神州数码
Digital China

DCN Wireless AP WL8200-X2

Operation Manual

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1 Preface

1.1 Manual Description

This manual mainly helps users use AP products correctly with the three working modes of AP.

- FIT AP Mode
- FAT AP Bridge Mode
- FAT AP Routing Mode

This manual takes the WL8200-X10 as an example for configuration. Because there are certain differences in hardware and software specifications for each model, all issues involving product specifications need to be confirmed with Yunke China Information Technology Limited.

1.2 Conventions

In this manual,

- For nouns such as buttons on the page, use "" to indicate them, such as "Edit";
- Use >> to indicate the sequence of entering the configuration interface, such as "first-level menu" >> "second-level menu";

This manual also uses various eye-catching signs to indicate places that should be paid special attention to during operation. As following:

Caution & Attention: Remind the matters needing attention in the operation, and improper operation may cause the setting to be invalid, data loss or equipment damage.

Instructions & Tips: Make necessary additions and explanations to the description of the operation content.

1.3 Revision Record

Date	Modify the content	Modifier
2021/3/23	Edit DCN Wireless AP WL8200-X4 Operation Manual	Yafei Li

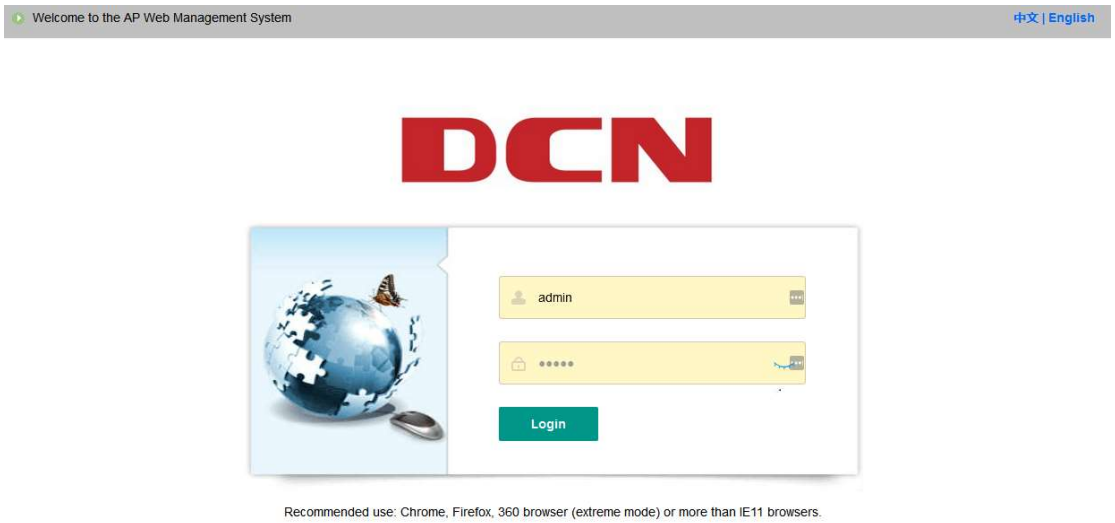
1.4 Applicable version

Version	Release time
3.13.1.x	2021.3

2 AP Basic Operations

2.1 WEB Login

Use POE (or local power) to charge the AP, connect the network port of the management computer to the AP's LAN port (or the management host connects to the AP's WLAN wirelessly), open the browser (recommended: Google, Firefox or IE11) and enter the management IP address on the LAN side (the default is https://192.168.1.10) to access the web configuration interface of the wireless AP. The default login user name is admin, and the password is admin.

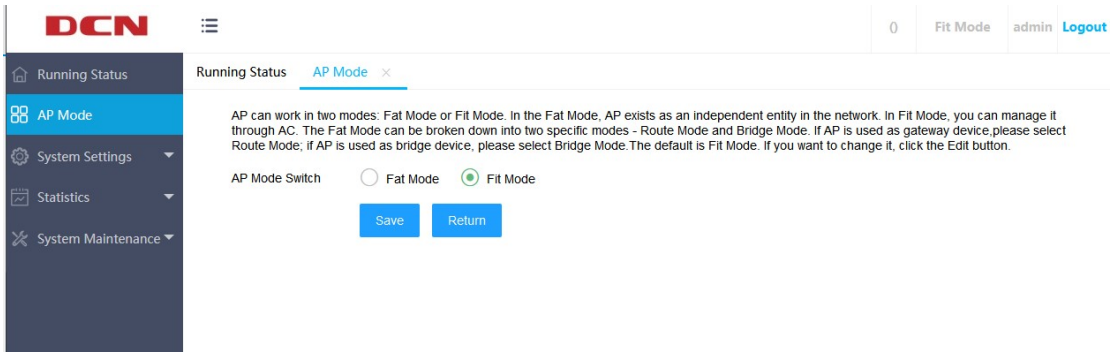


If the AP has no LAN port or no wired client, you can use the wireless client to connect to the AP's SSID (the default is DCN_WLAN) to access the AP.

If the network accessed by the AP has a DHCP server, the address of the AP may be obtained dynamically. In this situation, the user should access the current IP address of the AP.

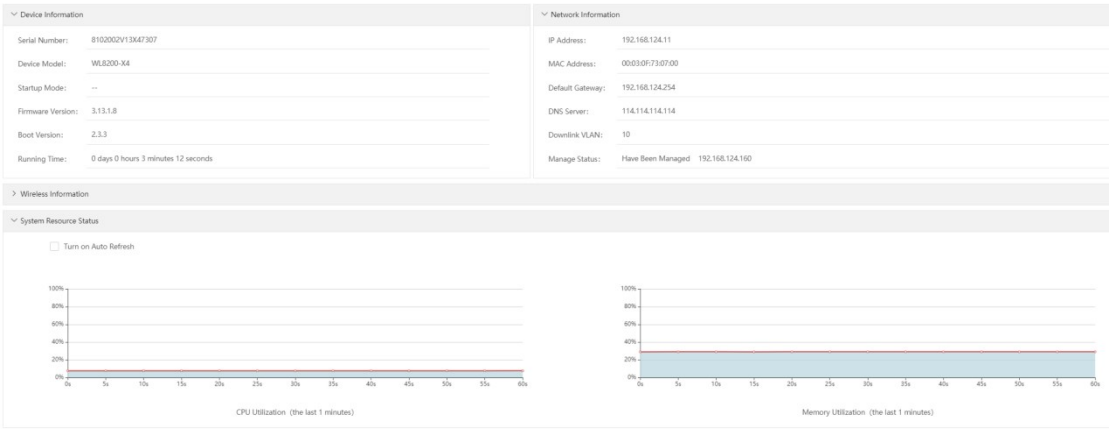
2.2 AP Mode

After logging into the AP's WEB page, if you want to switch to a certain mode, you can switch to the specified mode by clicking "AP Mode" on the left menu. As following:



2.3 Running Status

After logging into the system, the homepage displays the system running status, including device information, network information, wireless information and system resource status. Ticking "Turn on Auto Refresh" in the system resource status panel, the interface will display the CPU utilization and memory utilization in real time, and refresh every 5 seconds.

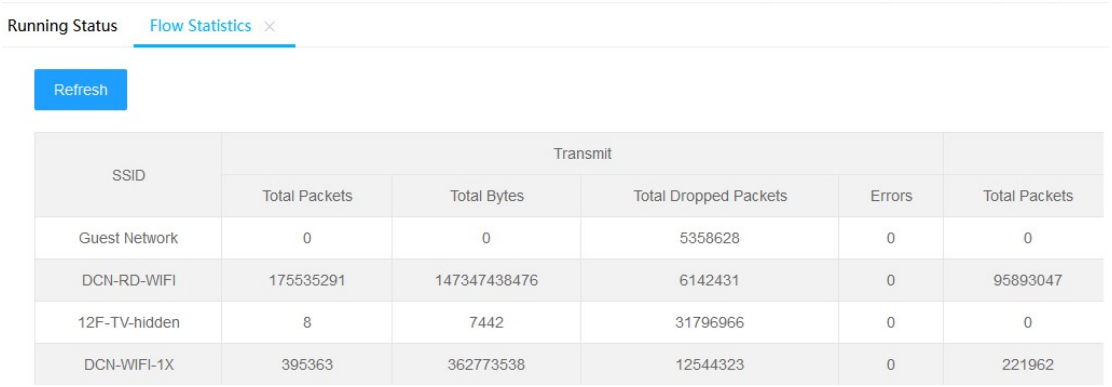


2.4 Statistics

The statistics contains three parts: flow statistics, radio statistics and client statistics.

2.4.1 Flow Statistics

Flow Statistics interface shows the message sent and received by different SSIDs. As following:



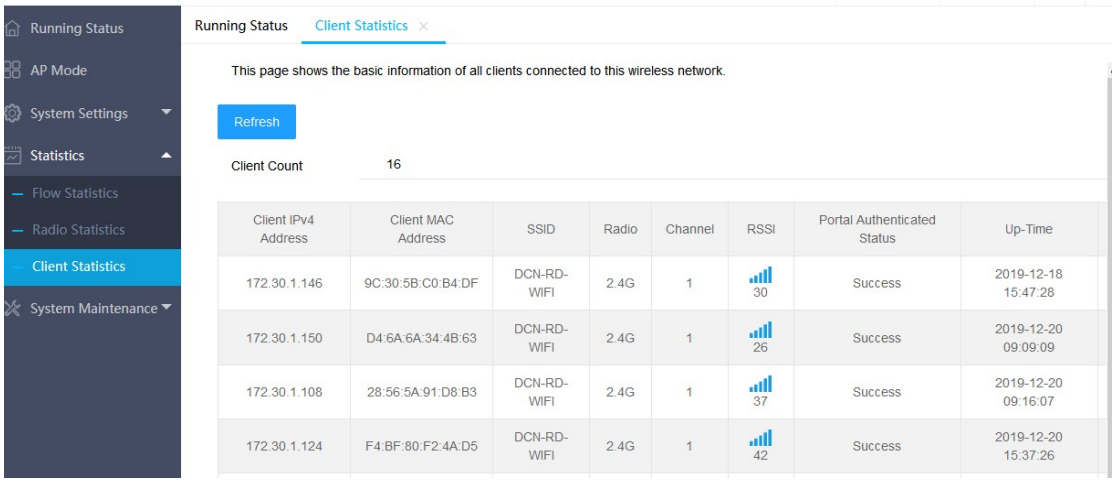
SSID	Transmit				
	Total Packets	Total Bytes	Total Dropped Packets	Errors	Total Packets
Guest Network	0	0	5358628	0	0
DCN-RD-WIFI	175535291	147347438476	6142431	0	95893047
12F-TV-hidden	8	7442	31796966	0	0
DCN-WIFI-1X	395363	362773538	12544323	0	221962

2.4.2 Radio Statistics

Radio statistics interface displays different radio statistics sending and receiving message information from radio statistics perspective. As following:

2.4.3 Client Statistics

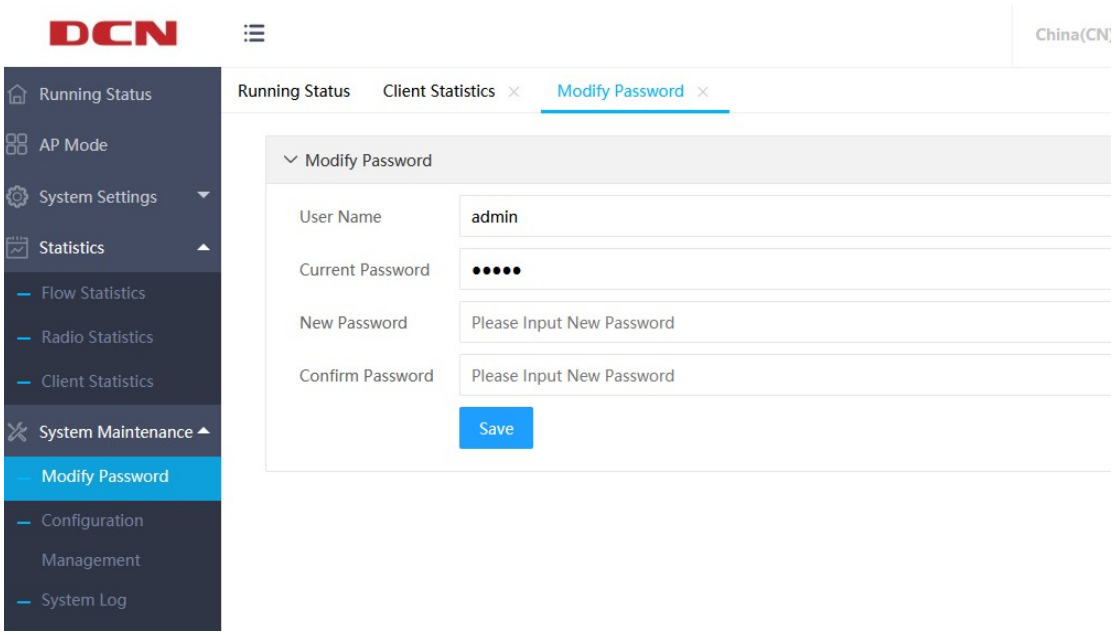
Client statistics list displays all client information related with the device, including client IP address, client MAC address, SSID, radio, channel, RSSI, portal authenticated status, up-time, etc. As following:



