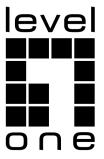
# Web Management Guide



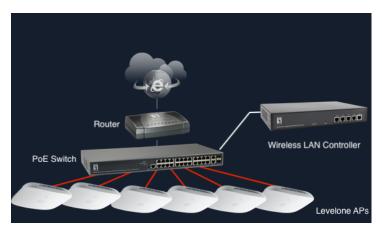
## **Networking Diagram**

**Gateway Networking Diagram** 



Wireless management gateway direct connected topology diagram, direct networking refers to the direct access to the AP or access switch under the AC, and the data and management services of the AP are forwarded and processed by the AC in a centralized manner.

## **Bypass Networking Diagram**



Wireless management gateway bypass topology diagram, bypass networking refers to the AC bypass in the existing network (mostly next to the aggregation switch) to achieve business management of the AP.

To set the bypass mode, you need to select the bypass mode in Network Settings - External Network Settings - Internet Access Method. You can choose Dynamic IP [DHCP] or Static IP for address acquisition, manually fill in the internal network IP address, subnet mask, default gateway, DNS, and click Apply.

After setting up, network according to the network topology map.

## Logging on to the equipment

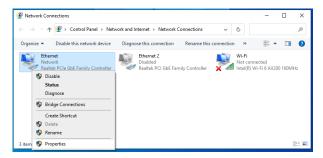
Connect the RJ-45 interface cable of a controller with a computer using a network cable.



Set the TCP/IP properties of the computer.

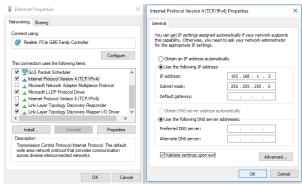
#### **■** Windows

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

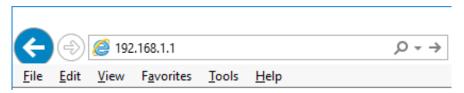


2. Double-click Internet Protocol 4 (TCP/IPv4)

Set the computer's IP address: The computer's IP address should be any one of the following free IP addresses  $192.168.1.2 \sim 192.168.1.253$ , and then click **OK**, to return to the previous page, click **OK**.



3. Logging on to the equipment: Open a browser and type **192.168.1.1** in the address bar, and then press Enter; in the pop-up login interface, enter the factory logon **username "admin"**, **password "admin"** and click OK.



#### **■** macOS

1. Click the Apple icon, from the Apple drop-down list, select **System Preferences**.



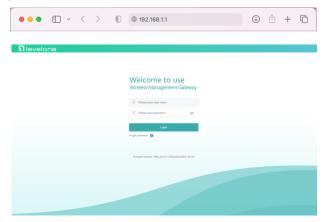
2. Click the Network icon.



3. Select the Ethernet (for wired connection), from the Configure IPv4 drop-down list, select Manually.

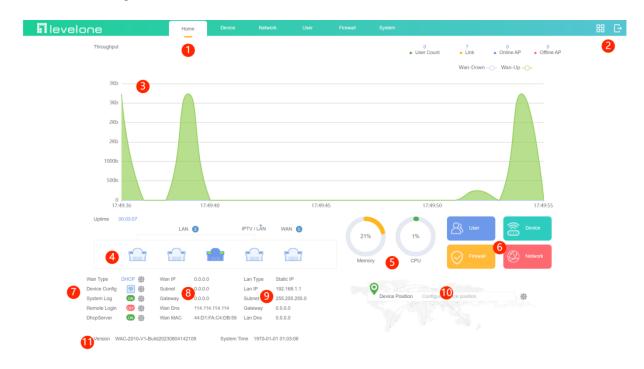


- 4. Set the computer's IP address: The computer's IP address should be any one of the following free IP addresses 192.168.1.2 ~ 192.168.1.253, Subnet Mask 255.255.255.0, and then click Apply.
- 5. Logging on to the equipment: Open a browser and type 192.168.1.1 in the address bar, and then press Enter; in the pop-up login interface, enter the factory logon username "admin", password "admin" and click OK.



