13);5G(36-64),(100-128),(132-140) |    |   |
| G        |             |           | Short GI           | On   |                   |  |    |   |
| WIFI     |             |           | Coverage Threshold | -85  | (-95dBm ~ -65dBm) |  |    |   |
|          |             |           | Packet Threshold   | 2346 | (256~2346)        |  |    |   |
| <b>₩</b> |             |           | RTS Threshold      | 2347 | (50~2347)         |  |    |   |
| Network  |             |           | DFS                | On   |                   |  |    |   |
| <u>~</u> |             |           |                    |      |                   |  |    |   |
| Manage   |             |           |                    |      |                   |  |    |   |
|          |             |           |                    |      |                   |  |    |   |
|          |             |           |                    |      |                   |  |    |   |
|          |             |           |                    |      |                   |  |    |   |
|          |             |           |                    |      | -                 |  |    |   |
|          |             |           |                    |      | Apply             |  |    |   |

|                | Ashran and Catting a Dag aviation  |
|----------------|--|
|                | Advanced Setting Description   |
|                | China (Applicable to Singapore)<br>U.S.A<br>UAE<br>ETSI<br>India<br>Brazil   |
| Country Region | <ul> <li>Select the country in which the AP is operating</li> <li>Wireless regulations vary from country to country. Make sure you select the correct country code so that the AP complies with the regulations in your country. The country code selection affects the radio modes the AP can support as well as the list of channels and transmission power of the radio.</li> <li>Each range has different characteristics. The lower frequencies exhibit better range, but with limited bandwidth and thus lower data rates. The higher frequencies exhibit less range and are subject to greater attenuation from solid objects.</li> </ul> |
|                | licensing process, but when operating in these bands, the user is  |

|  | obligated to follow the government regulations for that region.        |  |  |  |  |
|--|--|--|--|--|--|
|  | This feature effectively segregates the wireless of your choice        |  |  |  |  |
|  | from the rest of the Network. With Ethernet-to-WLAN Access             |  |  |  |  |
| User Isolation   | disabled, information sent from the Ethernet side will not be          |  |  |  |  |
|  | passed to the Wireless Clients. However, wireless clients will still   |  |  |  |  |
|  | be able to transmit across Ethernet for browsing, etc.                 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Short GI (Short Guard Interval)  |  |  |  |  |
| Short GI   | Short Guard Interval shortens the waiting time to 400 ns,              |  |  |  |  |
|  | Guard Interval is intended to avoid signal loss from multipath effect. |  |  |  |  |
|  | Short GI On ~  |  |  |  |  |
|  | Perform a Network Planning and Deployment Analysis                     |  |  |  |  |
|  | Install your access points strategically to maximize network           |  |  |  |  |
|  | coverage It is recommended to perform a network performance            |  |  |  |  |
|  | diagnosis prior to the wireless network deployment                     |  |  |  |  |
|  | diagnosis prior to the wireless network deployment.                    |  |  |  |  |
|  | Network performance is usually reduced by a retry packet rate          |  |  |  |  |
| Coverage Threshold   | close to or over 10%. This deficiency could be caused by frequency     |  |  |  |  |
|  | interference or screened devices, if a first analysis does not meet    |  |  |  |  |
|  | the expected network quality standards, need to be improved and        |  |  |  |  |
|  | the access points that need to be repositioned or have their settings  |  |  |  |  |
|  | reconfigured to improve network coverage, signal quality and           |  |  |  |  |
|  | overall user experience.   |  |  |  |  |
|  | Coverage Threshold   |  |  |  |  |
|  | Coverage Threshold -85 (-95dBm ~ -65dBm)                               |  |  |  |  |
|  | This value should be left at the default value of 2346. If you are     |  |  |  |  |
| Packet Threshold   | experiencing high packet error rate, slightly increase your            |  |  |  |  |
|  | fragmentation threshold within the value range of 256-2346.            |  |  |  |  |
|  | Setting the fragmentation threshold too low may result in poor         |  |  |  |  |
|  |  |  |  |  |  |
|  | performance.   |  |  |  |  |
|  | Packet Threshold (256~2346)  |  |  |  |  |
|  | This value should be left at the default value of 2347. If you         |  |  |  |  |
| <b>RTS Threshold</b> encounter inconsistent data flow, only minor modifications to |  |  |  |  |  |
| value range between 50-2347 are recommended.                                       |  |  |  |  |  |

|     | RTS Threshold 2347 (50~2347)                                      |
|-----|---|
|     | DFS(Dynamic Frequency Selection)                                  |
| DFS | Enable wireless products to actively detect the frequency used by |
|     | the military and actively choose another frequency to avoid the   |
|     | military frequency. which allows WLANs to avoid interference with |
|     | incumbent radar users in instances where they are collocated.     |
|     | NOTE: For EU Wireless Regulations, Please turn on the DFS         |
|     | DFS On ^  |
|     | Off   |
|     | On  |

## MAC ACL (MAC Filter Configuration)

The MAC filter configuration rule has the following 2 options:

- 1. Disable
- 2. Prohibited rules within the device through

| lev           | relone          |                              |         |        | 88 [→     |
|---------------|-----------------|------------------------------|---------|--------|-----------|
| â             | WiFi            | MAC ACL WiFi Timer           |         |        |           |
| Home          | SN SN           | MAC                          | Mark    | Status | Operation |
| ැදී<br>Wizard |                 |                              | No Data |        |           |
| WIFI          |                 |                              |         |        |           |
| Network       |                 |                              |         |        |           |
| Manage        |                 |                              |         |        |           |
|               |                 |                              |         |        |           |
|               | Disable         |                              |         |        |           |
|               | Prohibited rule | es within the device through |         |        |           |
|               | Disable         |                              | Add     |        |           |
|               | Disable         |                              | Delete  |        |           |

**Prohibited rules within the device through** - When this is selected, only devices with a MAC address in the list are not granted access.



| le   | velone                      |                                      | 88 €→     |
|--|-----------------------------|--------------------------------------|-----------|
| â  | WIFI MAC ACL                | MC ACL X                             |           |
| Home<br>Witzard<br>Wiff<br>Wiff<br>Network<br>Manage | BN                          | Status MAC CAdd a maxmum of 32) Save | Operation |
|  | Prohibited rules within the | Add Delete                           |           |

MAC Address - Add MAC addresses to the MAC Address Control List.

Prohibited rules within the device through - When this is selected, only devices with a MAC address in the list are not granted access.

| lev                    | velone         |                          |            |        | 88       | Ŀ  |
|------------------------|----------------|--------------------------|------------|--------|----------|----|
|                        | WiFi           | MAC ACL WiFi Timer       |            |        |          |    |
| Home                   | SN             | MAC                      | Маńк       | Status | Operatio | on |
| <b>୍ଟ୍ରି</b><br>Wizard | 1              | A4: Contraction Contract | iPhone     | 0      | ۰        |    |
| WIFI                   |                |                          |            |        |          |    |
| Network                |                |                          |            |        |          |    |
| Manage                 |                |                          |            |        |          |    |
|                        |                |                          |            |        |          |    |
|                        | Total 1        |                          |            |        | < 1      | >  |
|                        | Prohibited rul | les within the $$        | Add Delete |        |          |    |

## **WiFi Timer**

You can customize the AP device reboot time range

| lev       | elone | • |            |                              | 88 | Ŀ |
|-----------|-------|---|------------|------------------------------|----|---|
|           | _     |   |            |                              |    |   |
| ل<br>م    | Wi    |   | WiFi Timer |                              |    |   |
| Home      |       |   |            | WiFi Timer                   |    | _ |
| ్రా       |       |   |            | Time Range 💿 03:00 – 💿 03:30 |    |   |
| Wizard    |       |   |            |                              |    |   |
|           |       |   |            |                              |    |   |
| WIFI      |       |   |            |                              |    |   |
|           |       |   |            |                              |    |   |
|           |       |   |            |                              |    |   |
| Network   |       |   |            |                              |    |   |
| <b>\$</b> |       |   |            |                              |    |   |
| Manage    |       |   |            |                              |    |   |
|           |       |   |            |                              |    |   |
|           |       |   |            |                              |    |   |
|           |       |   |            |                              |    | _ |
|           |       |   |            | _                            |    |   |
|           |       |   | <br>       | Apply                        |    |   |

## Section IV Network (For AP/Repeater Mode)

#### LAN

Can choose 2 kinds of usage modes (Static IP/ Get IP From Gateway)

which can be selected according to the current network architecture environment.