2.5 System Maintenance

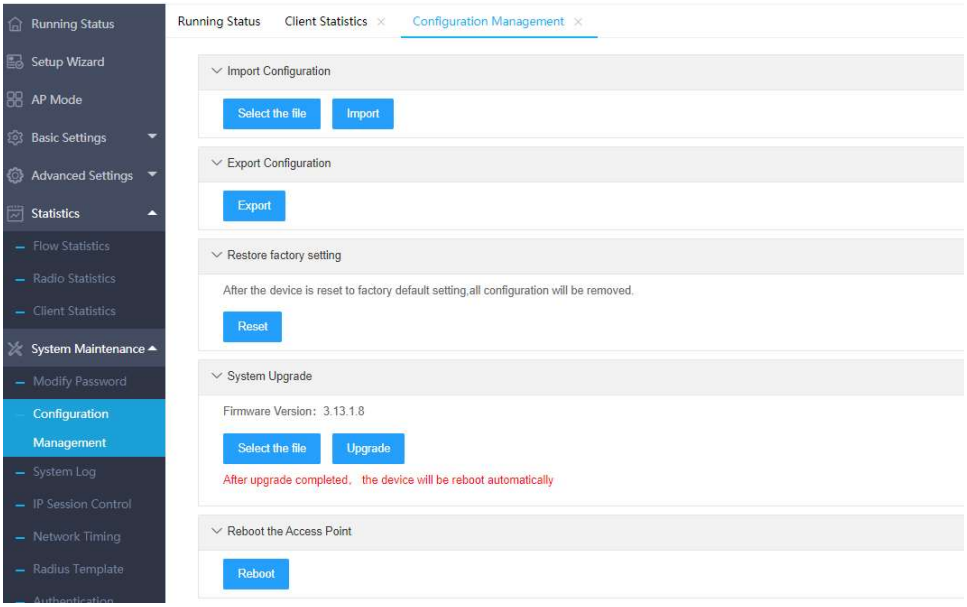
2.5.1 Modify Password

Click "System Maintenance">>"Modify Password" on the left menu, you can modify the username and password on the AP management interface. When modifying password, enter the original password first, then enter the new password twice, and click "Save ". As following:



2.5.2 Configuration Management

In this interface, the user can perform related operations such as configuration import and export, restore factory setting, system upgrade, reboot, etc. As following:



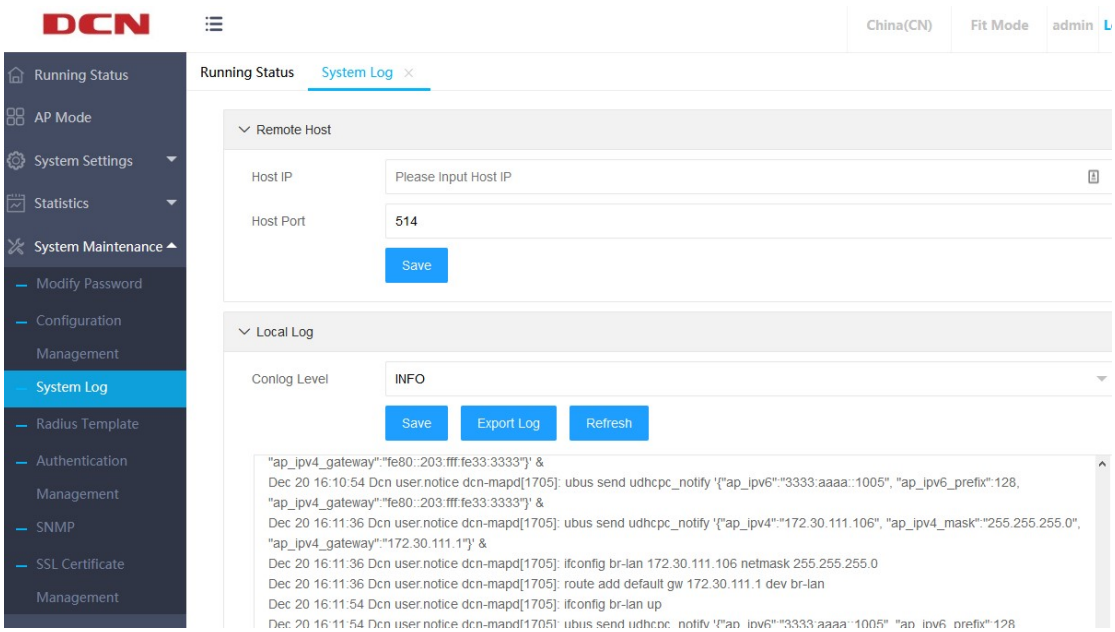
After the device is reset to factory default, all configurations will be deleted and restored to FIT mode.

2.5.3 System Log

The diagnostic log interface displays the latest log information of the device. It is divided into two sections: remote host and local log.

The remote host includes the log host IP address and the log host port configuration, which can store device logs to a remote syslog server.

The local log supports the log level setting and log packaging export function. Click the "Export Log" to package and download all log information to the local. As following:



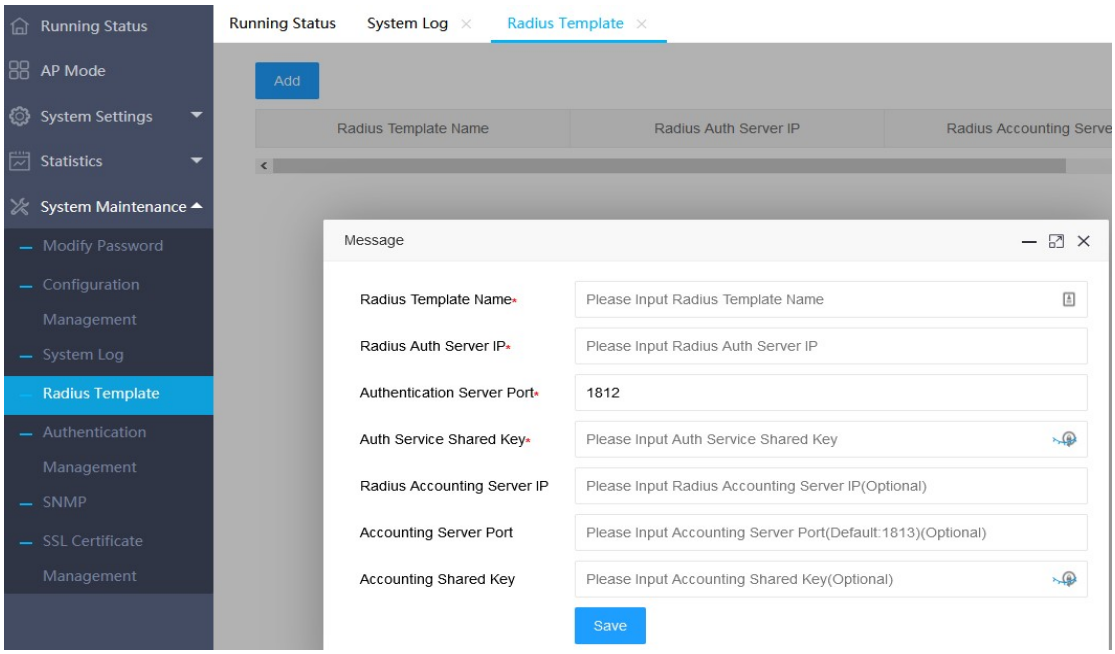
2.5.4 Radius Template

Click" System Maintenance ">>" Radius Template " to maintain the Radius server template.

(1) Radius template name, authentication server IP address, and authentication service shared key are required.

(2) The accounting server IP and the accounting shared key are optional. Both of them must be filled in or not filled in at the same time, otherwise the system prompts that they cannot be saved normally.

(3) The key requires 1-64 non-Chinese characters.



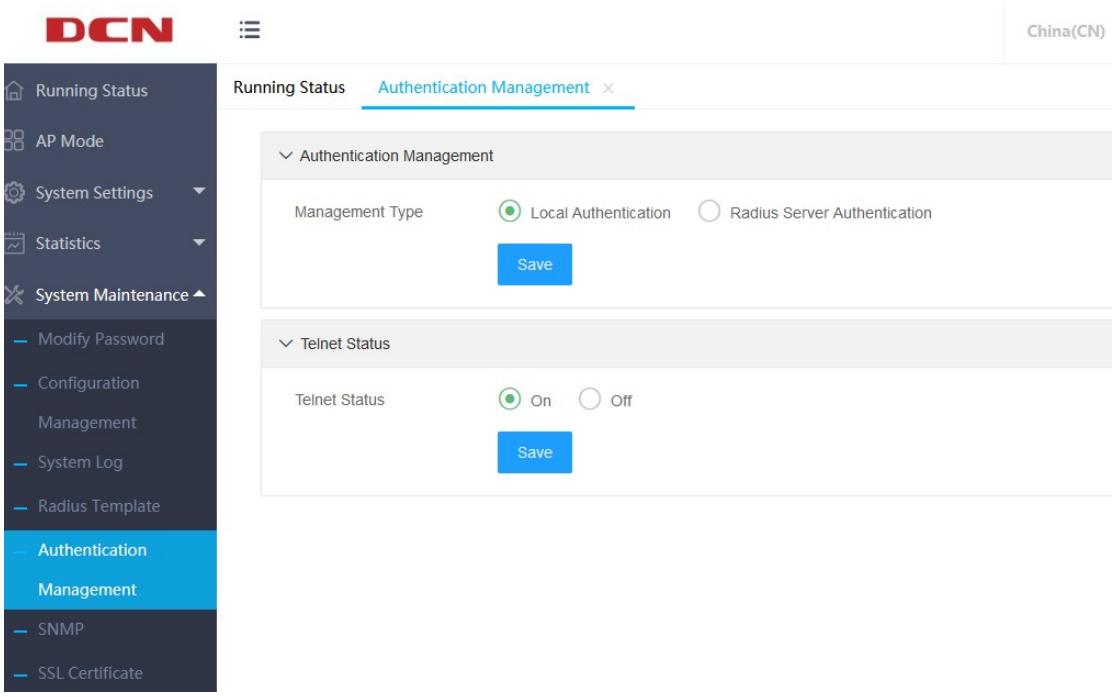
2.5.5 Authentication Management

Click “System Maintenance” >> “Authentication Management”, the user can see authentication management configuration and Telnet status.

(1) Select local authentication and save it directly.

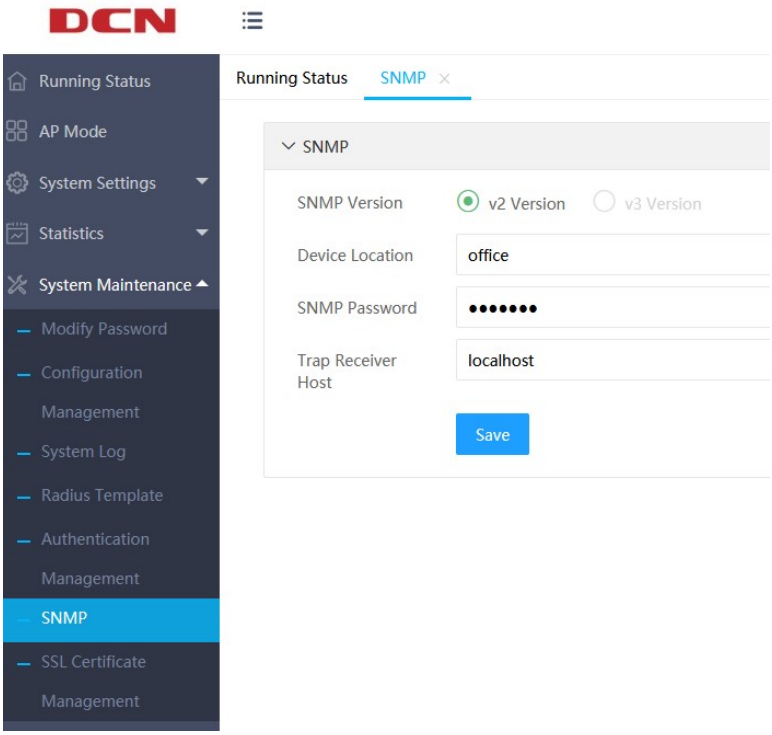
(2) To select Radius server authentication, you need to select a Radius server. This Radius server has been maintained in the "Radius server template".

Click “System Maintenance” >> “Authentication Management”, the user can see authentication management configuration and Telnet status. Choose to open or close telnet and save it.



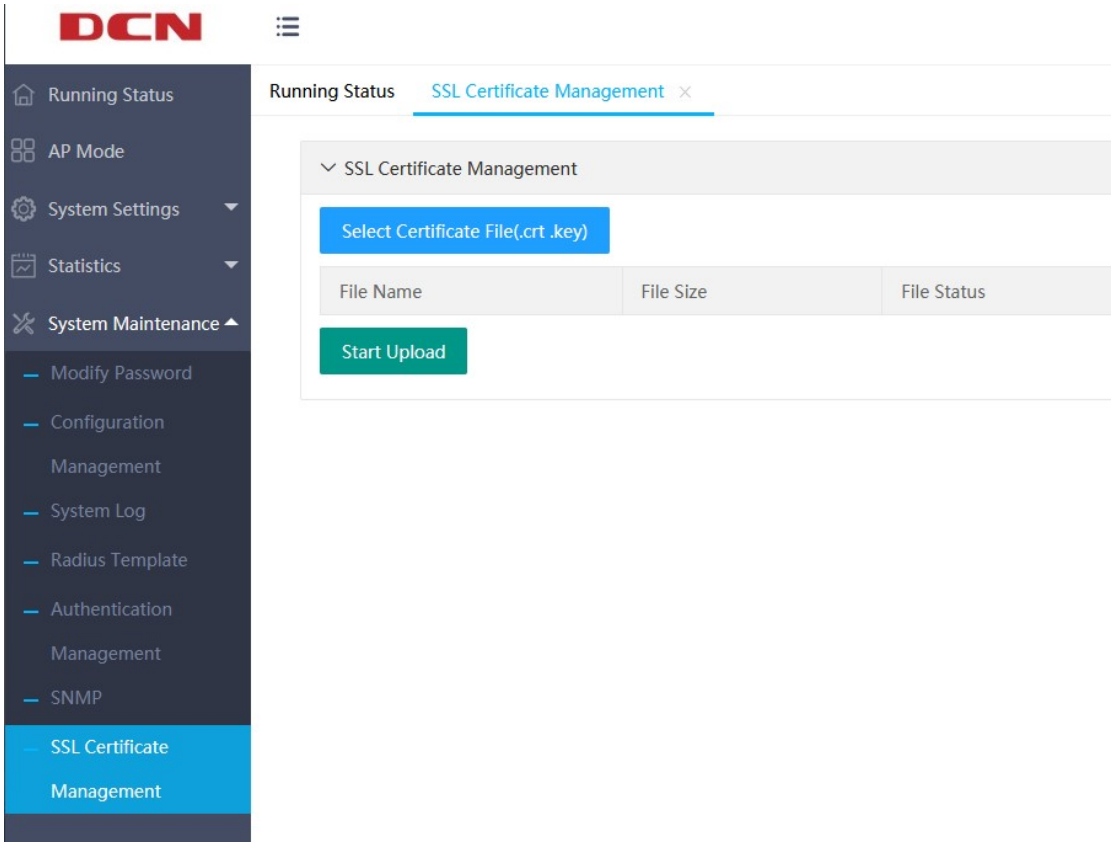
2.5.6 SNMP Configuration

Click "System Maintenance" >> "SNMP Configuration" to configure SNMP related information. As shown below:



2.5.7 SSL Certificate Management

Click " System Maintenance ">>" SSL Certificate Management " to upload the SSL certificate. As shown below:



The SSL certificate establishes an SSL secure channel between the client browser and the Web server, and mainly used to provide a user authentication server, to encrypt data and hide。

A valid SSL certificate includes a public key and a private key. The public key is used to encrypt information, and the private key is used to interpret the encrypted information，When the browser points to a secure domain, SSL will synchronously confirm the server and the client, and create an encryption method and a unique session key.