## 2. Equipment Overview

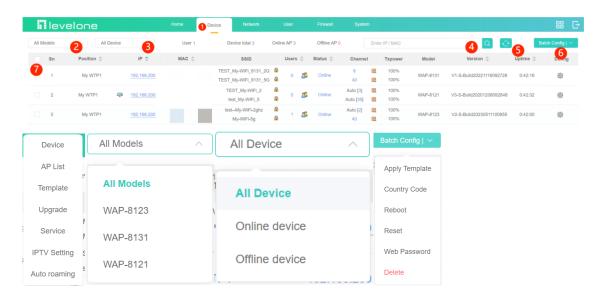
## 2.1 Home Page



- (1): Menu bar, click to switch to different menu bars.
- ②: Icon 1: Modify the wireless management gateway login password; Restart the wireless management gateway. Icon 2 Exit Login.
- ③: Display the current real-time online speed, total users, current links, online devices, offline devices, downlink, and uplink.
- ④: Display the running time of the device, LAN port (detailed information will be displayed on the LAN icon when the mouse is placed), WAN port (detailed information will be displayed on the WAN icon when the mouse is placed).
- (5): Display current memory usage and CPU usage.
- **(6)**: Display user management, device management, security protection, and network settings, and click to quickly navigate to them.
- ⑦: Display external network access, wireless settings, log management, remote access, and DHCP service information, click to quickly jump to.
- (8): Display external IP, subnet mask, external gateway, external DNS, and external MAC information.
- (9): Display intranet access, intranet IP, subnet mask, intranet gateway, and intranet DNS information.
- (10): The device address bar can indicate the location information of the wireless management gateway.
- 11): Display firmware version and system time.

## 3. Device management

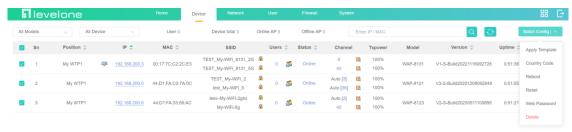
#### 3.1 Device list



Device list, wireless management gateway can manage AP devices.

- ①: The device management column mainly includes settings such as device list, template configuration, device upgrade, and service configuration.
- (2): In the All Models column, click the dropdown menu to view all device models.
- ③: All devices column, click the dropdown menu to view online and offline devices.
- 4: Display the number of wireless users, total devices, online APs, and offline APs.
- (5): Search bar, can search based on AP's IP/MAC.
- 6: Refresh key to refresh the current list information.
- (7): The batch operation bar includes: application template, country code, immediate restart, device reset, login password, and device deletion.
- ®: Display basic information of the AP device, including serial number, device note (device note information can be added), IP (AP server login address), MAC (device MAC address), SSID (device wireless name), user (connecting AP user), status (online or offline), channel (current wireless channel of the AP device), channel [analysis] (click icon to view surrounding interference situation), power, model (AP device model) Version number (current AP device firmware version), runtime, operation (click icon to change AP device configuration).

#### 3.2 Batch operation



Batch operation refers to the batch operation of one or more devices.

Application template: First, you need to set an AP device template in the template configuration bar, check the devices that require batch operation, and apply the template. (Note: Application templates can only be used for batch operations on AP devices of the same model, and different models of AP devices only support general templates.) Country code: Check the AP devices that require batch operations and set the country code in bulk. (Note: The device will restart after application).

Immediate restart: Check the AP devices that require batch operation, and set the batch settings to restart immediately.

Device reset: Check the AP devices that require batch operation and immediately reset the batch settings. (Note: After application, the device will be restored to the default configuration).

Login password: Check the AP devices that require batch operation and set the login password in bulk. (Note: Login password for AP devices).