| 1. Stat | ic IP         |                 |   |   |
|---------|---------------|-----------------|---|---|
| lev     | velone        |                 | 8 | Ð |
| â       | LAN           |                 |   |   |
| Home    | Connection    | Static IP v     |   |   |
| දුම     | IP Address    | 192.168.188.253 |   |   |
| Wizard  | Subnet        | 255.255.255.0   |   |   |
| G       | Gateway       | 192.168.188.253 |   |   |
| WiFi    | Primary DNS   | 8.8.8.8         |   |   |
|         | Secondary DNS | 8.8.6.6         |   |   |
| Network |               |                 |   |   |
| Manage  |               |                 |   |   |
|         |               |                 |   |   |
|         |               |                 |   |   |
|         |               | Appiy           |   |   |

#### 2. Get IP From Gateway

| lev       | relone                           | 88 | ₽ |
|-----------|----------------------------------|----|---|
| â         | LAN                              |    |   |
| Home      | Connection Get IP From Gateway ~ |    | _ |
| Wizard    |                                  |    |   |
| WIFI      |                                  |    |   |
| Network   |                                  |    |   |
| <b>\$</b> |                                  |    |   |
| Manage    |                                  |    |   |
|           |                                  |    |   |
|           | Apply                            |    |   |

## Section V Manage (For AP/Repeater Mode)

### Configure

#### 1. Restore

Drag the file here, or Click on the upload, upload the configuration file to overwrite the current configuration.

| lev                                      | elone   | 88 | ⊳ |
|--|---|----|---|
|  |   |    |   |
| බ  | Configure Timed Reboot Upgrade Time Manager Log |    |   |
| Home                                     | Restore Backup Reset Default                    |    |   |
| e la | Restore   |    |   |
| Wizard                                   |   |    |   |
| G.                                       |   |    |   |
| WiFi                                     | Drag the file here, or Click on the upload      |    |   |
| <b>S</b>                                 |   |    |   |
| Network                                  |   |    |   |
| \$                                       |   |    |   |
| Manage                                   |   |    |   |
|  |   |    |   |
|  |   |    |   |
|  |   |    |   |
|  | Restore   |    |   |

#### 2. Backup

Backup configured to your computer

| lev          | elone   | 88 | ₽ |
|--------------|---|----|---|
|              |   |    |   |
| <del>ش</del> | Configure Timed Reboot Upgrade Time Manager Log |    |   |
| Home         | Restore Backup Reset Default                    |    |   |
| ి            |   |    |   |
| Wizard       |   |    |   |
| Ca.          |   |    |   |
| WiFi         |   |    |   |
| 8            | Backup is configured to your computer           |    |   |
| Network      |   |    |   |
| <u>~</u>     |   |    |   |
| Manage       |   |    |   |
|              |   |    |   |
|              |   |    |   |
|              |   |    |   |
|              | Васкир  |    |   |

#### 3. Reset Default

Restore the factory default settings, please press this Reset button

| lev     | relone   | 88 | Ŀ |
|---------|--|----|---|
| ি       | Configure Timed Reboot Upgrade Time Manager Log    |    |   |
| Home    | Restore Backup Reset Default                       |    |   |
| Wizard  |  |    |   |
| WiFi    | ≊ <br>•  |    |   |
| Network | Hestore factory Settings, please operate carefully |    |   |
| Manage  |  |    |   |
| manage  |  |    |   |
|         |  |    |   |
|         | Reset Default                                      |    |   |

## **Timed Reboot**

Set the scheduling time for rebooting the device yourself.

| lev      | velone  | 器 | ⊡ |
|----------|---|---|---|
|          |   |   |   |
| කි       | Configure Timed Reboot Upgrade Time Manager Log |   |   |
| Home     | Timed Reboot                                    |   |   |
| ి        | ◯ Reboot Time Everyday ∨ 0:00 ∨                 |   |   |
| Wizard   | Restart Interval     5Day                       |   |   |
| ſa.      | 1Day  |   |   |
| WiFi     | 2Day  |   |   |
|          | 3Day  |   |   |
| Network  | 4Day  |   |   |
| _        | 5Day  |   |   |
| <b>↔</b> | 6Day  |   |   |
| Manage   | 7Day  |   |   |
|          | 8Day  |   |   |
|          |   |   |   |
|          |   |   |   |
|          | Antly   |   |   |
|          | хриу  |   |   |

### Upgrade

Click on the upload. The Firmware Upgrade window will appear. Insert the Firmware Path (or you can Browse for one) that you are going to use and click Upgrade. Please wait for the Upgrade Successful message to appear to complete the firmware upgrade.

**Note:** Please use to local computer is connected to the AP Lan port through an RJ45 cable to update the firmware first. After completing the update, empty the browser cache, otherwise the user interface may not be displayed correctly.

| lev      | relone  | 88 | ₽ |
|----------|---|----|---|
|          |   |    | _ |
| â        | Configure Timed Reboot Upgrade Time Manager Log             |    |   |
| Home     | Version WAP-8131-AP-V1.0-6220416                            |    |   |
| c        | Reset Default (Whether to resume the factory configuration) |    |   |
| Wizard   | Upgrade file  |    |   |
| (a       |   |    |   |
| WiFi     | Drag the file here, or Click on the upload                  |    |   |
| 8        |   |    |   |
| Network  |   |    |   |
| <b>◆</b> |   |    |   |
| Manage   |   |    |   |
|          |   |    |   |
|          |   |    |   |
|          |   |    |   |
|          | Upgrade   |    |   |

### **Time Manager**

Before sync with host, please select your Time zone. Get time from NTP server can only be available under Gateway Mode.

| lev     | relone  | 88 | Ŀ |
|---------|---|----|---|
| â       | Configure Timed Reboot Upgrade Time Manager Log                       |    |   |
| Home    | System Time 2022-09-06 17:26:02                                       |    |   |
| ి       | NTP Enable  |    |   |
| Wizard  | Time Zone Select (GMT+08:00)Beijing, Chongqing, Hong Kong, U $ \lor $ |    |   |
| Ca.     | Manual IP   |    |   |
| WiFi    | NTP Server time.windows.com   |    |   |
|         | time.windows.com  |    |   |
| Network | 210.98.16.100 - Time.kriss.re.kr                                      |    |   |
| -       | 211.115.194.21 - Ntp1.epidc.co.kr                                     |    |   |
| Manage  | 64.250.177.145 - Time.nist.gov  |    |   |
| manago  | 192.5.41.209 - North America  |    |   |
|         | 208.184.49.9 - North America  |    |   |
|         | 131.188.3.220 - Europe  |    |   |
|         |   |    |   |
|         | Apply   |    |   |

## Log

Can use Log to find errors to check the cause of the problem.