Click System Maintenance->SSL Certificate Management to upload SSL certificate, as shown in the figure.

（1） Upload method

Login web， System Maintenance-> SSL Certificate Management-> Select Certificate(.crt.key)，select the server crt and key files in the local ssl certificate，then click to start uploading.

（2） Upload process

Uploaded certificate will replace the original ssl certificate. The page prompts that the certificate is uploaded successfully, restart the WEB service to ensure that the certificate takes effect，Selecting the ‘OK’ button will immediately restart the HTTP service，The browser needs to add a new certificate to confirm the risk before accessing AP WEB through HTTPS protocol. Uploaded crt and key files after restart the web service，cannot delete in the foreground. If you need to restore the default certificate, restore the AP to the factory and reconfigure the fat AP. If you delete the certificate in the background, it will cause https inaccessibility and https redirection failure.

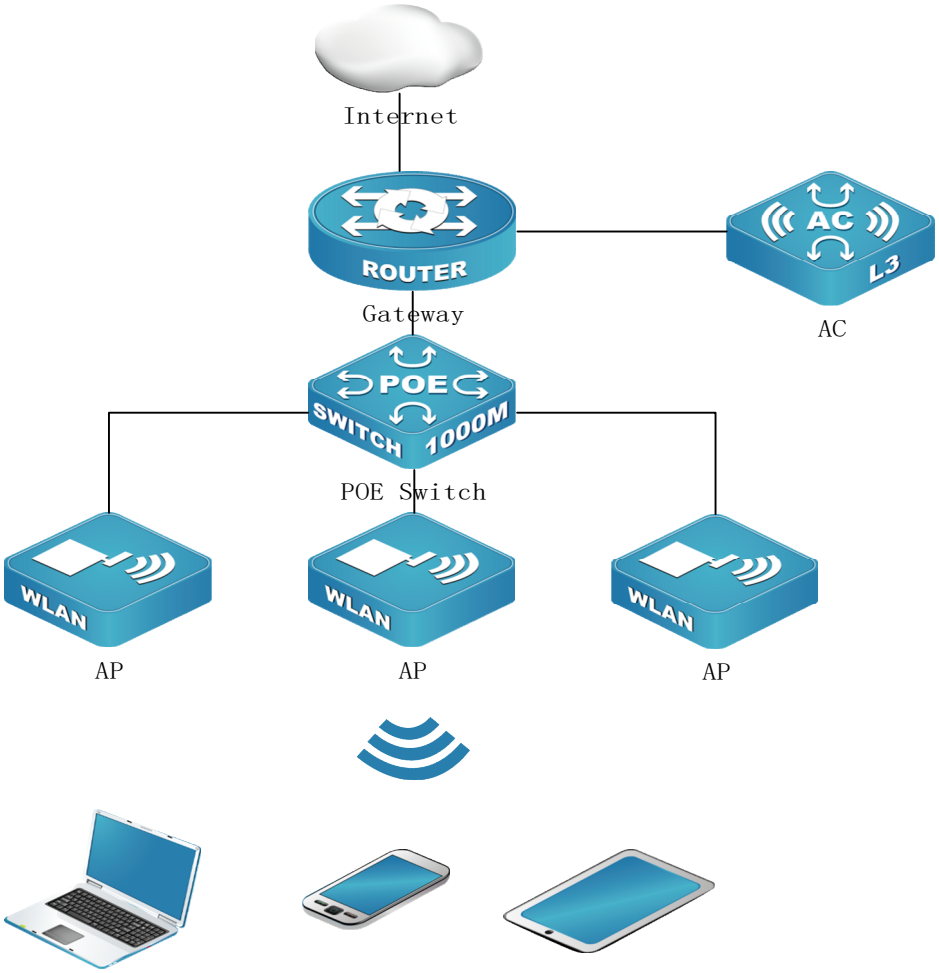
（3） Certificate View

admin@Dcn:/# cat /etc/ssl/certs/server.crt

3 FIT AP Mode

When there are a large number of APs on the network, the configuration or management one by one will become more complicated. At this time, it is suitable to use the FIT AP mode + AC (AP controller) for unified management and configuration, thereby reducing the configuration and management costs.

The typical topology is as following:



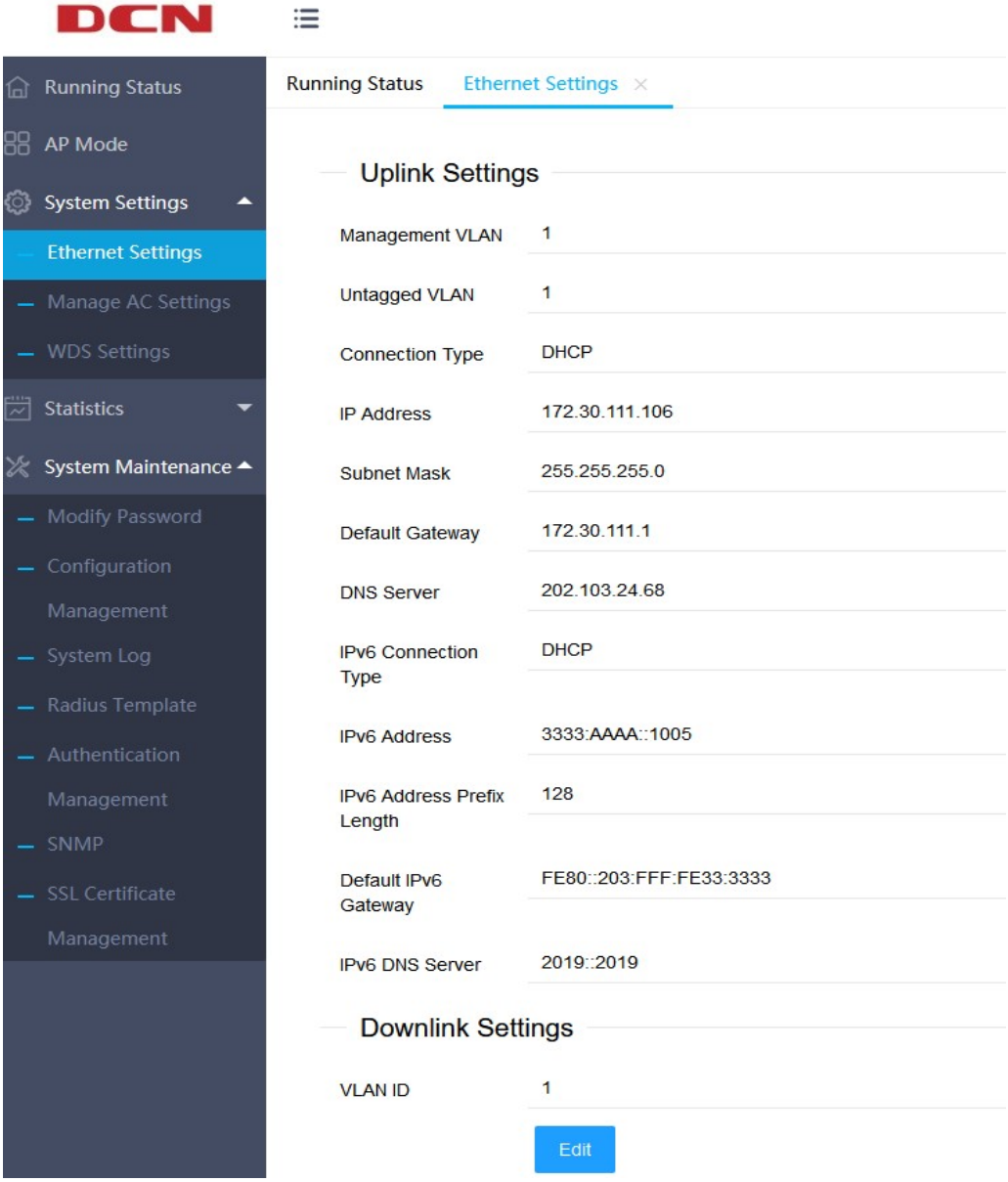
The AP is shipped in FIT AP mode by default. You can also switch to FIT AP mode by restoring the factory setting or following the instructions in the AP mode chapter. The wireless configuration of the FIT mode is operated uniformly through

the AC. For details about this part, please refer to the DCN related AC operation manual. Here, the AP's wired configuration, AC address setting, WDS configuration, and system management are mainly introduced.

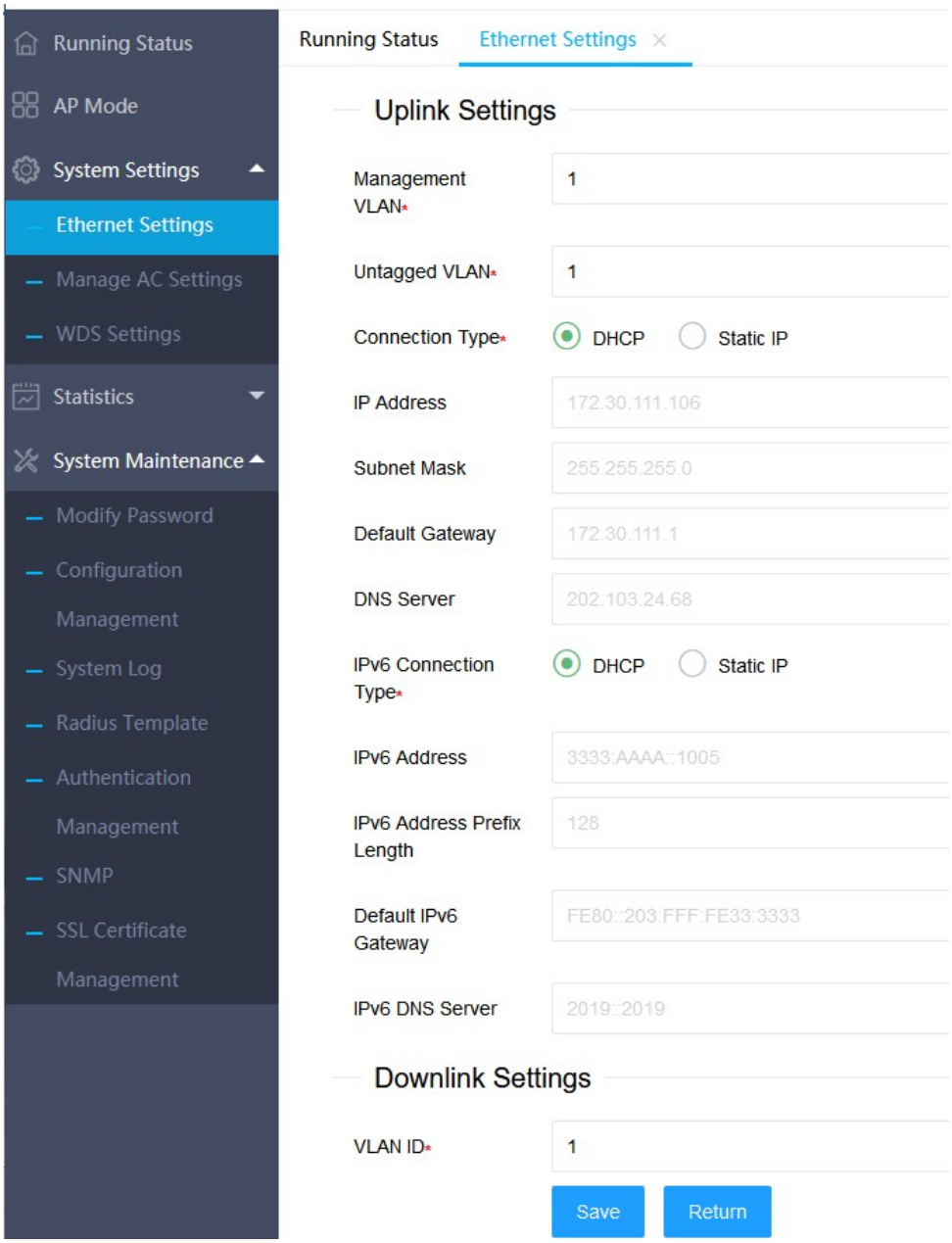
3.1 System Settings

3.1.1 Ethernet Settings

Click "System Settings">>"Ethernet Settings" on the left menu to enter the AP Ethernet setting interface. In default, the current status of the uplink port (usually the POE interface) and the downlink port of the AP are displayed. As following:



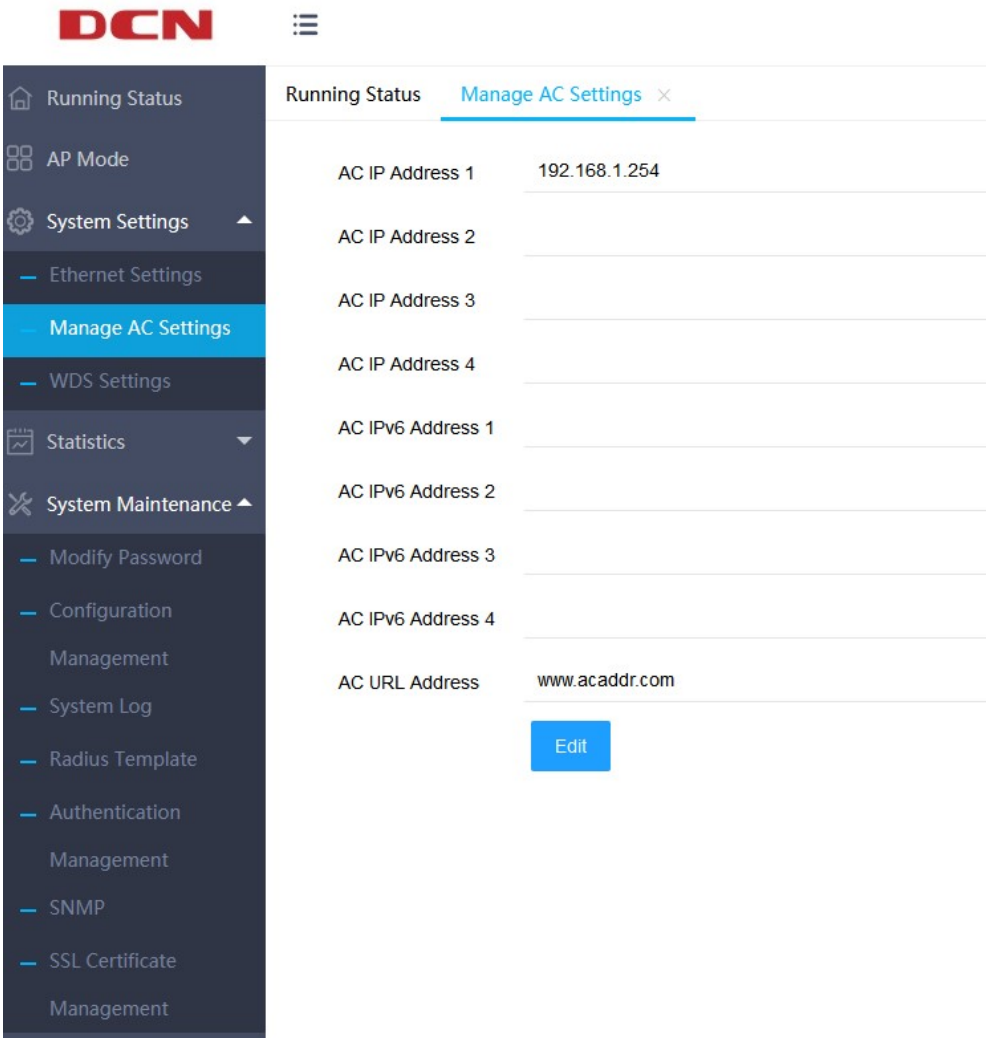
If you need to modify the related setting of the uplink port, you can click the "Edit" at the bottom of the interface to edit setting, where you can set the AP wired VLAN and the IP address configuration mode of the AP. As following:



3.1.2 Manage AC Settings

Click "System Settings">>"Manage AC Settings" on the left menu to enter the AC management setting interface. From this page, you can view the static AC management address of the current AP setting. If you need to configure the address of the static management AC, you can click the "Edit" at the bottom of the page to enter the setting page, where you can configure multiple IP (v6) addresses

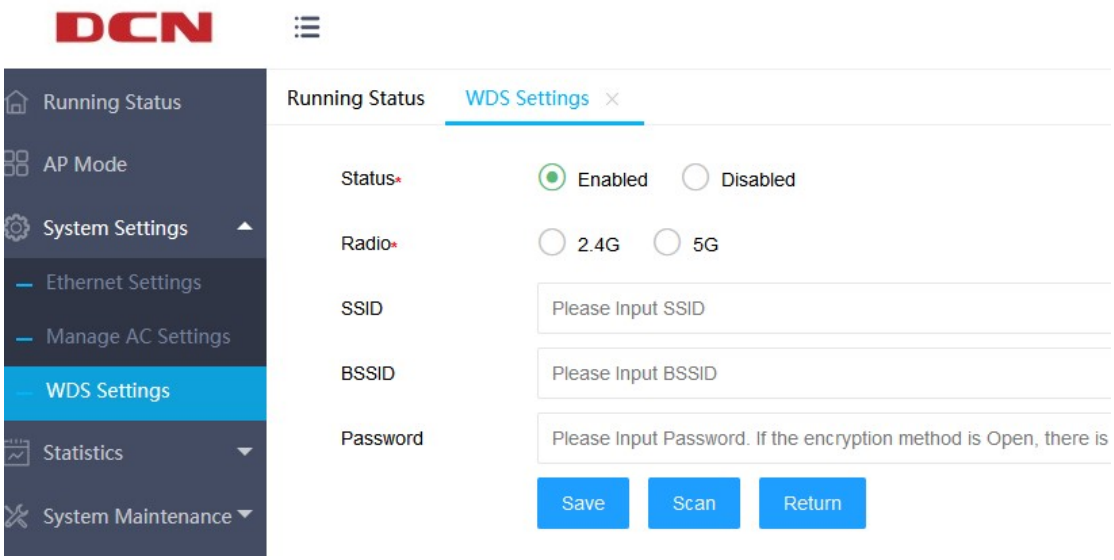
of the management AC or domain names of the management AC. As shown below:



Tip: In addition to static AC IP or AC domain name to find AC, you can also actively find AC through DHCP option. For details, refer to DCN AC related manuals or consult DCN staffs.

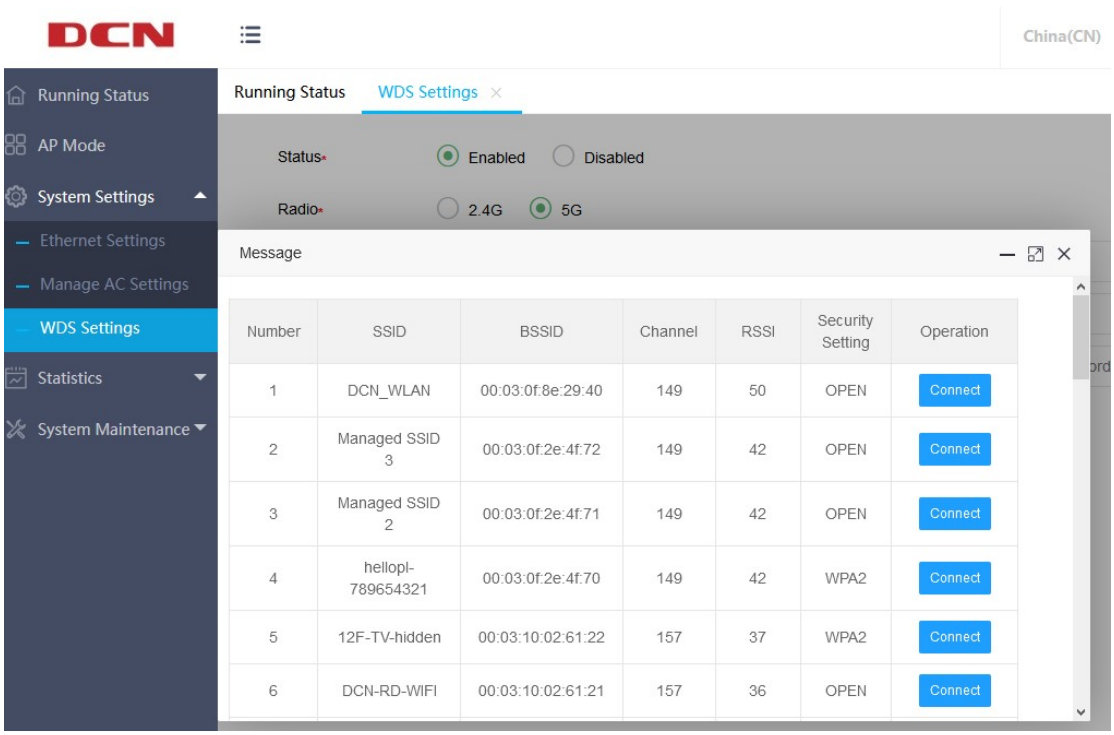
3.1.3 WDS Settings

Click "System Settings" >>"WDS Settings" on the left menu to view the WDS current status of the AP. If you need to bridge this AP with other ones, you can click the "Edit" at the bottom of the page to enter the WDS setting page, as shown below:



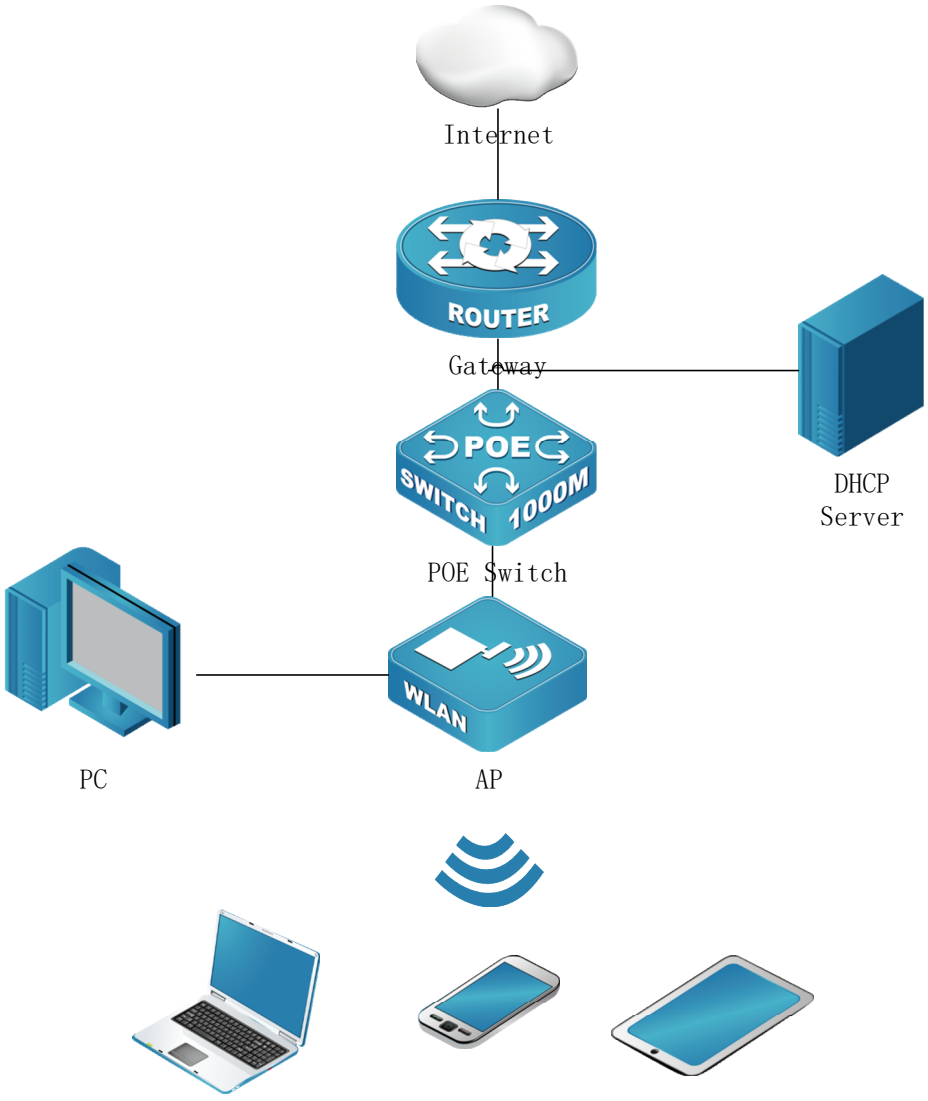
If you want to manually enter the information of the target wireless network or the target wireless network is a hidden network, you can directly enter the corresponding wireless network information and save it.