Delete device: Check the offline AP device to delete the device. (Note: Only offline devices can be deleted).

## 3.3 WiFi Configuration

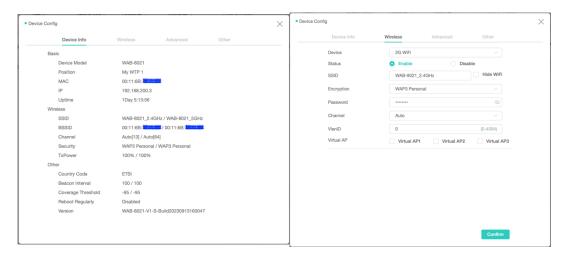


Figure 1 Figure 2

Wireless device configuration refers to the wireless configuration of AP devices, click for settings.

Figure 1-(1): Device information menu bar.

Figure 1-2: Mainly displays the basic information, wireless information, and other information of the device.

Figure 2-(1): Wireless configuration menu bar.

Figure 2-(2): Wireless selection bar (drop-down to select wireless, single frequency device represents wireless device 1, multi frequency device will have wireless device 2, wireless device 3, etc.), wireless status (enable/disable), WiFi name (set wireless name, check to hide WiFi, can hide), encryption method (can choose no encryption or encryption), channel (can choose automatic or fixed channel), VlanID, enable virtual AP (check and enable).

Figure 3-1: Advanced settings menu bar.

Figure 3-②: Wireless selection (drop-down to select wireless, single frequency device represents wireless device 1, multi frequency device will have wireless device 2, wireless device 3, etc.), mode (current 2G/5G mode bandwidth of wireless device), transmission power (current 2G/5G power size of wireless device), maximum number of incoming users (current 2G/5G maximum accessible number of wireless device), user isolation (enabled or disabled), ShortGI (enabled or disabled) Beacon frame time interval, AP coverage threshold, packet threshold, RTS threshold. Figure 4- Serial number ①: Other settings menu bar.

Figure 4-②: Scheduled restart (enable or disable, if selected, the type of restart time can be set, either by time or by day), device login password (set login password for AP device).

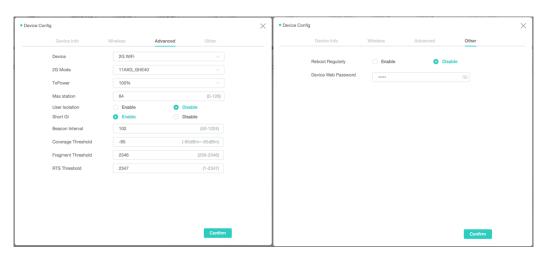


Figure 3 Figure

## 3.4 Template Configuration



Template configuration is mainly used for batch operation of template configuration. Only templates of the same model can be used, while templates of different models can use universal templates.

- 1: Add or delete templates.
- ②: For ready template, click 🌑 to modify, click 🎇 to delete

## 3.5 Device Upgrade



Device upgrade, AP device upgrade supports both online and local upgrades, and can choose between immediate or scheduled upgrades.

- 1: Model drop-down menu, device drop-down menu.
- (2): Total number of devices, online AP, offline AP.
- ③: The search bar allows for searching based on the IP/MAC of the AP.
- 4: Online upgrade (the device is connected to the network to obtain the latest firmware, click on online upgrade to upgrade the AP device.), Local upgrade (upload the upgraded firmware first, click on local upgrade to upgrade the AP device.), Upload firmware.
- 5: Basic information of the device.

## 3.6 Service Configuration



Service configuration, mainly including: device management function (enable to manage AP, disable not to manage AP), address server function (enable to assign IP server IP address to AP, disable not to assign server IP address to AP), server IP address, number of assigned addresses, address effective time (drop-down menu to select effective time), number of assigned IP (currently assigned IP number) Assigned IP list (click to view the details of assigned IP), static DHCP management (click to add and set static IP).