| lev       | relone 📟 🗗  |
|-----------|---|
|           |   |
| කි        | Configure Timed Reboot Upgrade Time Manager Log   |
| Home      | 2022/09/06 16:57:24 WAP-8131 syslog.info syslogd started: BusyBox v1.28.3<br>2022/09/06 16:57:24 WAP-8131 kern.notice kernel: [ 0.000000] 0xfffffbdc0040000 - 0xfffffbdc0800000 ( 7 MB actual)  |
| ్టి       | 2022/09/06 16:57:24 MAP-8131 kern.notice kernel: [ 0.000000] fixed : 0xfffffbffafd0000 - 0xfffffbffac00000 ( 4108 KB)<br>2022/09/06 16:57:24 MAP-8131 kern.notice kernel: [ 0.000000] PCI I/O : 0xffffffbffafd00000 - 0xffffffbfbe00000 ( 16 MB)<br>2022/09/06 16:57:24 MAP-8131 kern.notice kernel: [ 0.000000] modules : 0xffffffbffafd000000 ( 64 MB)  |
| Wizard    | 2022/09/06 16:57:24 WAP-8131 kern.notice kernel: [ 0.000000] .init: 0xfffffc00082f000 - 0xfffffc00086a000 ( 236 KB)<br>2022/09/06 16:57:24 WAP-8131 kern.notice kernel: [ 0.000000] .text: 0xfffffc000808000 - 0xfffffc00082f000 ( 7866 KB)<br>2022/09/06 16:57:24 WAP-8131 kern.notice kernel: [ 0.000000] .data: 0xffffffc00085b000 - 0xfffffc00091c000 ( 644   |
| ſa.       | 2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.000000] SLUB: HWalign=64, Order=0-3, MinObjects=0, CPUs=4, Nodes=1<br>2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.000000] Premeptible hierarchical RCU implementation.<br>2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.000000] Build-time adjustment of leaf fanout to 64.  |
| WiFi      | 2022/09/06 16:57:4/ WAP-8131 kern.info kernel: [ 0.000000] NR_IRQS:64 nr_ings:64 0<br>2022/09/06 16:57:4/ WAP-8131 kern.info kernel: [ 0.000000] Architected cp15 timer(s) running at 24.00MHz (virt).<br>2022/09/06 16:57:4/ WAP-8131 kern.info kernel: [ 0.000000] clocksource: arch_sys_counter: mask: 0xffffffffffffffffffffffffffffffffffff  |
| $\otimes$ | 2022/09/06 16:57:24 WAP-811 Kern.info Kernet: [ 0.000005] Sched_clock: 50 Dis at 24WHZ, resolution 4ins, Wraps every 439804051109/ns<br>2022/09/06 16:57:24 WAP-8131 Kern.info Kernet: [ 0.000499] Calibrating delay loop (skipped), value calculated using time frequency. 48.00 Bogo?<br>2022/09/06 16:57:24 WAP-8131 Kern.info Kernet: [ 0.000421] pid_max: default: 32768 minimum: 301<br>2022/09/06 16:57:24 WAP 8131 Kern.info Kernet: [ 0.000421] pid_max: default: 32768 minimum: 301 |
| Network   | 2022/09/00 10:37:24 MAR-0313 Kern.info Kernet ( 0.000317) Provint-cache hash table entries: 1024 (010er: 1, 0192 09/05)<br>2022/09/06 16:57:24 MAR-0313 Kern.info Kernet ( 0.000527) Mountpoint-cache hash table entries: 1024 (010er: 1, 8192 bytes)<br>2022/09/06 16:57:24 MAR-0313 Kern.info Kernet ( 0.001066) Initializing group subsys io<br>2023/09/06 16:57:24 MAR-0313 Kern.info Kernet ( 0.001066) Initializing group subsys io   |
| ÷         | 2022/09/00 16:57:24 WAP-8131 kern.info kernel: [ 0.001002] initializing cyroup subsys devices<br>2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.001123] Initializing cyroup subsys ferezer<br>2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.001123] Initializing cyroup subsys ferezer   |
| Manage    | 2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.001145] Initializing cgroup subsys pids<br>2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.001391] EFI services will not be available.<br>2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.001412] ASID allocator initialised with 65536 entries  |
|           | 2022/09/06 16:57:44 MAP-8131 kern.info kernel: [ 0.051842] MSM Memory Dump base table set up<br>2022/09/06 16:57:24 MAP-8131 kern.info kernel: [ 0.091866] MSM Memory Dump apps data table set up<br>2022/09/06 16:57:24 MAP-8131 kern.info kernel: [ 0.090153] Detected VIPT I-cache on CPU1   |
|           | 2022/09/00 10:57:24 WAF-811 Kern.info Kernel: [ 0.990194] (+U1: booted secondary processor [51af8014]<br>2022/09/06 16:57:24 WAF-811 Kern.info Kernel: [ 0.120170] CPU2: Booted secondary processor [51af8014]<br>2022/09/06 16:57:24 WAF-8131 Kern.info Kernel: [ 0.120170] CPU2: Booted secondary processor [51af8014]<br>2022/09/06 16:57:24 WAF-8131 Kern.info Kernel: [ 0.120172] Detected VIPT 1-cache on CPU2  |
|           | 2022/09/06 16:57:24 WAP-8131 kern.info kernel: [ 0.150198] CPU3: Booted secondary processor [51af8014]  |
|           | Log Remote Log Service 0.0.0.0 Apply Export Delete Retresh  |

## Section VI Network (For Gateway Mode)

## **LAN Settings**

You can set to change Lan IP address and Subnet and choose whether to turn off the STP function (Spanning Tree Protocol), the default is enabled. also set up basic functions in the DHCP Server

| lev                   | elor | he  |             |               |                 |           |
|-----------------------|------|-----|-------------|---------------|-----------------|-----------|
| _                     | _    |     |             |               |                 |           |
| ඛ                     |      | LAN | Static DHCP | WAN           |                 |           |
| Home                  |      |     |             | IP Address    | 192.168.188.253 | ۰         |
| ්                     |      |     |             | Subnet        | 255.255.255.0   |           |
| Wizard                |      |     |             | STP           |                 |           |
| (a                    |      |     |             | DHCP Server   |                 |           |
| WiFi                  |      |     |             | Start Address | 2               |           |
| 8                     |      |     |             | Max Number    | 235             |           |
| Network               |      |     |             | Primary DNS   | 168.95.1.1      |           |
|                       |      |     |             | Secondary DNS | 8.8.8.8         |           |
| $\overline{\bigcirc}$ |      |     |             | Rental period | 24(Hour)        | ~         |
| Firewall              |      |     |             | DHCP number   | )               | DHCP List |
| <b>*</b>              |      |     |             |               |                 |           |
| Manage                |      |     |             |               |                 |           |
|                       |      |     |             |               |                 |           |
|                       |      |     |             |               |                 | Apply     |

#### **Static DHCP**

Click the Add option, through the Static DHCP function, you can manage the specified distribution IP address and edit device name.

| <b>n</b> lev   | velone                           |                                      | ⊞ <b>[</b> →  |
|----------------|----------------------------------|--------------------------------------|---|
| â              | LAN Static DHCP WAN              |                                      |   |
| Home           | SN IP Address                    | MAC                                  | Mark Operation  |
| ्डि?<br>Wizard | 1 192.168.188.222                | 00:1.0000000000                      | MacBook Pro 🔅   |
| <b>ME</b>      | Static DHCP                      | Station List SN IP Address           | MAC Name  |
| Network        | MAC 00Lubro and a maximum of 32) | 1 192.168.188.222<br>2 192.168.188.2 | oonalaaniineenaa<br>A4: <b>Salaaniineen</b> Mimika-Mimika |
| Firewall       | Save                             |                                      |   |
| Manage         |                                  | Total 2                              | < 1 >   |
|                | Total 1                          |                                      | < 1 >   |
|                |                                  | dd Delete                            |   |

## WAN

Connect Internet Method can be set, there are 3 modes of Static IP / PPPoE / DHCP to choose Internet Mode: Static IP

| 3    |                 | WAN           |      |   |  |
|------|-----------------|---------------|------|---|--|
| me   | Internet Mode   | Static IP     | ~    | Enable web server access on WAN port 8080 (1-65535) |  |
| P    | IP Address      | 192.168.1.230 |      | MAC Clone Scan                                      |  |
| ard  | Subnet          | 255.255.255.0 |      | Enable Ping Access on WAN                           |  |
|      | Default Gateway | 192.168.1.254 |      | Enable IPsec pass through on VPN connection         |  |
| Fi   | MTU             | 1500          |      | Enable PPTP pass through on VPN connection          |  |
|      | Primary DNS     | 168.95.1.1    |      | Enable L2TP pass through on VPN connection          |  |
| €    | Secondary DNS   | 1.1.1.1       |      | Line Detection                                      |  |
| vork | Band Type       | 1000M Fiber   |      |   |  |
| 0    | Up              |               | Kbps |   |  |
| wall | Down            |               | Kbps |   |  |
|      |                 |               |      |   |  |
| •    |                 |               |      |   |  |

#### Internet Mode: DHCP

| levelo                | one              |             |      |   | 88 | ₽ |
|-----------------------|------------------|-------------|------|---|----|---|
|                       |                  |             |      |   |    |   |
| ស                     | LAN Static DHCP  | WAN         |      |   |    |   |
| Home                  | Internet Mode    | DHCP        |      | Enable web server access on WAN port 8080 (1-65535) |    |   |
| ి                     | MTU              | 1500        |      | MAC Clone Scan                                      |    |   |
| Wizard                | Set DNS Manually |             |      | Enable Ping Access on WAN                           |    |   |
| G                     | Primary DNS      | 168.95.1.1  |      | Enable IPsec pass through on VPN connection         |    |   |
| WiFi                  | Secondary DNS    | 1.1.1.1     |      | Enable PPTP pass through on VPN connection          |    |   |
|                       | Band Type        | 1000M Fiber |      | Enable L2TP pass through on VPN connection          |    |   |
| 8                     | Up               |             | Kbps | Line Detection                                      |    |   |
| Network               | Down             |             | Kbps |   |    |   |
| $\overline{\bigcirc}$ |                  |             |      |   |    |   |
| Firewall              |                  |             |      |   |    |   |
| 2                     |                  |             |      |   |    |   |
| Manage                |                  |             |      |   |    |   |
|                       |                  |             |      |   |    |   |
|                       |                  |             |      | Apply   |    |   |