If you want to connect it through the scanning method, you can first select the radio frequency band to be bridged on this page, click the "Scan" to start scanning, select the target BSSID, and then select "Connect" for WDS connection, as shown below:


DCN
China(CN)
Running Status
AP Mode
System Settings
Ethernet Settings
Manage AC Settings
WDS Settings
Statistics
System Maintenance
Running Status
WDS Settings
Status*
Enabled
Disabled
Radio*
2.4G
5G
Message
Number
SSID
BSSID
Channel
RSSI
Security Setting
Operation
1
DCN_WLAN
00:03:0f:8e:29:40
149
50
OPEN
Connect
2
Managed SSID 3
00:03:0f:2e:4f:72
149
42
OPEN
Connect
3
Managed SSID 2
00:03:0f:2e:4f:71
149
42
OPEN
Connect
4
hellopl-789654321
00:03:0f:2e:4f:70
149
42
WPA2
Connect
5
12F-TV-hidden
00:03:10:02:61:22
157
37
WPA2
Connect
6
DCN-RD-WIFI
00:03:10:02:61:21
157
36
OPEN
Connect

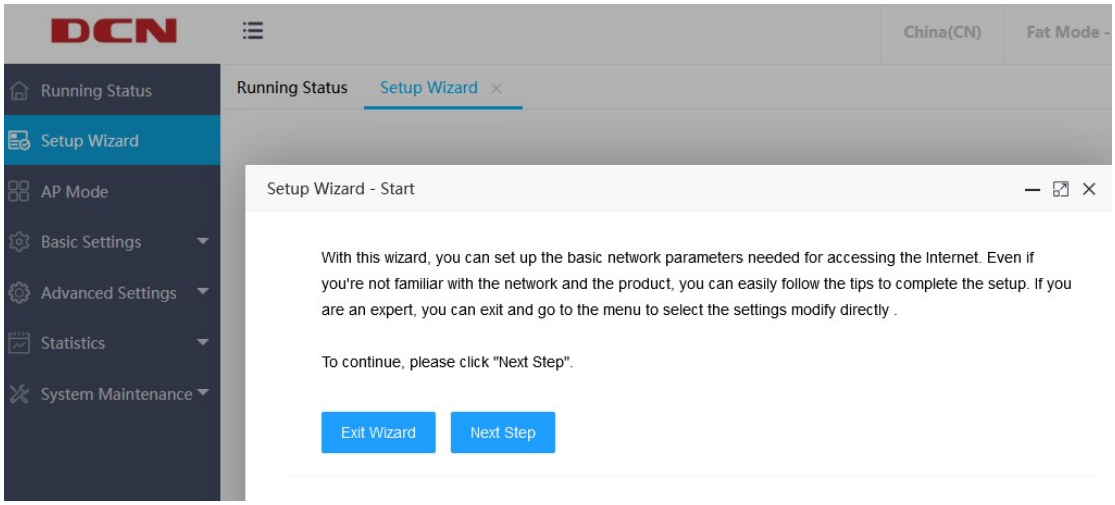
4 FAT Bridge Mode

When there is no AC in the network, you can select the fat mode. If there is a DHCP server in the network, you can switch the AP to the fat bridge mode to use the wireless network.

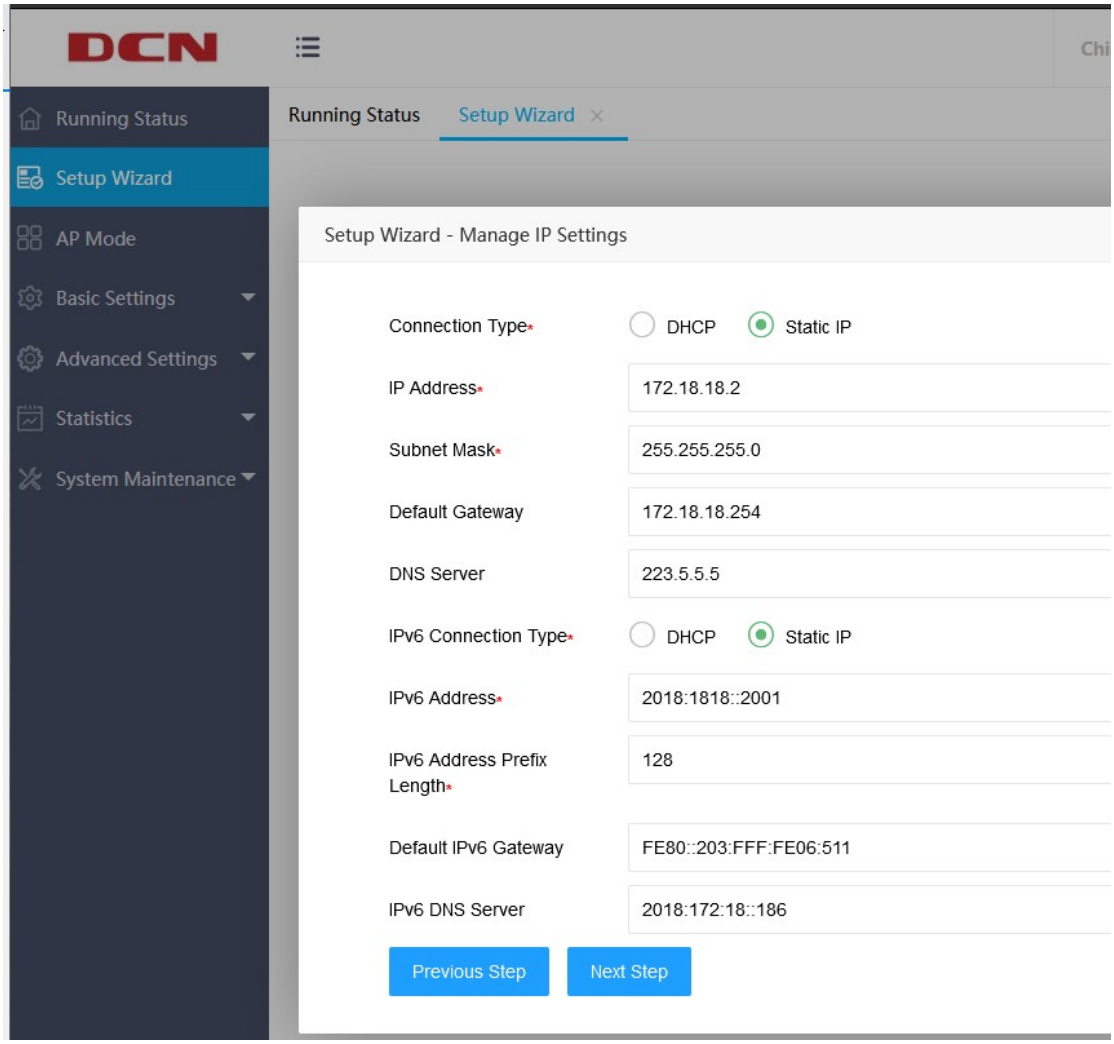


4.1 Setup Wizard

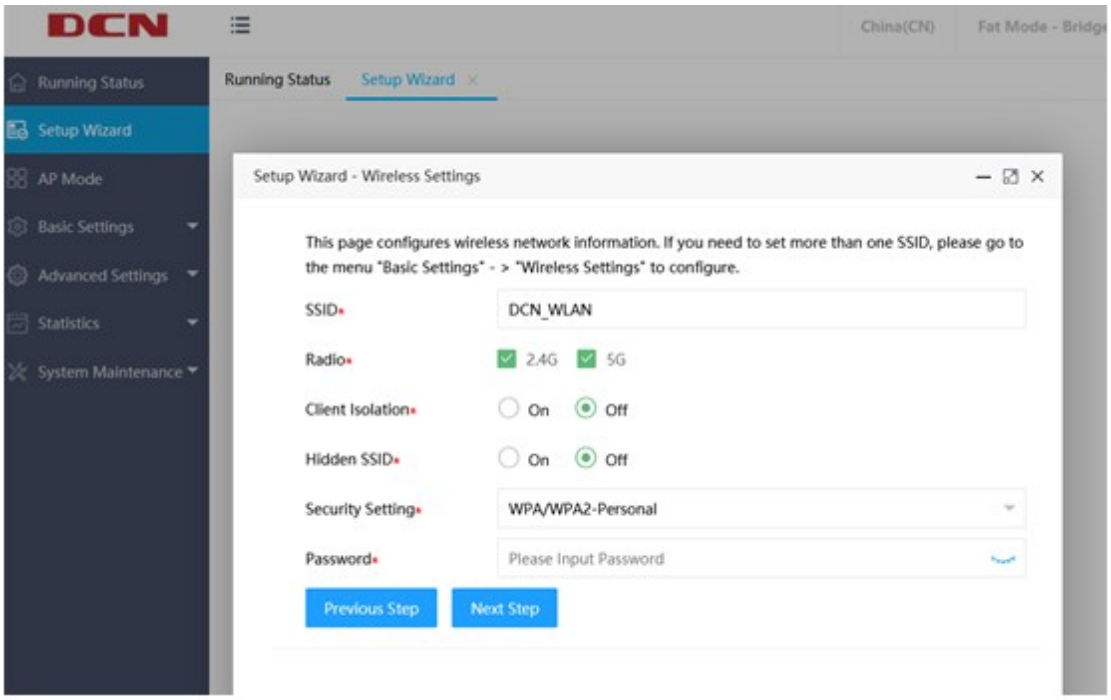
Clicking "Setup Wizard" on the left menu and then the "Setup Wizard-Start" interface will pop up, which introduces the role of the wizard. If you do not want to use the wizard, you can select "Exit Wizard".



If you want to use the wizard, you can click "Next Step" to enter the "Setup Wizard-Manage IP Settings" interface, where you can configure the AP's IP (v6) address connection method to be dynamic or static, as shown below:



After the management address setting is completed, click "Next Step" to enter the "Setup Wizard-Wireless Settings" interface, where you can set wireless parameters such as wireless name (SSID) and security mode, as shown in the figure below:

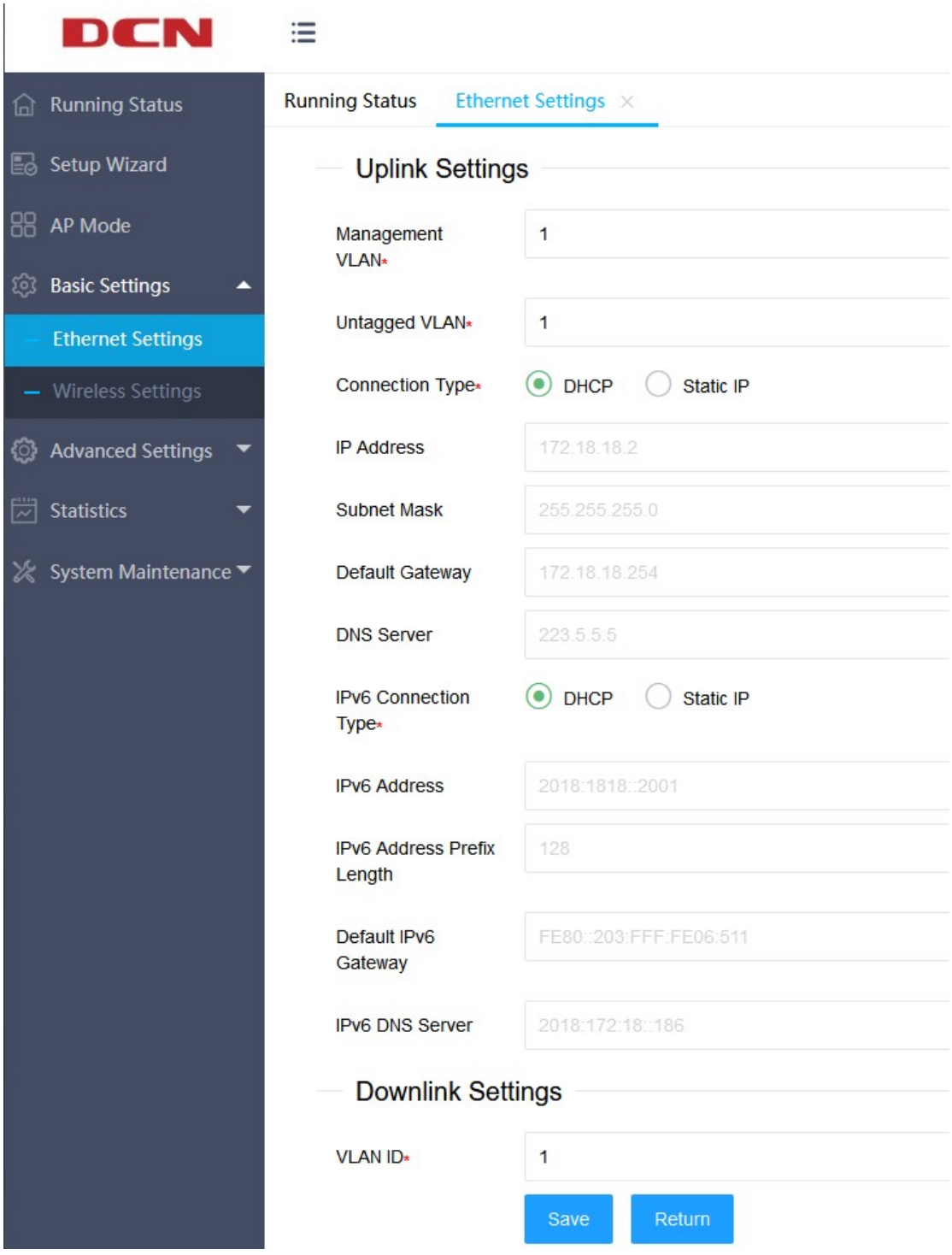


Click "Next Step" and then click "Complete". Finally, before you click "Complete", you can click "Previous Step" to modify the parameters that have been set. After you click "Complete", all parameter settings will take effect.