## 3.7 Static DHCP Management

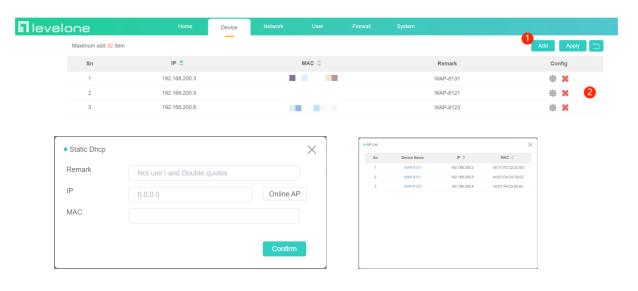
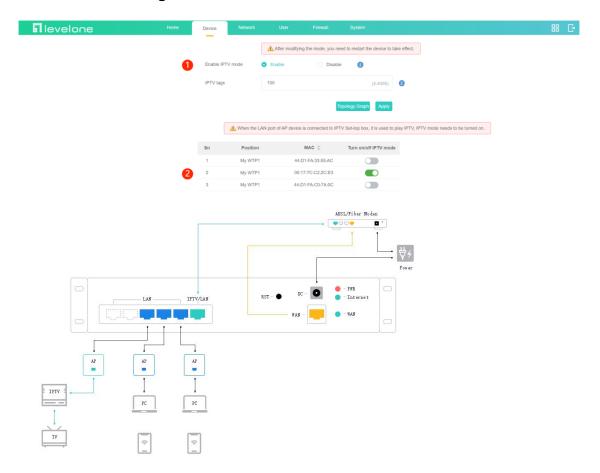


Figure 1 Figure 2

Static DHCP management, adding and setting static DHCP, assigning corresponding IP addresses by identifying the MAC of the AP.

- ①: Add (click Add to jump to Figure 1, click Online AP to jump to Figure 2 for configuration), Apply (current configuration of the application), Return button (return to the Service Configuration bar).
- 2: For ready IP group, click to modify, to delete.

## 3.8 IPTV setting



IPTV settings, using a separate VLAN for transmission, transmit digital TV signal data to the set-top box through the panel AP.

- ①: After connecting according to the connection method in the topology diagram, enable IPTV mode, and then restart the AC manager.
- 2: IPTV mode has been enabled for the corresponding AP based on the MAC address or device note

## 3.9 Auto roaming

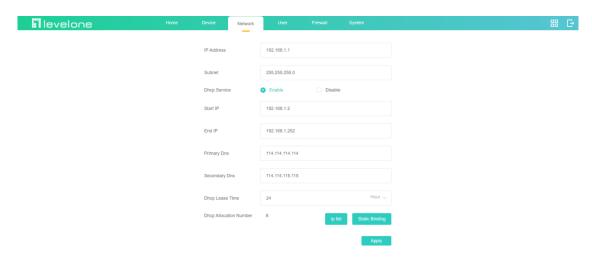
Enables Auto-Roaming for wireless networks, Load balancing across multiple Aps

When roaming is enabled, the SSID, encryption, and password between aps must be consistent. When 5G priority is enabled, the SSID, encryption, and password of 2G and 5G of the AP must be the same.



#### 4. Network

## 4.1 LAN Setting



Internal network settings mainly include: internal network IP address, subnet mask, DHCP server status (enable to assign IP to connected users, disable not assigning IP to connected users), start IP address, end IP address, preferred DNS, backup DNS, lease term, DHCP allocation quantity (display the current number of connected users), assigned IP list (click to view the details of assigned IP) Static DHCP management (click to add and set static IP).

(Note: Static DHCP management can refer to 3.7)

## 4.2 WAN Setting



External network settings mainly include: Internet access method (drop-down menu can select static IP, dynamic IP, broadband dialing, bypass mode), MTU; Manually set DNS on/off, preferred DNS, backup DNS, broadband type (different broadband can be selected from the drop-down menu), uplink bandwidth, and downlink bandwidth; Line detection on/off (used to detect WAN ports).