#### Internet Mode: PPPoE

| <u>ش</u> |                  | WAN                 |      |   |     |  |
|----------|------------------|---------------------|------|---|-----|--|
| ome      | Internet Mode    | PPPoE               | ~ ]  | Enable web server access on WAN port 8080 (1-65535) |     |  |
| 2 C      | Username         |                     |      | MAC Clone Scar                                      | n - |  |
| izard    | Password         |                     |      | Enable Ping Access on WAN                           |     |  |
| e l      | Server Name      | No Need, Don't fill |      | Enable IPsec pass through on VPN connection         |     |  |
| ViFi     | Service Name     | No Need, Don't fill |      | Enable PPTP pass through on VPN connection          |     |  |
|          | МТО              | 1492                |      | Enable L2TP pass through on VPN connection          |     |  |
| <b>9</b> | Set DNS Manually |                     |      | Line Detection                                      |     |  |
| LWORK    | Primary DNS      | 168.95.1.1          |      |   |     |  |
| 3        | Secondary DNS    | 1.1.1.1             |      |   |     |  |
| ewall    | Band Type        | 1000M Fiber         |      |   |     |  |
| -        | Up               |                     | Kbps |   |     |  |
|          | Down             |                     |      |   |     |  |

## Section VII Firewall (For Gateway Mode)

### **URL Filtering**

Set URL Filter list, Manage which websites cannot be accessed within a specified time.

| <b>i</b> lev | /elone      |   |           |
|--------------|-------------|---|-----------|
|              |             |   |           |
| කි           | URL Filteri | ing IP Filter MAC Filter Port Mapping DMZ |           |
| Home         | SN          | Rule Name Time Group URL Status Mark      | Operation |
| ్లి          | □ 1         | URL Filtering × Stacebook                 | •         |
| Wizard       |             | Status 💽                                  |           |
|              |             | Rule Name blacklist                       |           |
| (6.          |             | Time Group Custom V Add                   |           |
|              |             | Time Range ③ 08:00 - ③ 18:00              |           |
|              |             | Work Date Working Day ~                   |           |
| Network      |             | 🜌 Mon. 🜌 Tue. 🜌 Wed.                      |           |
|              |             | 🗹 Thu. 🗹 Fri. 🗌 Sat. 🗌 Sun.               |           |
| Firewall     |             | URL https://www.facebook.com              |           |
|              |             | Mark facebook                             |           |
| <b>↓</b>     |             |   |           |
| Manage       | Total 1     | Save                                      |           |
|              | iota i      |   |           |
|              | Enable Url  | filter function v                         |           |

Choose according to the current use needs. After selecting, please click OK.

1. Disable



| $\overline{\bigcirc}$ |         |                            | Prom | pt Information                       |        | ×  |
|-----------------------|---------|----------------------------|------|--------------------------------------|--------|----|
| Firewall              |         |                            |      |                                      |        |    |
| Manage                |         | Disable                    | 0    | Are you sure to turn off URI filter? |        |    |
|                       | Total ' | Enable Url filter function |      |                                      |        |    |
|                       |         | Disable ^                  |      |                                      | Cancel | ок |

- 2. Enable URL Filter function
- These sites will not be accessible once the rules are in effect !

|                    |   | Prompt Information  | × |
|--------------------|---|---|---|
| Firewall<br>Manage | Disable Inable Url filter function Enable Url filter function | Are you sure want to enable web filter?These sites will not be accessible once the rules are in effect! |   |



| lev         | elc     | ne               |                   |            |              |     |                          |        |          | 88    | Ŀ     |
|-------------|---------|------------------|-------------------|------------|--------------|-----|--------------------------|--------|----------|-------|-------|
|             |         |                  |                   |            |              |     |                          |        |          |       |       |
| ណ៍          |         | URL Filtering    | IP Filter         | MAC Filter | Port Mapping | DMZ |                          |        |          |       |       |
| Home        |         | SN               | Rule Name         |            | Time Group   |     | URL                      | Status | Mark     | Opera | ition |
| C<br>Wizard |         | 1                | blacklist         |            | Custom       |     | https://www.facebook.com | •      | facebook | ٥     | •     |
| WiFi        |         |                  |                   |            |              |     |                          |        |          |       |       |
| Network     |         |                  |                   |            |              |     |                          |        |          |       |       |
| Firewall    |         |                  |                   |            |              |     |                          |        |          |       |       |
| Manage      |         |                  |                   |            |              |     |                          |        |          |       |       |
|             | Total 1 | Enable Url filte | r function $\sim$ |            |              |     | Add Delete               |        |          | <     | 1 >   |

## **IP Filter**

Set the IP Filter list to manage the inability to access the specified service transport protocol port number range(1-65535) within a specified time, need to cooperate with the IP Group function.

| lev      | elone         |   | 88 [→     |
|----------|---------------|---|-----------|
|          |               |   |           |
| â        | URL Filtering | IP Fiter MAC Filter Port Mapping DMZ                            |           |
| Home     | SN F          | Rule Name Time Group IP Address Port Range Protocol Status Mark | Operation |
| ్టి      |               |   |           |
| Wizard   | Status        |   |           |
| G        | Rule Name     | ftp-data  |           |
| WiFi     | Time Group    | Any V Add   |           |
|          | IP Group      | Custom V Add  |           |
| Network  | IP Address    | 192.168.188.222 - 192.168.188.222 Scan                          |           |
| INELWORK | Port Range    | 20 - 21 No empty,range:1-65535                                  |           |
|          | Protocol      | TCP+UDP   |           |
| Firewall | Mark          | File Transfer   |           |
| <u></u>  |               | Add a maximum of 32   |           |
| Manage   |               | Save  |           |
|          |               |   |           |
|          | Disable       | Add Delete  |           |

Choose according to the current use needs.After selecting, please click Apply.

#### 1. Disable

Factory default is disable

| Firewall |  | Prompt Information                             | ×  |
|----------|--|--|----|
| Manage   | Disable Allows the device to pass in the rule Prohibited rules within the device through Disable | Are you sure to turn off IP filter?     Cancel | ок |

- 2. Allows the device to pass in the rule (IP filter whitelist mode)
- When the rules take effect, only devices within the rules will be allowed to surf the Internet



• When the rules take effect, only devices within the rules will be allowed to FTP service.

| lev      | elc     | ne             |  |            |            |            |          |        |               | 88    | Ŀ    |
|----------|---------|----------------|--|------------|------------|------------|----------|--------|---------------|-------|------|
|          | _       |                |  |            |            |            |          |        |               |       |      |
| කි       |         |                | IP Filter  |            |            |            |          |        |               |       |      |
| Home     |         | SN             | Rule Name  | Time Group | IP Address | Port Range | Protocol | Status | Mark          | Opera | tion |
| ి        |         | 1              | ftp-data   | Any        | Custom     | 20 - 21    | TCP+UDP  | •      | File Transfer | •     |      |
| Wizard   |         |                |  |            |            |            |          |        |               |       |      |
| Ca.      |         |                |  |            |            |            |          |        |               |       |      |
| WiFi     |         |                |  |            |            |            |          |        |               |       |      |
| <b>S</b> |         |                |  |            |            |            |          |        |               |       |      |
| Network  |         |                |  |            |            |            |          |        |               |       |      |
|          |         |                |  |            |            |            |          |        |               |       |      |
| Firewall |         |                |  |            |            |            |          |        |               |       |      |
| <u></u>  |         |                |  |            |            |            |          |        |               |       |      |
| Manage   |         |                |  |            |            |            |          |        |               |       |      |
|          | Total 1 |                |  |            |            |            |          |        |               | < 1   | >    |
|          |         | Allows the dev | vice to pass ir $\!$ |            |            | Add Dele   | te       |        |               |       |      |

- 3. Prohibited rules within the device through (IP filter blacklist mode)
- After the rules come into effect, devices within the rules will be banned from accessing the Internet!

|          |  | Prompt Information ×  |
|----------|--|---|
| Firewall |  |   |
| Manage   | Disable<br>Allows the device to pass in the rule | Are you sure want to use the IP filter blacklist mode? After the<br>rules come into effect, devices within the rules will be banned<br>from accessing the Internet! |
|          | Prohibited rules within the device through       |   |
|          | Prohibited rules within the                      | Cancel OK   |

• The FTP service and service transport protocol port number range(20-21) will not be accessible once the rules are in effect.