4.2 Basic Settings

4.2.1 Ethernet Settings

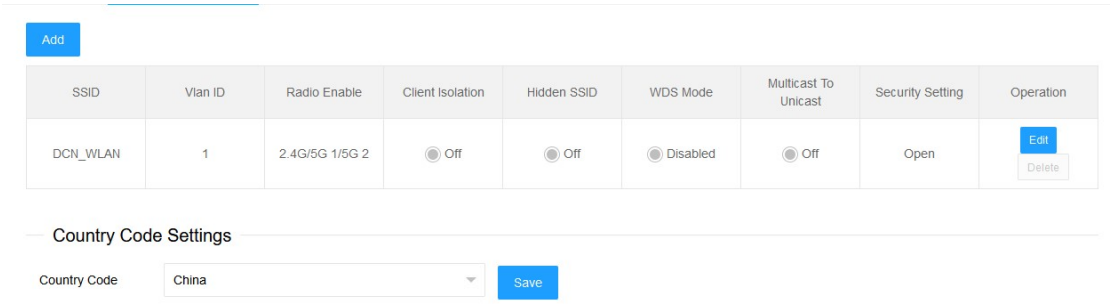
Click "System Settings">>"Ethernet Settings" on the left menu to enter the AP Ethernet setting page. The AP uplink (usually a POE interface) and the current status of the downlink are displayed by default. Then you can click the "Edit" at the bottom of the page to enter the page, where you can set the AP wired interface VLAN and the IP address configuration method of the AP. As shown below:



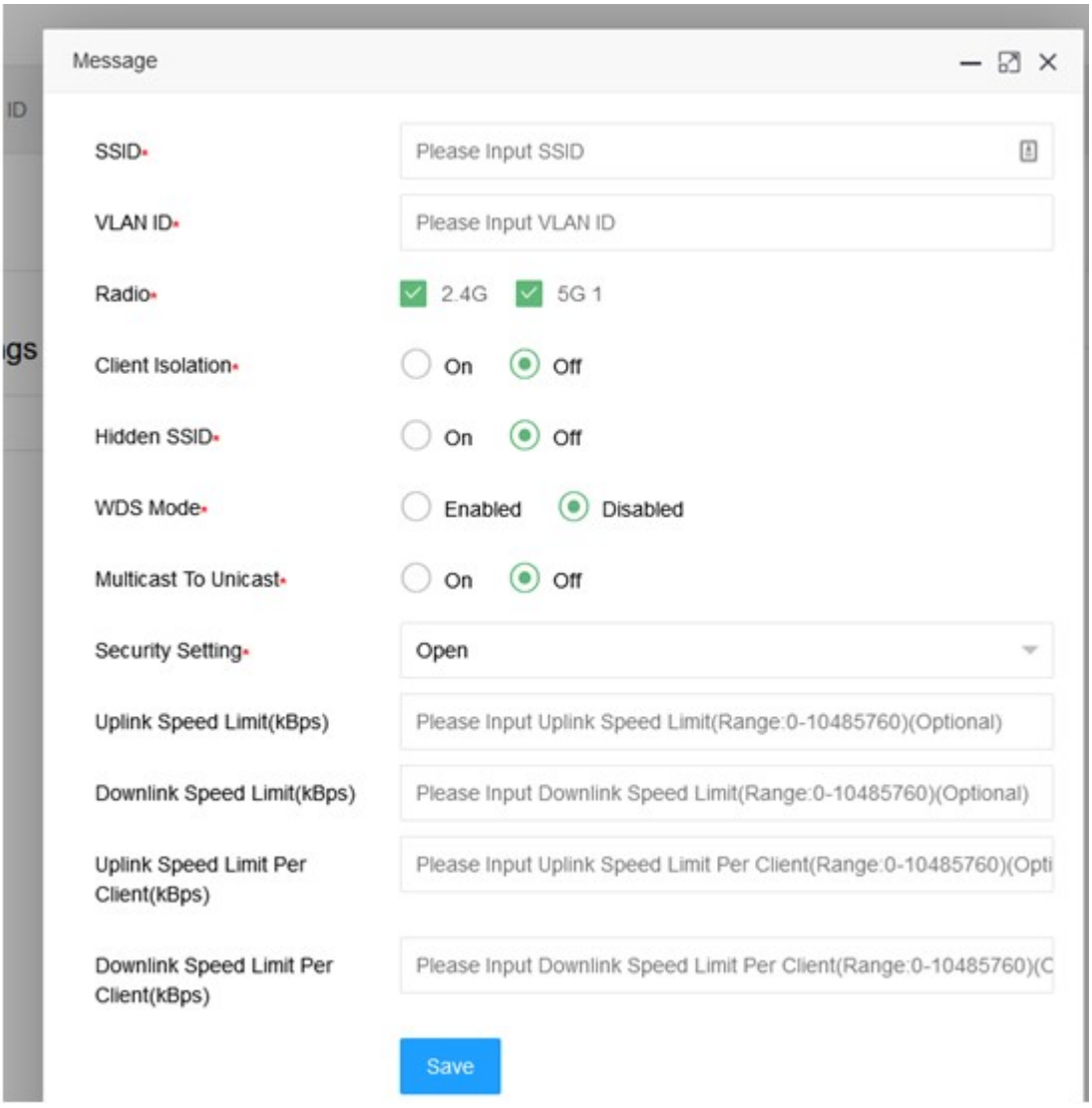
4.2.2 Wireless Settings

Click "Basic Settings">>"Wireless Settings" on the left menu to enter the wireless setting page, where you can set the basic parameters of the wireless

network, as shown below:



If you need to create a new wireless network, you can click "Add" and enter the corresponding parameters, as shown below:



The content marked with " * " in the above picture is required, the others are

optional, and the brief introduction is as follows:

Client Isolation: Communication control between wireless clients. When being turned on, wireless clients cannot communicate with each other. Off by default.

Hidden SSID: When the hidden SSID is turned on, the wireless client will not be able to search for this SSID information.

Security Settings: This router supports three security settings, Open, WPA / WPA2-Personal, and WPA / WPA2-Enterprise.

Uplink Speed Limit: Control the uplink speed of all users under this SSID to not exceed the specified speed.

Downlink Speed Limit: Control the downlink speed of all users on a certain radio frequency under the SSID to not exceed the specified speed.

Uplink Speed Per Client: Controls the uplink speed of each client accessing the wireless.

Downlink Speed Per Client: Controls the downlink speed of a single client.

It should be noted that the bandwidth speed limit is for wireless to wired interfaces, and does not include the speed limit between wireless to wireless interfaces or between wireless clients to wireless clients under the same VAP. And one-way SSID speed limit and client speed limit cannot be used at the same time. In addition, each AP can set up to 16 SSIDs. The default SSID can only be edited and cannot be deleted.

In addition, the OPEN mode does not need to set a password, and the wireless client can directly access;

In WPA / WPA2-Persional mode, you need to set a password with a length of 8 to 63 characters;

WPA / WPA2-Enterprise mode is authenticated by the radius server, so you need to bind the radius template. For details, refer to section 2.5.4.

4.3 Advanced Settings

4.3.1 Radio Settings

The radio setting page displays all radio information in a list with no new features. Click " Edit " in the operation column to modify the radio settings, including status, channel, channel bandwidth, transmit power, multicast rate, STBC mode, Beacon interval, DTIM period, RTS period, max clients, etc., as shown below:

Status: Setting the Radio on or off. On by default.

Mode: Configure the Radio mode, such as bgn, an, ac, axg, axa.

Channel Bandwidth: Configure the Radio bandwidth to 20Mhz, 40Mhz, 80Mhz.

Channel: Configure the Radio channel.

Transmit Power: Configure the Radio transmit power.

Multicast Rate: Configure the Radio to fixed multicast rate.

STBC mode: Setting the Radio STBC mode on of off. On by default.

Beacon Interval: Configure the Radio beacon interval, 100ms by default.

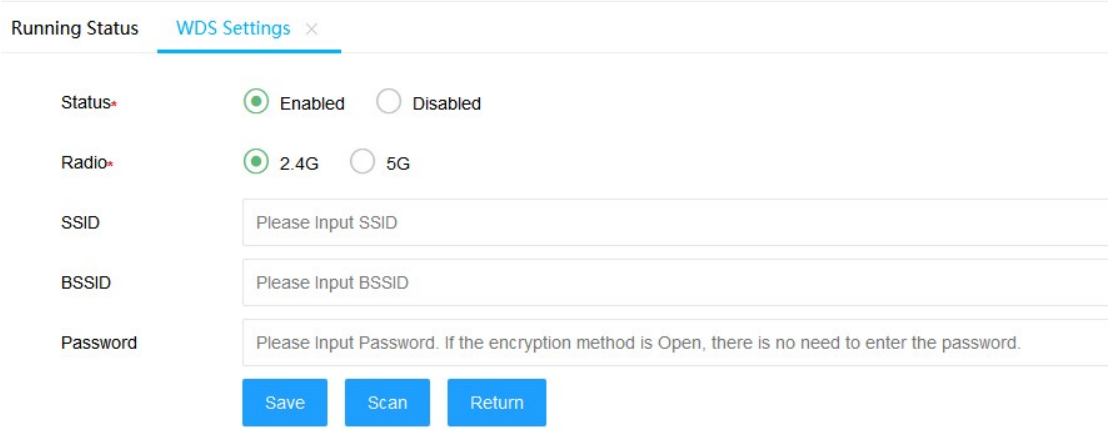
DTIM Period: Configure the beacon DTIM period, 1 by default.

RTS Period: Configure the packets size that triggers RTS.

Max Clients: Configure the max number of associated client.

4.3.2 WDS Settings

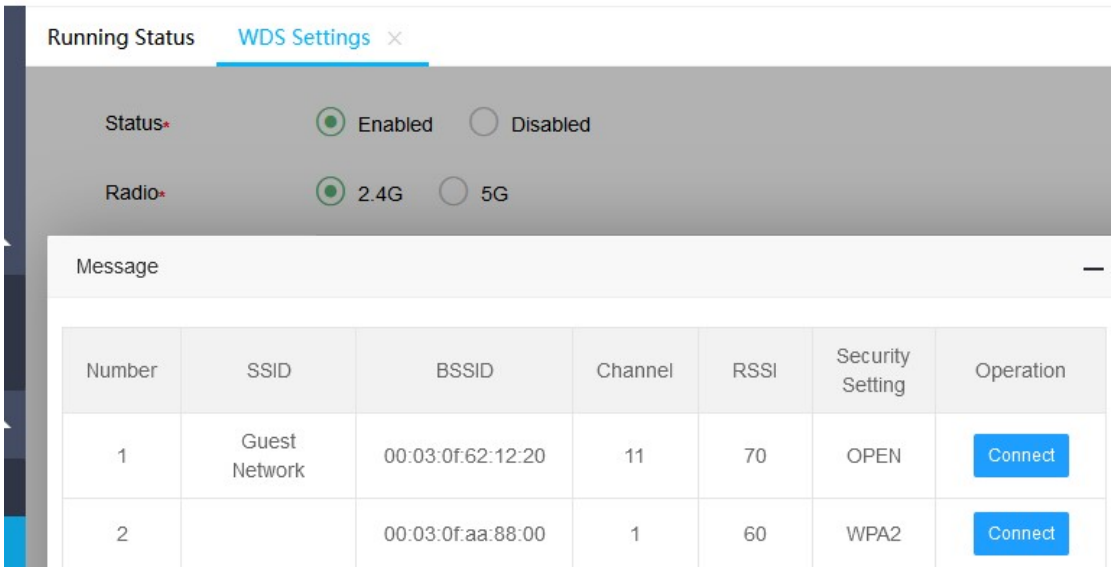
Click "Advanced Settings">>"WDS Settings" on the left menu to view the WDS current status of the AP. If you need to bridge this AP with other ones, you can click the "Edit" at the bottom of the page to enter the WDS setting page, as shown below:



If you want to manually enter the information of the target wireless network or the target wireless network is a hidden network, you can directly enter the related wireless network information and save it.

If you want to connect it through the scanning method, you can first select the radio frequency band to be bridged on this page, click the "Scan" to start scanning, select the target BSSID, and then select "Connect" for WDS connection, as shown

below:



4.3.3 WDS Precautions

- It is recommended that no more than three WDS series APs，Otherwise the transmission efficiency will be greatly reduced
- RootAP can be fit AP, also can be fat bridge AP
- The rootap SSID used for WDS connection is recommended to use 5G，because of the 2.4G throughput is too low.
- RootAP and Satellite the SSID used to connect to WDS SSID, other VAPs of the radio frequency can still release the SSID for service connection，WDS mode will not occupy the entire radio frequency resources.

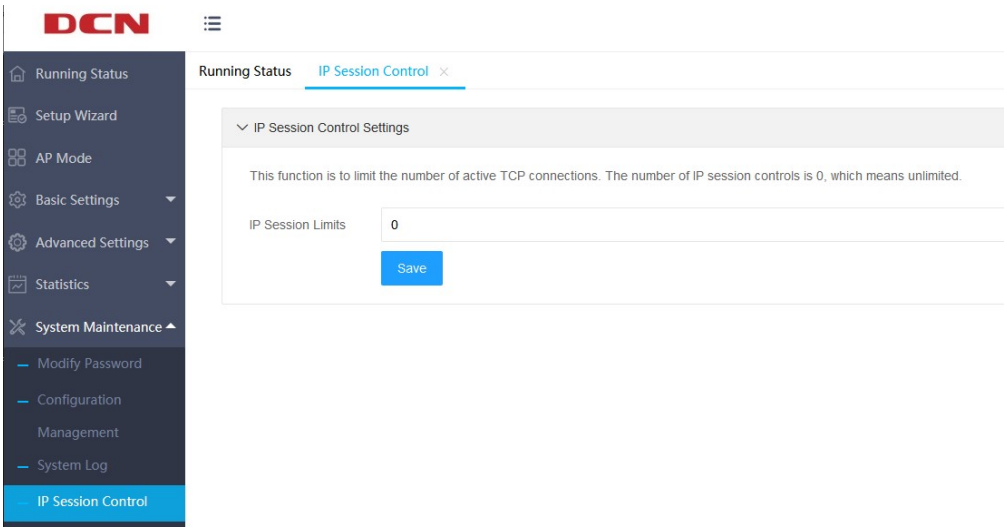
4.4 System Maintenance

4.4.1 IP Session Control

Click "System Maintenance">>"IP Session Control" on the left menu to enter

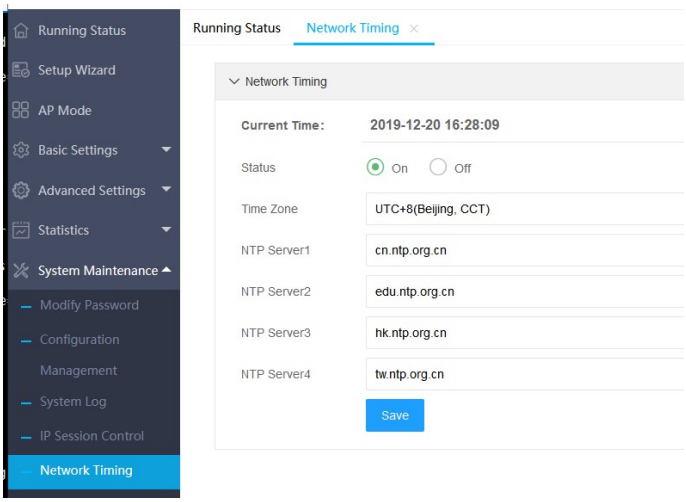
the IP session control page, where you can set the number of TCP connections that each client can use simultaneously. If the number of connections reaches the specified number, the new TCP connections will be rejected. Note that closed TCP connections are not counted in the number of connections.