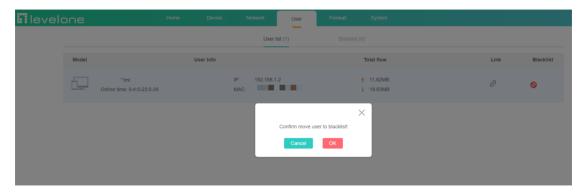
(Note: The bypass mode can refer to the bypass network topology diagram)

# 5. User Management

## 5.1 User List



User list, mainly displaying the device name, device IP, device MAC, connection duration, uplink traffic, downlink traffic, number of links (click on the connection icon to view details), operation (click on the icon to directly add the user to the blacklist) of online users.



Click to add user to blacklist.

# 5.2 Blacklist



Blacklist, users on the blacklist, prohibited from using data traffic, click at to remove user from blacklist.

# 5.3 Speed Limit



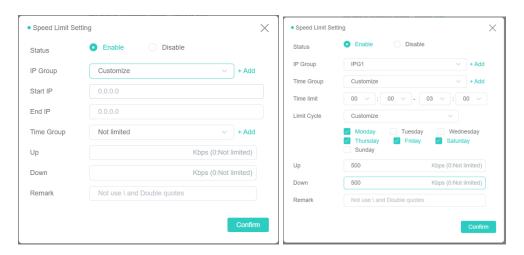


Figure 1 Figure 2

User speed limit mainly applies traffic restrictions to the set IP groups.

1: Add, click Add to add user speed limit settings.

The user speed limit settings mainly include: status (enabled or disabled), IP group (customized as shown in Figure 1, and you can also select the preset IP group maintenance as shown in Figure 2, or click+Add to enter IP group maintenance for re creation), time group (unlimited as shown in Figure 1, and you can also select the preset time maintenance group as shown in Figure 2, or customize it, and you can also click+Add to enter the time maintenance group for re creation)

2: Modify current group by , and delete group by .

③: Enable/ disable speed limit.

#### 6. Firewall

#### 6.1 IP Filter

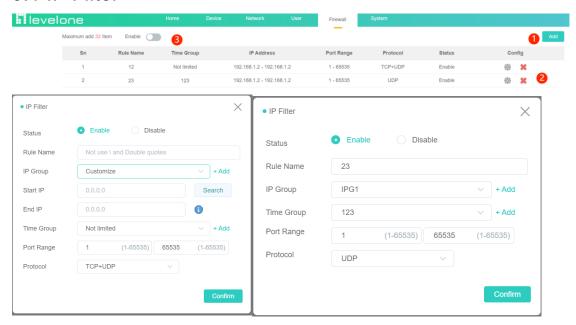


Figure 1 Fugure 2

IP filtering refers to TCP/UDP restrictions on IP ranges added to the filtering rules.

(1): Add, click Add to add IP address filtering.

IP address filtering mainly includes: status (enabled or disabled), rule name, IP group (as shown in Figure 1 for customization or selecting online users, as shown in Figure 2 for preset IP group maintenance, or clicking+Add to enter IP group maintenance for re creation) Time group (as shown in Figure 1 without restrictions, as shown in Figure 2, you can also select the preset or customized time maintenance group, and click+Add to enter the time maintenance group for re creation), port range, and protocol.

- (2): For ready group, to modify, to delete.
- (3): Enable/ disable filter.