| <b>i</b> lev   | /elc    | one             |                                 |                   |             |            |          |        |               | 88 [→     |
|----------------|---------|-----------------|---------------------------------|-------------------|-------------|------------|----------|--------|---------------|-----------|
| â              |         | URL Filtering   | IP Filter                       | MAC Filter Port I | Mapping DMZ |            |          |        |               |           |
| Home           |         | SN              | Rule Name                       | Time Group        | IP Address  | Port Range | Protocol | Status | Mark          | Operation |
| Carolina State |         | 1               | ftp-data                        | Any               | Custom      | 20 - 21    | TCP+UDP  | 0      | File Transfer | ٥         |
| WiFi           |         |                 |                                 |                   |             |            |          |        |               |           |
| Network        |         |                 |                                 |                   |             |            |          |        |               |           |
| Firewall       |         |                 |                                 |                   |             |            |          |        |               |           |
| Manage         |         |                 |                                 |                   |             |            |          |        |               |           |
|                | Total 1 | Prohibited rule | es within the $ \smallsetminus$ |                   |             | Add Del    | ete      |        |               | < 1 >     |

## **MAC Filter**

Establish MAC filtering to manage device online behavior.

| lev                   | elone                   |                             |                     |        |      | 88 €→     |
|-----------------------|-------------------------|-----------------------------|---------------------|--------|------|-----------|
| â                     | URL Filtering IP Filter | MAC Filter Port Mapping DMZ |                     |        |      |           |
| Home                  | SN Rule Name            | Time Group                  | MAC                 | Status | Mark | Operation |
| ి                     |                         |                             | × <sup>o Data</sup> |        |      |           |
| Wizard                | Status                  |                             |                     |        |      |           |
| (G.                   | Rule Name Customer Se   | ervice Department Unit      |                     |        |      |           |
| WiFi                  | Time Group Any          | ~ Add                       |                     |        |      |           |
|                       | MAC 00:                 |                             |                     |        |      |           |
| Network               | Mark Computer           | Scan                        |                     |        |      |           |
| $\overline{\bigcirc}$ | Add a maximum           | n of 32                     |                     |        |      |           |
| Firewall              |                         | Save                        |                     |        |      |           |
| <u>∽</u>              |                         |                             |                     |        |      |           |
| Manage                |                         |                             |                     |        |      |           |
|                       |                         |                             |                     |        |      |           |
|                       | Disable                 |                             | Add Delete          |        |      |           |

Choose according to the current use needs.After selecting, please click Apply.

#### 1. Disable

r

Factory default is disable

| Firewall |   | Prompt Information                   | ×      |
|----------|---|--------------------------------------|--------|
| Manage   | Disable<br>Allows the device to pass in the rule<br>Prohibited rules within the device through<br>Disable | Are you sure to turn off MAC filter? | Cancel |

#### 2. Allows the device to pass in the rule (IP filter whitelist mode)

|          |  | Prompt Information   | × |
|----------|--|--|---|
| Firewall |  | Are you sure want to use MAC filter whitelist mode? When the     |   |
| <u>~</u> | Disable                                    | rules take effect, only devices within the rules will be allowed |   |
| Manage   | Allows the device to pass in the rule      | to surf the Internet!  |   |
|          | Prohibited rules within the device through |  |   |
|          | Allows the device to pass ir $\land$       | Cancel OK  |   |

• When the rules take effect, only devices within the rules will be allowed to surf the Internet

| lev            | elc     | ne             |                          |            |              |     |        |        |          | 88      | E→  |
|----------------|---------|----------------|--------------------------|------------|--------------|-----|--------|--------|----------|---------|-----|
| ඛ              |         | URL Filtering  | IP Filter                | MAC Filter | Port Mapping | DMZ |        |        |          |         |     |
| Home           |         | SN             | Rule Name                |            | Time Group   |     | MAC    | Status | Mark     | Operati | ion |
| ୍ଟ୍ର<br>Wizard |         | 1 Custo        | omer Service Dep         | partment   | Any          |     | A4:    | 0      | Computer | •       |     |
| WiFi           |         |                |                          |            |              |     |        |        |          |         |     |
| Network        |         |                |                          |            |              |     |        |        |          |         |     |
| Firewall       |         |                |                          |            |              |     |        |        |          |         |     |
| Manage         | Total 1 |                |                          |            |              |     |        |        |          | 7       |     |
|                |         | Allows the dev | ice to pass ir $ 	imes $ |            |              | Add | Delete |        |          |         |     |

3. Prohibited rules within the device through (IP filter blacklist mode)



• After the rules come into effect, devices within the rules will be banned from accessing the Internet.

| lev            | elc     | ne              |                  |            |              |     |        |        |          | 88      | Ŀ   |
|----------------|---------|-----------------|------------------|------------|--------------|-----|--------|--------|----------|---------|-----|
| _              |         |                 |                  |            |              |     |        |        |          |         | _   |
| â              |         |                 |                  | MAC Filter | Port Mapping |     |        |        |          |         |     |
| Home           |         | SN              | Rule Name        |            | Time Group   |     | MAC    | Status | Mark     | Operati | ion |
| <b>K</b> izard |         | 1 Custo         | omer Service Dep | partment   | Any          |     | A4:    | 0      | Computer | ٥       |     |
|                |         |                 |                  |            |              |     |        |        |          |         |     |
| WiFi           |         |                 |                  |            |              |     |        |        |          |         |     |
| Network        |         |                 |                  |            |              |     |        |        |          |         |     |
| Firewall       |         |                 |                  |            |              |     |        |        |          |         |     |
| Manage         |         |                 |                  |            |              |     |        |        |          |         |     |
|                | Total 1 |                 |                  |            |              |     |        |        |          | < 1     | >   |
|                |         | Prohibited rule | s within the $$  |            |              | Add | Delete |        |          |         |     |

## Port Mapping (Port Forwarding)

In computer networking, port forwarding or port mapping is an application of network address translation (NAT) that redirects a communication request from one address and port number combination to another while the packets are traversing a network gateway, such as a router or firewall. This technique is most commonly used to make services on a host residing on a protected or masqueraded (internal) network available to hosts on the opposite side of the gateway (external network), by remapping the destination IP address and port number of the communication to an internal host.



#### Network Architecture Diagram Example

#### 1. To configure Port Mapping for internal NAS1

 Through the Port Mapping function, service transport protocol port number 5001 to 8701, by remapping the destination IP address and port number of the communication to an internal NAS1 (192.168.188.235).

| ධ        |               |                     | Port Mapping   |          |               |               |        |      |          |
|----------|---------------|---------------------|----------------|----------|---------------|---------------|--------|------|----------|
| lome     | SN Rule       | Name                | IP Address     | Protocol | External Port | Internal Port | Status | Mark | Operatio |
|          |               |                     |                |          |               |               |        |      |          |
| /izard   | Status        |                     |                |          |               |               |        |      |          |
| (a.      | Rule Class    | User Defined        |                |          |               |               |        |      |          |
| WiFi     | Rule Name     | NAS WEB UI          |                |          |               |               |        |      |          |
|          | Protocol      | TCP+UDP             |                |          |               |               |        |      |          |
| etwork   | IP Address    | 192.168.188.235     |                | Scan     |               |               |        |      |          |
|          | External Port | 8701 - 8701         | No empty,range | :1-65535 |               |               |        |      |          |
| ${ \ }$  | Internal Port | 5001 - 5007         | No empty,range | :1-65535 |               |               |        |      |          |
| rewall   | Mark          | NAS 1               |                |          |               |               |        |      |          |
| <u> </u> |               | Add a maximum of 32 |                |          |               |               |        |      |          |
| -0-      |               | Cou                 |                |          |               |               |        |      |          |

## 2. To configure Port Mapping for internal NAS2

• Through the Port Mapping function, service transport protocol port number 5001 to 8702, by remapping the destination IP address and port number of the communication to an internal NAS2(192.168.188.236).