The default is 0, which means unlimited. As shown below:



4.4.2 Network Timing

Click "System Maintenance" >>" Network Timing", you can set NTP network time, turn on or off the NTP server. It supports up to 4 NTP server settings. As shown below:



4.5 Configuration example

4.5.1 Open Wireless Connection

4.5.1.1 Networking Requirements

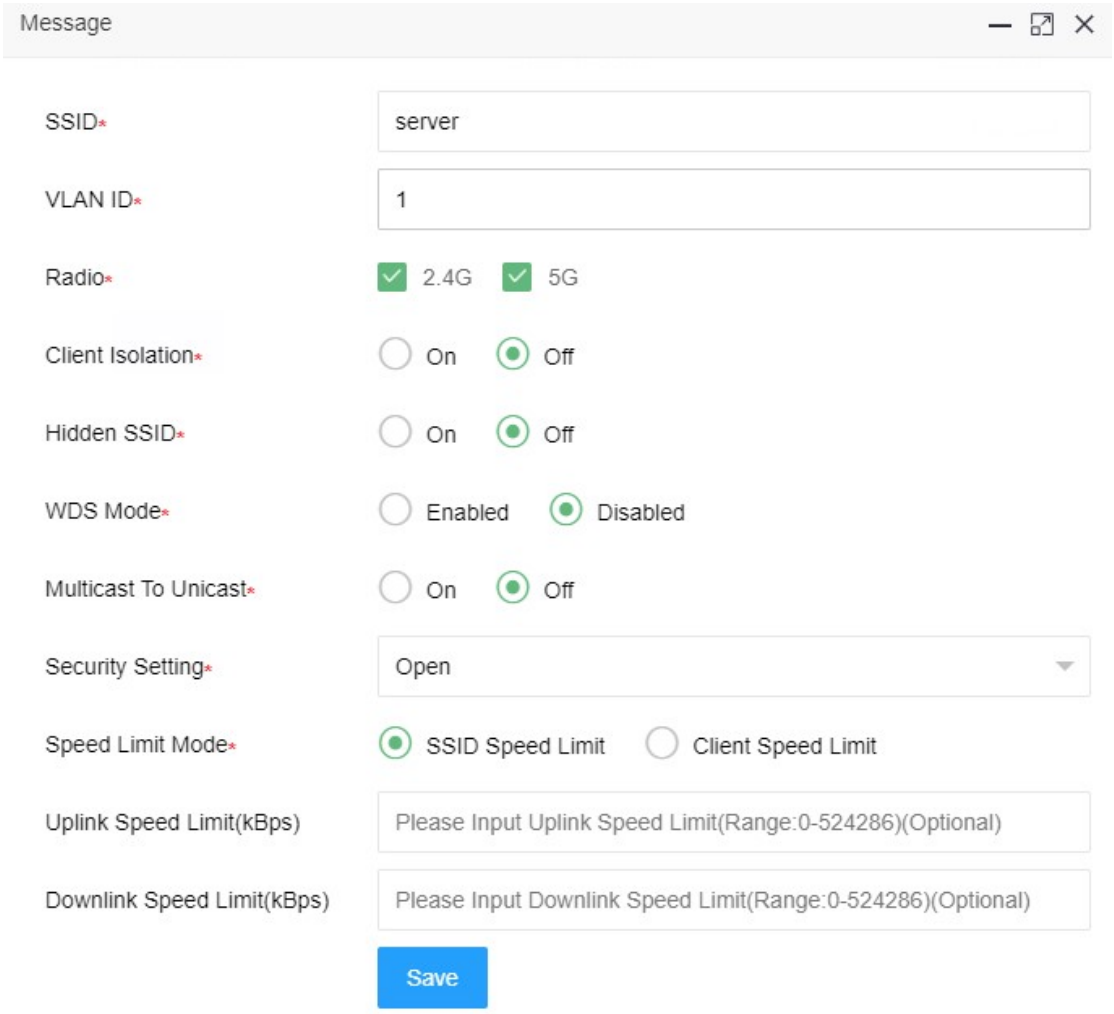
In order to ensure that staff can access the internal network resources of the department anytime and anywhere, need to achieve through the deployment of the AP. Device administrators can configure wireless access in open mode, the specific requirements are as follows:

- AP provides the SSID is 'service' and the security is the open mode.
- In order to high bandwidth requirements, and compatible with existing 802.11n wireless networks, adopt 802.11axg (2.4GHz) radio frequency mode.
- In order to high bandwidth requirements, and compatible with existing 802.11ac wireless networks, adopt 802.11axa (5GHz) radio frequency mode.

Wireless network with open mode:

4.5.1.2 Configuration Steps

Login AP basic setting, enter the wireless setting page.



- Radio 2.4G、5G check to enable
- VLAN ID configure according to actual situation
- SSID configure to “service”
- Security setting select “Open”
- Click <save> button

4.5.1.3 Verify configuration results

Enter the client statistics page, you can view the successfully online client。

4.5.2 WPA2-PSK Wireless Connection

4.5.2.1 Networking Requirements

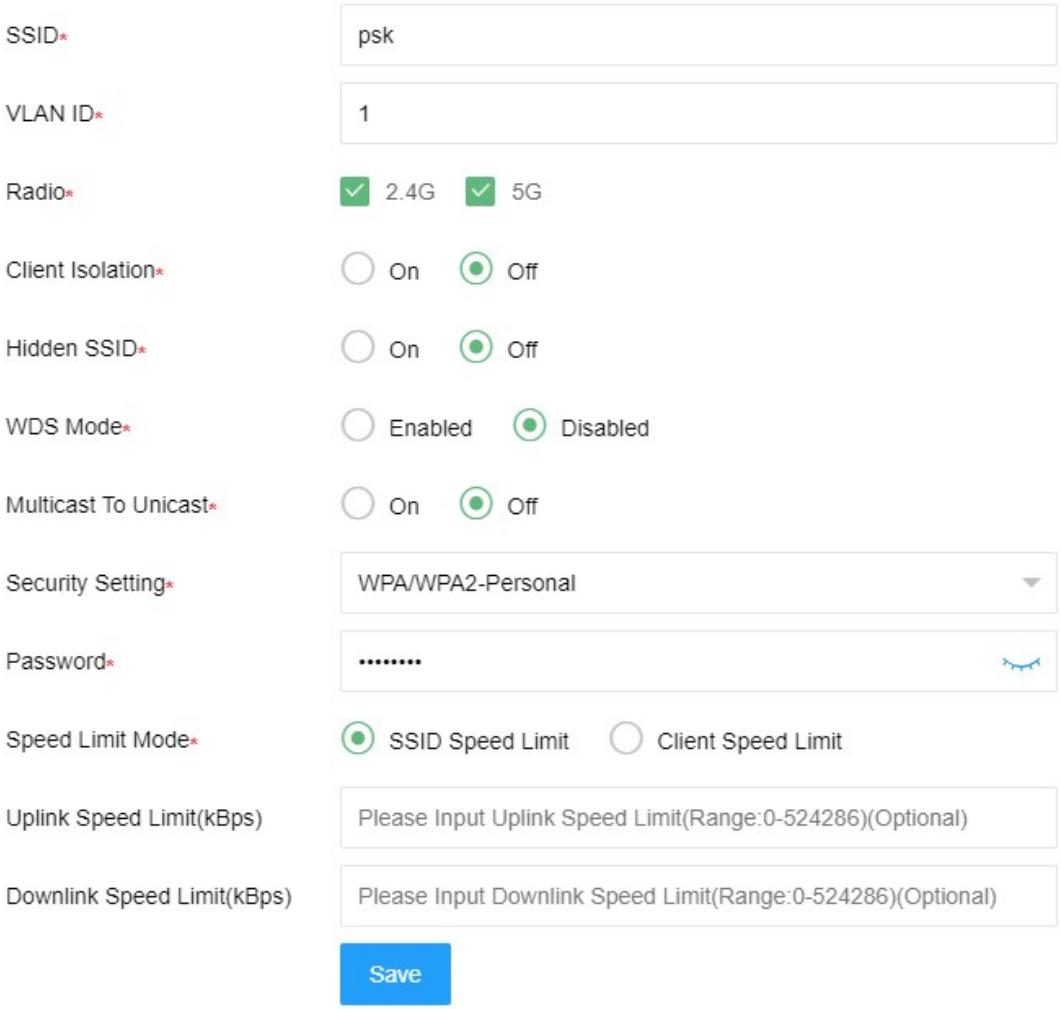
In a small office，device administrators can complete WPA2-PSK wireless access configuration through the web page, the specific requirements are as follows：

- AP provides the SSID is ‘service’ and the security is the WPA2-PSK.
- In order to high bandwidth requirements，and compatible with existing 802.11n wireless networks, adopt 802.11axg (2.4GHz) radio frequency mode.
- In order to high bandwidth requirements，and compatible with existing 802.11ac wireless networks, adopt 802.11axa (5GHz) radio frequency mode.

Wireless network with WPA2-PSK mode：

4.5.2.2 Configuration Steps

Login AP basic setting, enter the wireless setting page.



- Radio 2.4G、5G check to enable
- VLAN ID configure according to actual situation
- SSID configure to “psk”
- Security setting select “WPA/WPA2-Personal”
- Security configure to “12345678”
- Click <save> button

4.5.2.3 Verify configuration results

- Operation station connects to wireless network（ssid：psk）,enter password 12345678。After the client successfully associates with the AP, it can access the

wireless network.

- Enter the client statistics page, you can view the successfully online client.

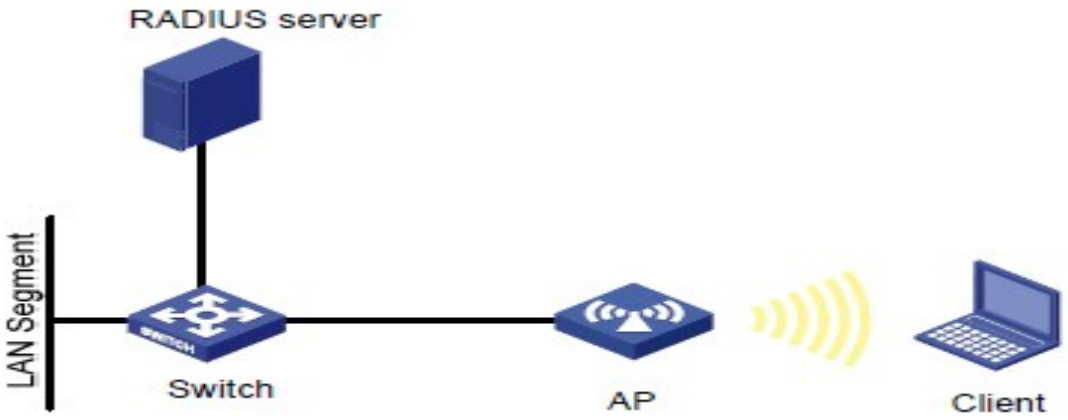
4.5.3 WPA2-Enterprise Wireless Connection

4.5.3.1 Networking Requirements

In a company's office, employees need to be able to access the office environment through wireless，mobile devices that are not employees of the company cannot be accessed，Administrators can configure WPA2-Enterprise by the web page, specific requirements are as follows：

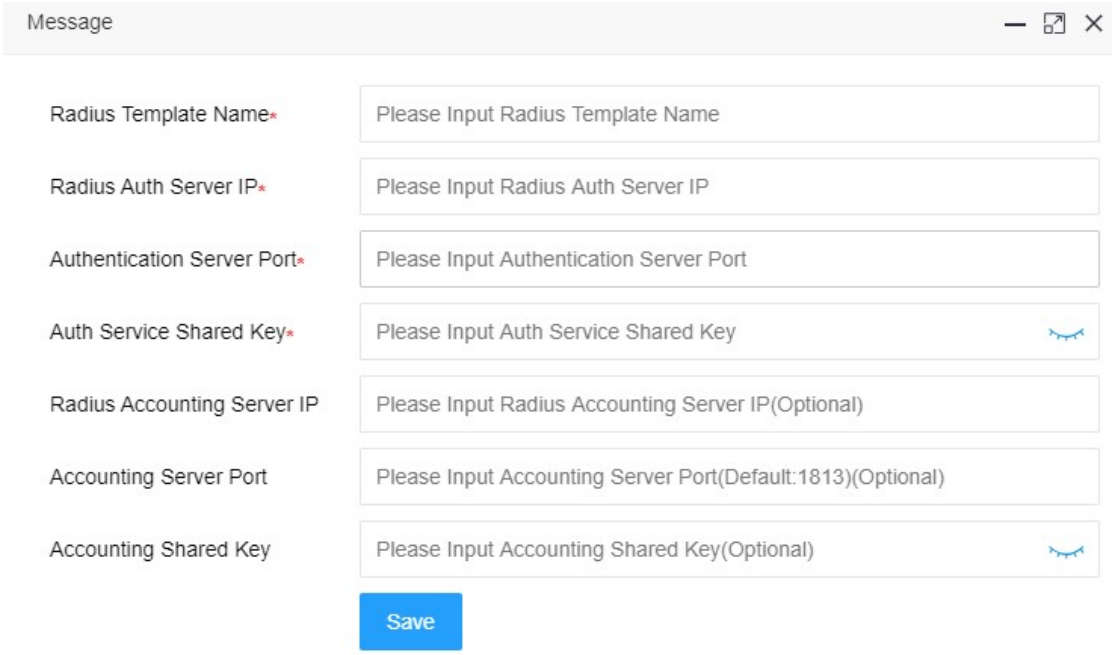
- AP provides the SSID is ‘WPA-Enterprise’ and the security is the WPA2-Enterprise.
- In order to high bandwidth requirements，and compatible with existing 802.11n wireless networks, adopt 802.11axg (2.4GHz) radio frequency mode.
- In order to high bandwidth requirements，and compatible with existing 802.11ac wireless networks, adopt 802.11axa (5GHz) radio frequency mode.