#### 6.2 MAC Filter

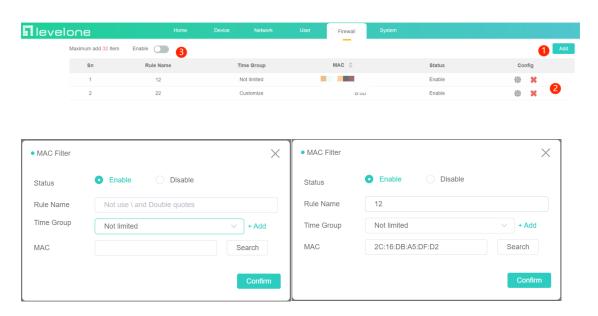


Figure 1 Figure 2

MAC filtering refers to the data restriction of MAC devices added to the filtering rules.

1: Add, click Add to add MAC filtering.

MAC filtering mainly includes: status (enabled or disabled), rule name, time group (as shown in Figure 1 without limitation, as shown in Figure 2, you can also select the preset or customized time maintenance group, and you can click+Add to enter the time maintenance group for re creation), MAC address (manually filled in, or select online users).

- 2): For ready group, to modify, to delete.
- ③: Enable/ disable filter.

#### 6.3 URL Filter

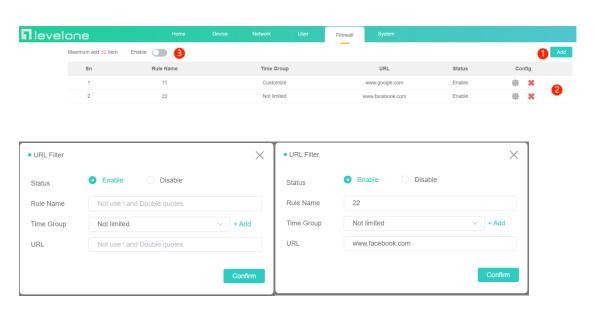


Figure 1 Figure 2

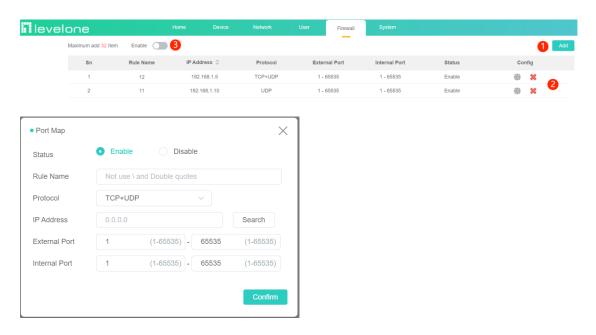
URL filtering refers to the data filtering of URLs added to the filtering rules.

1: Add, click Add to add URL filtering.

Website filtering mainly includes: status (enabled or disabled), rule name, time group (as shown in Figure 1 without limitation, as shown in Figure 2, you can also select the preset or customized time maintenance group, and click+Add to enter the time maintenance group for re creation), website (the website to be filtered).

- 2): For ready group, we to modify, to delete.
- ③: Enable/ disable filter.

## 6.4 Port Map



Port mapping refers to mapping the internal network (LAN) IP address of a host to a public network (WAN) IP address. When a user accesses a port of a host that provides a mapping port, the server will transfer the request to the host that provides this specific service within the local LAN; The port mapping function can also map multiple ports of an external IP address machine to different ports on different internal machines. Serial number

1: Add, click Add to add port mapping.

Port mapping mainly includes: status (enabled or disabled), rule name, protocol (TCP/UDP), internal network IP address (manually filled in or selected for online users), external port, and internal port.

- 2: For ready group, to modify, to delete.
- ③: Enable/ disable.

#### 6.5 DMZ Host



DMZ settings refer to the issue of external networks not being able to access internal network servers after installing a firewall. Click to enable the DMZ host, manually fill in or select online users, and this function will take effect.

# 7. System Management

## 7.1 Firmware Upgrade

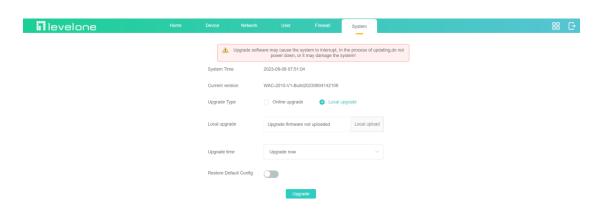
Through this function, the firmware upgrade of the wireless management gateway can be divided into online upgrade and local upgrade. The wireless management gateway also supports scheduled upgrades.