| ស      |    |               |                | Port Mapping   | DMZ                 |               |               |        |       |       |
|--------|----|---------------|----------------|----------------|---------------------|---------------|---------------|--------|-------|-------|
| ome    | SN | Rule Name     |                | IP Address     | Protocol            | External Port | Internal Port | Status | Mark  | Opera |
|        | 1  | NAS WEB UI    | 1              | 92.168.188.235 | TCP+UDP             | 8701          | 5001          | 0      | NAS 1 |       |
| ard    |    |               |                |                |                     |               | 5001          | 0      | NAS 2 | 4     |
|        |    | Status        |                |                |                     |               |               |        |       |       |
| с<br>П |    | Rule Class    | User Defined   |                |                     |               |               |        |       |       |
|        |    | Rule Name     | NAS WEB UI     |                |                     | i             |               |        |       |       |
|        |    | Protocol      | TCP+UDP        |                |                     |               |               |        |       |       |
| rork   |    | IP Address    | 192.168.188.23 | 36             | Scan                |               |               |        |       |       |
| 5      |    | External Port | 8702 -         | 8702 No        | empty,range:1-65535 | -             |               |        |       |       |
| vali   |    | Internal Port | 5001 -         | 5001 No        | empty,range:1-65535 |               |               |        |       |       |
|        |    | Mark          | NAS 2          |                |                     |               |               |        |       |       |
|        |    |               |                |                |                     | _             |               |        |       |       |

• Click below to Enable Port Mapping function

| $\overline{\heartsuit}$           |         |                                     |                  | F          | Prompt Inforn  | nation        |               |               |        | ×     |           |
|-----------------------------------|---------|-------------------------------------|------------------|------------|----------------|---------------|---------------|---------------|--------|-------|-----------|
| Firewall                          | Total   | Disable<br>Enable Port N<br>Disable | Mapping Function |            | e Are you!     | u sure want t | o enable po   | t mapping?    | Cancel | ок    |           |
| lev                               | elc     | one                                 |                  |            |                |               |               |               |        |       | 88 [→     |
|                                   |         | URL Filtering                       | IP Filter        | MAC Filter | Port Mapping   | DMZ           |               |               |        |       |           |
| Home                              |         | SN                                  | Rule Name        |            | IP Address     | Protocol      | External Port | Internal Port | Status | Mark  | Operation |
| æ                                 |         | 1                                   | NAS WEB UI       | 19         | 2.168.188.235  | TCP+UDP       | 8701          | 5001          | 0      | NAS 1 | ٥         |
| Wizard<br>WiFi<br>WiFi<br>Network |         | 2                                   | NAS WEB UI       | 19         | 12.168.188.236 | TCP+UDP       | 8702          | 5001          | ø      | NAS 2 | ٥         |
| Firewall                          |         |                                     |                  |            |                |               |               |               |        |       |           |
| Manage                            | Total 2 | Enable Port M                       | anning Funct 😔   |            |                | Add           | Delete        |               |        |       |           |

#### Verify confirmation

• Record the real IP address currently displayed in the WAN info.

**Note:** IP Address of 192.168.X.X / 172.X.X.X / 10.X.X.X are displayed, it means that there is still a router on the upper end that is allocating IP address by DHCP, please confirm with the telecom provider that provides the network

| lev           | relone                           |  |   |   |   |   | 88  | ₽  |
|---------------|----------------------------------|--|---|---|---|---|---|----|
| Home          | Mode Gateway Mode Online Us      | er O                                       | Flow 1b   |   | WA  | IN Down Stream -O-                          | WAN Up Stream -O-                               |    |
| <b>Vizard</b> | Hardware accelerate              |  | 0b  |   |   |   |   |    |
| WIFI          |                                  | ~  | 0b  |   |   |   |   |    |
| Network       |                                  |  | 0b  |   |   |   |   |    |
|               | Uptime 00:02:40                  | office_1                                   | 0<br>13:39:36   | 13:39:40  | 13:39:45  | 13:39:50                                    | 13:39:  | 55 |
| Firewall      | Device Info                      | 🗎 Lan                                      | Info  | 🗎 Wan Info  |   | 2.4GHz WiFi                                 | 5GHz WiFi                                       |    |
| Manage        | 3% 44%<br>CPU Memory             | IP Addre<br>Subnet<br>STP<br>MAC<br>DHCP S | ess 192.168.188.25<br>255.255.255.25<br>On<br>Server On | 3 Internet Mod<br>IP Address<br>Gateway<br>DNS<br>MAC Address | e PPPoE ♥<br>61.3.1.1.1.1.1.1.1<br>211.3.1.1.1.1.1.1.1.1<br>168.95.1.1 1.1.1.1.1<br>s | Status<br>SSID<br>Channel<br>Encrypt<br>MAC | On 0<br>Wireless 2.4G_AC3E/<br>6<br>WPA2PSK-AES | 15 |
|               | Version WAP-8131-AP-V1.0-6220416 |  |   | Participant.  |   |   |   |    |

• The Laptop of the external Internet can enter the real ip address and : 8701 Connect to the internal network NAS1 management page.



• The Laptop of the external Internet can enter the real ip address and : 8702 Connect to the internal network NAS2 management page.



## DMZ (Demilitarized Zone)

The specified intranet device all service transport protocol port enabled and can be accessed from the external network.

**Note:** Strictly speaking, this is not a real DMZ, because the host can still access the internal network, and it is not independent of the internal network.

| llev     | elone   |   |
|----------|---|---|
| â        | URL Filtering IP Filter MAC Filter Port Mapping DMZ | ٦ |
| Home     | Enable DMZ  |   |
| Wizard   | DMZ Host 192.168.188.2 Scan                         |   |
| (a.      | Station List ×                                      |   |
| WiFi     | 1 192.168.188.222 00.5 <b>2 101.00</b>              |   |
| Network  | 2 192-168.188.2 A4:5                                |   |
|          |   |   |
| Firewall |   |   |
| Manage   | Total 2   |   |
|          | Save  |   |

| lev                   | relone *  | 8 ( | ÷ |
|-----------------------|---|-----|---|
|                       |   |     |   |
| Homo                  | URL Filtering IP Filter MAC Filter Port Mapping DMZ |     |   |
| nome                  | Enable DMZ  |     |   |
| ¢ P                   | DMZ Host 192.168.188.2 Scan                         |     |   |
| Wizard                |   |     |   |
| (a.                   |   |     |   |
| WiFi                  |   |     |   |
| 8                     |   |     |   |
| Network               |   |     |   |
| $\overline{\bigcirc}$ |   |     |   |
| Firewall              |   |     |   |
| <b>↓</b>              |   |     |   |
| Manage                |   |     |   |
|                       | Save  |     |   |
|                       |   |     | _ |

## Section VIII Manage (For Gateway Mode)

## Configure

#### 1. Restore

Drag the file here, or Click on the upload, upload the configuration file to overwrite the current configuration.

| lev      | elone   | 88 | ₽ |
|----------|---|----|---|
|          | Continues Timed Rebort Litorards Time Massaer Lon DoS IP Group Time Group |    |   |
| Home     | Restore         Backup         Rest Default                               |    |   |
| چې       | Restore   |    |   |
| Wizard   |   |    |   |
| WiFi     | Drag the file here, or Cilck on the upload                                |    |   |
| 8        |   |    |   |
| Network  |   |    |   |
| Firewall |   |    |   |
| <b>♦</b> |   |    |   |
| Manage   |   |    |   |
|          |   |    |   |
|          | Restore   |    |   |

#### 2. Backup

Backup configured to your computer

| lev      | elone   | 器 | ₽ |
|----------|---|---|---|
|          |   |   |   |
| â        | Configure Timed Reboot Upgrade Time Manager Log QoS IP Group Time Group |   |   |
| Home     | Restore Backup Reset Default  |   |   |
| ి        |   |   |   |
| Wizard   |   |   |   |
| G        | لها   |   |   |
| WiFi     |   |   |   |
|          | Backup is configured to your computer                                   |   |   |
| Network  |   |   |   |
|          |   |   |   |
| Firewall |   |   |   |
|          |   |   |   |
| Managa   |   |   |   |
| waraye   |   |   |   |
|          | Backup  |   |   |
|          | Dackap  |   |   |

#### 3. Reset Default

Restore factory Settings, please operate carefully.



## **Timed Reboot**

Set the scheduling time for rebooting the device yourself

| Timed Reboot        | )             |  |  |
|---------------------|---------------|--|--|
| Reboot Time     Eve | eryday ^ 0:00 |  |  |
| Restart Interval    | reryday       |  |  |
| M                   | on.           |  |  |
| ти                  | е.            |  |  |
| W                   | ed.           |  |  |
| Th                  | u.            |  |  |
| Fri                 |               |  |  |
| Sa                  | ıt.           |  |  |
| SL                  | in.           |  |  |

Reset Default

### Upgrade

Click on the upload. The Firmware Upgrade window will appear. Insert the Firmware Path (or you can Browse for one) that you are going to use and click Upgrade. Please wait for the Upgrade Successful message to appear to complete the firmware upgrade.

**Note:** Please use to local computer is connected to the AP Lan port through an RJ45 cable to update the firmware first. After completing the update, empty the browser cache, otherwise the user interface may not be displayed correctly.

| lev                   | relone    |              |           |                 |                    |                   |           |            |  | 88 | Ŀ |
|-----------------------|-----------|--------------|-----------|-----------------|--------------------|-------------------|-----------|------------|--|----|---|
|                       |           |              |           |                 |                    |                   |           |            |  |    |   |
| â                     | Configure | Timed Reboot | Upgrade   | Time Manager    | Log                | QoS               | IP Group  | Time Group |  |    |   |
| Home                  |           |              | Vers      | sion WAP-8131-A | P-V1.0-6220416     |                   |           |            |  |    |   |
| چې                    |           |              | Reset Def | ault (Whe       | ther to resume the | ne factory config | guration) |            |  |    |   |
| Wizard                |           |              | Upgrade   | file            |                    |                   |           |            |  |    |   |
| ſa.                   |           |              |           |                 |                    |                   |           |            |  |    |   |
| WiFi                  |           |              |           |                 | Drag the file her  | e, or Click on th | e upload  |            |  |    |   |
| 8                     |           |              |           |                 |                    |                   |           |            |  |    |   |
| Network               |           |              |           |                 |                    |                   |           |            |  |    |   |
| $\overline{\bigcirc}$ |           |              |           |                 |                    |                   |           |            |  |    |   |
| Firewall              |           |              |           |                 |                    |                   |           |            |  |    |   |
| <b>⇔</b>              |           |              |           |                 |                    |                   |           |            |  |    |   |
| Manage                |           |              |           |                 |                    |                   |           |            |  |    |   |
|                       |           |              |           |                 | _                  |                   |           |            |  |    |   |
|                       |           |              |           |                 |                    | Jpgrade           |           |            |  |    |   |

### **Time Manager**

Before sync with host, please select your Time zone. Get time from NTP server can only be available under Gateway Mode.

| lev        | relone    |              |              |           |                      |                 |              |            |   | 器 | Ŀ |
|------------|-----------|--------------|--------------|-----------|----------------------|-----------------|--------------|------------|---|---|---|
|            | _         |              | _            |           | _                    |                 |              |            | _ |   |   |
| ඛ          | Configure | Timed Reboot | Upgrade Time | e Manager | Log                  | QoS             | IP Group     | Time Group |   |   |   |
| Home       |           |              | System       | Time 202  | 2-09-06 11:54:08     |                 |              |            |   |   |   |
| ి          |           |              | NTP Er       | able 🧲    | D                    |                 |              |            |   |   |   |
| Wizard     |           |              | Time Zone S  | elect (   | GMT+08:00)Beijing    | g, Chongqing, H | Hong Kong, U |            |   |   |   |
| (G.        |           |              | Manu         | al IP     |                      |                 | 0            |            |   |   |   |
| WiFi       |           |              | NTP S        | erver ti  | ime.windows.com      |                 | ,            | ^          |   |   |   |
|            |           |              |              |           | time.windows.com     |                 |              |            |   |   |   |
| Network    |           |              |              |           | 210.98.16.100 - Tim  | ie.kriss.re.kr  |              |            |   |   |   |
|            |           |              |              |           | 211.115.194.21 - Nt  | p1.epidc.co.kr  |              |            |   |   |   |
| Eisensell. |           |              |              |           | 64.250.177.145 - Tir | America         |              |            |   |   |   |
| Firewaii   |           |              |              |           | 192.5.41.209 - North | h America       |              |            |   |   |   |
| ¢-         |           |              |              |           | 208.184.49.9 - Norti | h America       |              |            |   |   |   |
| Manage     |           |              |              |           | 131.188.3.220 - Eur  | ope             |              |            |   |   |   |
|            |           |              |              |           |                      |                 |              |            |   |   |   |
|            |           |              |              |           |                      | Apply           |              |            |   |   |   |

#### Log

Can use Log to find errors to check the cause of the problem.

| lev     | elone  | 88                  | Ŀ                  |
|---------|--|---------------------|--------------------|
|         |  |                     | _                  |
| කි      | Configure Timed Reboot Upgrade Time Manager Log QoS IP Group Time Group  |                     |                    |
| Home    | 2022/09/01 14:01:21 WAP-8131 syslog.info syslogd started: BusyBox v1.28.3<br>2022/09/01 14:01:21 WAP-8131 kern.info kernel: [ 0.000000] Built 1 zonelists in Zone order, mobility grouping on. Total pages: 99<br>2022/09/01 14:01:21 WAP-8131 kern.info kernel: [ 0.000000] Kernel command line: console=ttyMSM0,115200n8 ubi.mtd=rootfs root=mtc<br>2022/09/01 14:01:21 WAP-8131 kern.info kernel: [ 0.000000] Pib hash table entries: 2048 (order: 2, 16384 bytes)  | 288<br>l:ubi_ro     | otfs roo           |
| Wizard  | 2022/09/01 14:01:21 WAP-8131 kern.info kernel:         0.0000001 Dentry cache hash table entries: 65536 (order: 7, 524288 bytes)           2022/09/01 14:01:21 WAP-8131 kern.info kernel:         0.0000001 Inde-cache hash table entries: 32768 (order: 6, 262144 bytes)           2022/09/01 14:01:21 WAP-8131 kern.info kernel:         0.0000001 Inde-cache hash table entries: 32768 (order: 6, 262144 bytes)           2022/09/01 14:01:21 WAP-8131 kern.info kernel:         0.0000001 Inde-cache hash table entries: 52768 (order: 6, 262144 bytes)           2022/09/01 14:01:21 WAP-8131 kern.info kernel:         0.0000001 Memory: 376132K/403456K varilable (5520K kernel code, 644K rwdata, 2346           2022/09/01 14:01:21 WAP-8131 kern.intotice kernel:         0.0000001 Virual kernel memory layout: | e63000-<br>K rodata | fffffc(<br>a, 236K |
| WiFi    | 2022/09/01 14:01:21 WAP-8131 kern.notice kernel:         0.000000         vmalloc:         0xfffff800000000 - 0xfffffb0000         (246 GB)           2022/09/01 14:01:21 WAP-8131 kern.notice kernel:         0.000000         vmalloc:         0xfffffb1c0000000 - 0xfffffb1c0000000         (X H K K K K K K K K K K K K K K K K K K  | iximum)<br>tual)    |                    |
| Network | 2022/09/01 14:01:21 WAP-B313 kern.notice kernel: [ 0.000000] modules: xxtfffffc00002/000 - 0xffffffc0010000000 ( 49 MB)<br>2022/09/01 14:01:21 WAP-B313 kern.notice kernel: [ 0.000000] .init: xxffffffc00002/000 - 0xffffffc001000000 ( 49 KB)<br>2022/09/01 14:01:21 WAP-B313 kern.notice kernel: [ 0.000000] .text: xxfffffc00002/000 - 0xffffffc00002/000 ( 766 KB)<br>2022/09/01 14:01:21 WAP-B313 kern.notice kernel: [ 0.000000] .text: xxfffffc00002/000 - 0xffffffc00002/000 ( 766 KB)<br>2022/09/01 14:01:21 WAP-B313 kern.notice kernel: [ 0.000000] .text: xxfffffc00002/000 - 0xffffffc00002/000 ( 766 KB)<br>2022/09/01 14:01:21 WAP-B313 kern.notice kernel: [ 0.000000] .dta: xxfffffc00002/000 - 0xffffffc00002/000 ( 766 KB)   |                     |                    |
|         | 2022/09/01 14:01:21 WAP-8131 kern.info kernel:         0.0000000         Preemptible hierarchical RCU implementation.  | fe9dc0,             | max_id             |
|         | 2022/09/01 14:01:21 WAP-Bill Kern.info Kernel: [ 0.0000000] Sched_cuttr 30 ult 31 (4/mrz, resolution 4.145, Wrap5 eVery 4390040511<br>2022/09/01 14:01:21 WAP-Bill Kern.info Kernel: [ 0.000409] Calibrating delay loog (skipped), value calculated using timer frequence<br>2022/09/01 14:01:21 WAP-Bill Kern.info Kernel: [ 0.000517] Mount-cache hash table entries: 1024 (order: 1, 8192 bytes)<br>2022/09/01 14:01:21 WAP-Bill Kern.info Kernel: [ 0.000517] Mountpoint-cache hash table entries: 1024 (order: 1, 8192 bytes)<br>2022/09/01 14:01:21 WAP-Bill Kern.info Kernel: [ 0.000517] Mountpoint-cache hash table entries: 1024 (order: 1, 8192 bytes)  | y 48.0              | 00 Bogo!           |
| Manage  | 2022/09/01 14:01:21 WAP-B313 kern.info kernel:       0.0010861 Initializing cgroup subsys memory         2022/09/01 14:01:21 WAP-B313 kern.info kernel:       0.001131 Initializing cgroup subsys devices         2022/09/01 14:01:21 WAP-B313 kern.info kernel:       0.001131 Initializing cgroup subsys freezer         2022/09/01 14:01:21 WAP-B313 kern.info kernel:       0.001139 Initializing cgroup subsys freezer         2022/09/01 14:01:21 WAP-B313 kern.info kernel:       0.001139 Initializing cgroup subsys net_cls         2022/09/01 14:01:21 WAP-B313 kern.info kernel:       0.001139 Initializing cgroup subsys net_cls  |                     |                    |
|         | Log Remote Log Service 0.0.0.0 Apply Export Delete Refresh   |                     |                    |