## 7.1.1 Online upgrade



After the wireless management gateway connects to the network, if there is the latest version, the server will automatically issue the latest version, and you can also check for updates on your own.

## 7.1.2 Local upgrade



To upgrade locally, you need to first upload the upgraded firmware, select the upgrade time (immediate upgrade/scheduled upgrade), and check whether to restore to the default configuration after the upgrade is completed.

#### 7.2 Device maintenance

## 7.2.1 Remote login



Remote access, when enabled and applied, will generate a remote address to access the wireless management gateway. If disabled, this feature can be disabled.

#### 7.2.2 Telnet service



Telnet service, enabled and applied to access the wireless management gateway through Telnet, disabled to disable this feature.

## 7.2.3 Scheduled restart



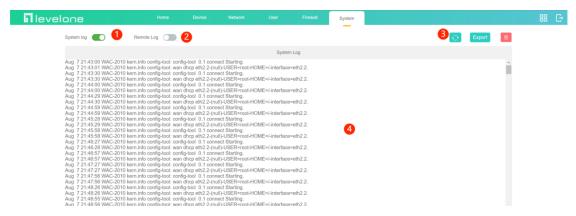
Scheduled restart, enable to set the restart time every few days/weeks, disable to disable this feature.

#### 7.3 Reboot



Restart immediately, the device will restart immediately when this function is applied, or you can click the shortcut key in the upper right corner to restart the device.

## 7.4 System log



System logs, displaying the operation logs of the wireless management gateway system.

- 1): Enable the system log switch.
- 2: Enable remote service switch(Opening requires entering a remote address, click to change address)
- ③: Refresh, export (can be exported and kept locally), delete (delete the current log).
- 4: Log details.

## 7.5 Configuration Management

## 7.5.1 Backup



Backup the information, click Export Configuration File, and you can download the current wireless management gateway configuration to local storage.

## 7.5.2 Restore settings



Restore the configuration and use the saved configuration file to restore the configuration of the wireless management gateway.

## 7.5.3 Factory settings



Factory settings. After application, the wireless management gateway will lose all current configurations and restore to the factory configuration. Please operate with caution.

## 7.5.4 DHCP cache cleanup



DHCP cache cleaning can delete the DHCP cache of the terminal, as well as the DHCP cache of the AP. It is mainly used to clear the DHCP cache of offline devices.

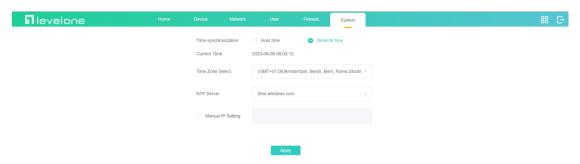
# 7.6 System Time

#### 7.6.1 Host time



Host time refers to synchronizing with the host time connected to the wireless management gateway.

#### 7.6.2 Network time



When the wireless management gateway is connected to the network, you can choose your own time zone and network time server, or manually set the time server to set the time.

# 7.7 IP group



IP group, mainly used for selecting preset IP groups.

- (1): Add (set IP group name, IP address range) .
- 2): For current IP group, a to modify, to delete.

## 7.8 Time group



Time group maintenance is mainly used for selecting preset time groups.

- (1): Add (set time group name, time range, and limit period).
- ②: For current time group, 🏶 to modify, 🗶 to delete.

## 7.9 Accelerate



Network acceleration, with options for normal and hard acceleration (when clients access public network servers, data packets will pass through at least one router when transmitted on the network, and for multiple/multi-layer routes, network forwarding will be performed to allow clients to access public network servers and return results).