## QoS (Quality of Service)

1. Can restrict Flow Control of specified device IP or IP Group.

#### **Limited Mode**

- Shared limited bandwidth
- Exclusive limited bandwidth

| lev      | elone   | 88 [→     |
|----------|---|-----------|
|          |   |           |
| ŵ        | Configure Timed Reboot Upgrade Time Manager Log CoS IP Group Time Group |           |
| Home     | SN IP Address Time Group Limited Mode Up Down Status Mark               | Operation |
| ¢        |   |           |
| Wizard   | Status 💽  |           |
| (G.      | IP Group Custom V Add   |           |
| WiFi     | IP Address 192.168.188.222 - 192.168.188.222 Scan                       |           |
|          | Time Group Add  |           |
| Network  | Limited Mode Exclusive limited bandwidth                                |           |
|          | Up 30000 Kbps   |           |
| Firewall | Down 20000 Kbps   |           |
| -        | Add a maximum of 32   |           |
| Manage   | Save  |           |
|          |   |           |
|          | Disable QoS V Add Delete  |           |

#### 2. Click below to Enable QoS function

|          |         |                             |                               |            | Prom         | ipt Inform      | ation   |           |            |        |             |        |     |
|----------|---------|-----------------------------|-------------------------------|------------|--------------|-----------------|---------|-----------|------------|--------|-------------|--------|-----|
| Manage   | То      | Disa<br>tal 1 Enak<br>Disat | ble QoS<br>ole QoS<br>ole QoS | ^          | 0            | Are you         | sure wa | nt to ena | able QoS   | ?      | Cancel      |        | ОК  |
| lev      | elc     | ne                          |                               |            |              |                 |         |           |            |        |             | 88     | ₽   |
| <b>a</b> |         | Configure                   | Timed Reboot                  | Upgrade    | Time Manager | Log             | QoS     | IP Group  | Time Group |        |             |        |     |
| Home     |         | SN                          | IP Address                    | Time Group | Limi         | ited Mode       | Up      |           | Down       | Status | Mark        | Operat | ion |
| Wizard   |         | 1                           | Custom                        | Any        | Exclusive li | mited bandwidth | 30000   | 1         | 20000      | 0      | Macbook Pro | •      |     |
| Network  |         |                             |                               |            |              |                 |         |           |            |        |             |        |     |
| Firewall |         |                             |                               |            |              |                 |         |           |            |        |             |        |     |
| Manage   |         |                             |                               |            |              |                 |         |           |            |        |             |        |     |
|          | Total 1 |                             |                               |            |              |                 |         |           |            |        |             | < 1    | >   |
|          | C       | Enable QoS                  |                               |            |              | Add             | Delete  |           |            |        |             |        |     |

## **IP Group**

The establishment of IP groups is easy to manage and can be applied to IP Filter / QoS functional options.



| lev                     | elo     | ne        |              |                 |              |         |                  |          |            |          |        |     |
|-------------------------|---------|-----------|--------------|-----------------|--------------|---------|------------------|----------|------------|----------|--------|-----|
|                         | _       |           |              |                 |              |         |                  |          |            |          |        |     |
| ඛ                       |         | Configure | Timed Reboot | Upgrade         | Time Manager | Log     | QoS              | IP Group | Time Group |          |        |     |
| Home                    |         | SN        |              | Group Name      |              |         | IP Range         |          |            | Mark     | Operat | ion |
| ి                       |         | 1         | Custome      | r Service Depar | tment        | 192.168 | 1.188.2 - 192.16 | 8.188.40 |            | office 1 | •      |     |
| Wizard                  |         | 2         | Busir        | ness Departmer  | nt           | 192.168 | .188.41 - 192.16 | 8.188.60 |            | office 1 | •      |     |
| G                       |         |           |              |                 |              |         |                  |          |            |          |        |     |
| WIFI                    |         |           |              |                 |              |         |                  |          |            |          |        |     |
|                         |         |           |              |                 |              |         |                  |          |            |          |        |     |
| Network                 |         |           |              |                 |              |         |                  |          |            |          |        |     |
|                         |         |           |              |                 |              |         |                  |          |            |          |        |     |
| $\mathbf{\overline{e}}$ |         |           |              |                 |              |         |                  |          |            |          |        |     |
| Firewall                |         |           |              |                 |              |         |                  |          |            |          |        |     |
| \$                      |         |           |              |                 |              |         |                  |          |            |          |        |     |
| Manage                  |         |           |              |                 |              |         |                  |          |            |          |        |     |
|                         | Total 2 |           |              |                 |              |         |                  |          |            |          | <      | >   |
|                         |         |           |              |                 |              | Add     | Delete           |          |            |          |        |     |

## Time Group

Create a time management group, which can be applied to the following functional options.

- URL Filtering
- IP Filter
- MAC Filter
- QoS

| <b>H</b> lev          | velo |           |              |         |                    |            |         |    |            |      |           |
|-----------------------|------|-----------|--------------|---------|--------------------|------------|---------|----|------------|------|-----------|
|                       |      | Configure | Timed Reboot | Upgrade | Time Manager       |            | QoS     |    | Time Group |      |           |
| Home                  |      | SN        | Time Group   |         | Time Range         |            | Work Da | te |            | Mark | Operation |
| දුමු                  |      |           | Time Group   |         |                    |            |         | ×  |            |      |           |
| Wizard                |      |           | Time         | Group   | Customer Service   | Time Group |         |    |            |      |           |
| Ca.                   |      |           | Time         | Range   | © 09:30            | - 🕓 18:30  | )       |    |            |      |           |
| WiFi                  |      |           | Wor          | rk Date | Working Day        |            |         |    |            |      |           |
|                       |      |           |              |         | Mon. 🔽 Tue         | e. 🔽 Wed.  | Sun.    |    |            |      |           |
| Network               |      |           |              | Mark    | office 1           |            |         |    |            |      |           |
| $\overline{\bigcirc}$ |      |           |              | A       | dd a maximum of 16 |            |         |    |            |      |           |
| Firewall              |      |           |              |         | Sav                | re         |         |    |            |      |           |
| \$                    |      |           |              |         |                    |            |         |    |            |      |           |
| Manage                |      |           |              |         |                    |            |         |    |            |      |           |
|                       |      |           |              |         |                    |            | _       |    |            |      |           |
|                       |      |           |              |         |                    | Add        | Delete  |    |            |      |           |

| <b>I</b> lev  | elo     | ne        |                     |          |               |     |           |          |            |          | 88       | ₽ |
|---------------|---------|-----------|---------------------|----------|---------------|-----|-----------|----------|------------|----------|----------|---|
| â             |         | Configure | Timed Reboot        | Upgrade  | Time Manager  | Log | QoS       | IP Group | Time Group |          |          |   |
| Home          |         | SN        | Time Group          | 1        | Time Range    |     | Work Dat  | te       |            | Mark     | Operatio | n |
| <b>Vizard</b> |         | 1         | Customer Service Ti | me Group | 09:30 - 18:30 |     | Working D | lay      |            | office 1 | ٥        |   |
| WIFI          |         |           |                     |          |               |     |           |          |            |          |          |   |
| Network       |         |           |                     |          |               |     |           |          |            |          |          |   |
| Firewall      |         |           |                     |          |               |     |           |          |            |          |          |   |
| Manage        |         |           |                     |          |               |     |           |          |            |          |          |   |
|               | Total 1 |           |                     |          |               |     |           |          |            |          | < 1      | > |
|               |         |           |                     |          |               | Add | Delete    |          |            |          |          |   |