Wireless network with WPA2-Enterprise：



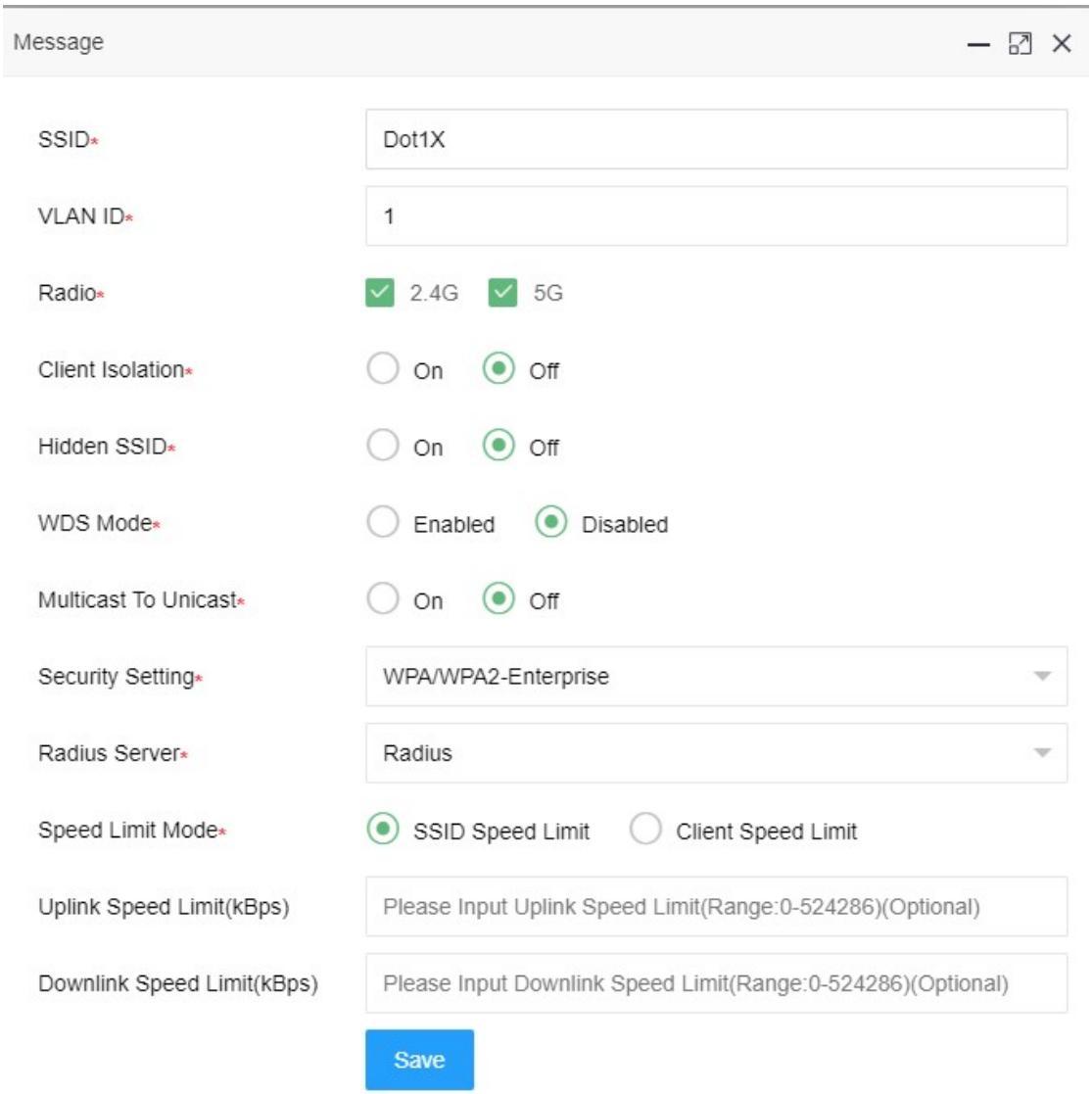
4.5.3.2 Configuration Steps

1. Login system maintenance，enter Radius template page.



- Configure Radius template name to ‘Radius’
- Configure the authentication server IP address and server port according to the actual Radius server address
- Configure shared key for authentication server settings
- Click <save> button

2. Logging AP web, edit wireless configuration



- Radio 2.4G、5G check to enable
- VLAN ID configure according to actual situation
- SSID configure to “Dot1X”
- Security setting select “WPA/WPA2- Enterprise”
- Radius server is selected as the configured Radius
- Click <save> button

4.5.3.3 Verify configuration results

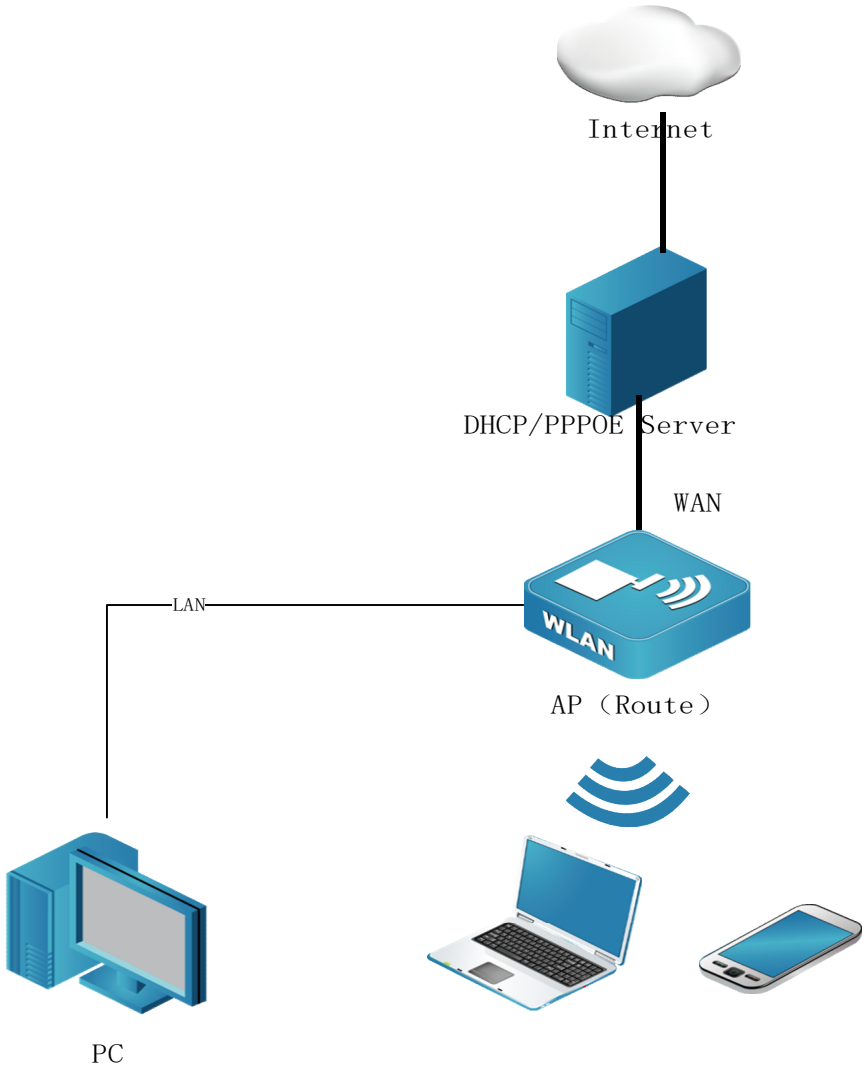
- The wireless client configures wireless network settings in windows，click

<add>button, enter in the "Network Name (SSID)" in the pop-up window “WPA-Enterprise”， Select " WPA/WPA2- Enterprise " for the network authentication type，click next. Change connection settings，click<setting>in safe page，select EAP authentication method "Secure password (EAP-MSCHAP v2)", cancel "Verify server identity by verifying certificate", click ok. Refresh the wireless network list，select the configured network service (WPA-Enterprise) in the list，click<connect>， enter the user name and password existing in the Radius server in the pop-up box. After the client successfully associates with the AP, it can access the wireless network.

- Enter the client statistics page, you can view the successfully online client.

5 FAT Routing Mode

The AP in the FAT routing mode can access broadband lines to provide DHCP and wireless access for LAN phones, laptops, etc. to achieve the shared Internet access. The typical topology is as follows:



On the WAN side of the AP, set the WAN port address through PPPoE, DHCP, or static address, and then connect to the Internet or other network through the gateway device. LAN and WLAN constitute a private subnet. Devices on this network apply to the AP for dynamic or static IP addresses through DHCP.

The WAN side and the LAN (WLAN) side network are isolated by a firewall. The LAN side host performs IP masquerading (NAT) and is not visible to the WAN side device.

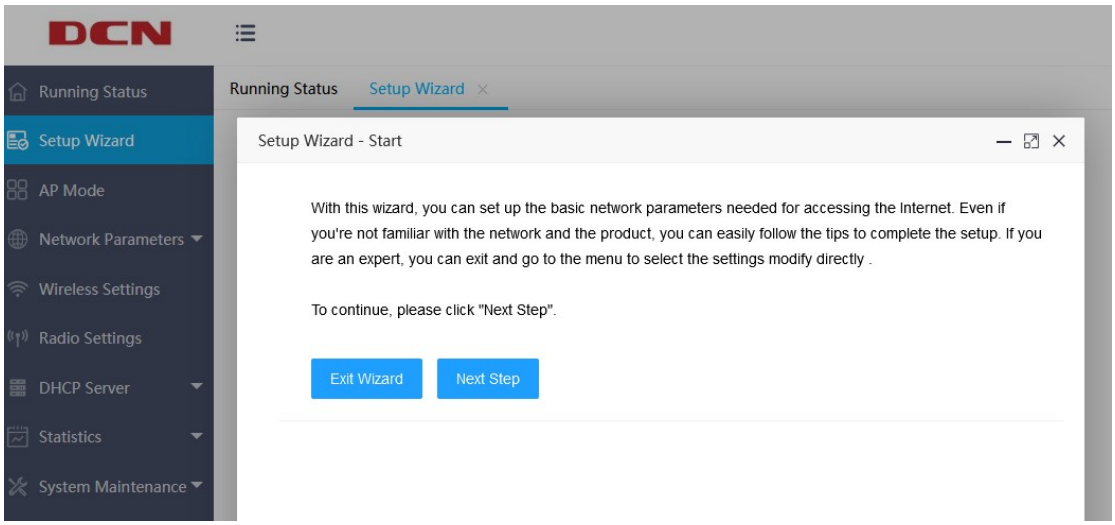
5.1 WEB Login

Unlike the fit mode and the fat bridge mode, in the fat routing mode the AP can only be accessed from the LAN side, so it can only be accessed by using a LAN-side wired device connected to the AP's LAN port or a wireless terminal connected to the AP's SSID (the default is DCN_WLAN). Open the browser after connecting and enter the LAN side management IP address (the default address is: 192.168.1.10), you can access the web setting interface of the wireless AP, recommended use: Google, Firefox, 360 browser (speed mode) or IE11 browser. The default username is: admin, and the password is: admin, which supports https access.

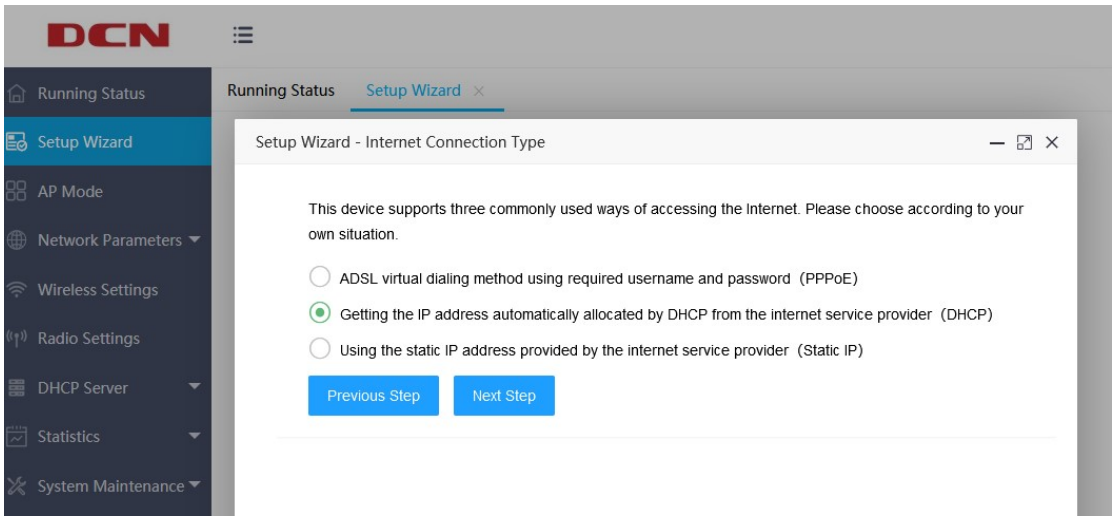
5.2 Setup Wizard

Click "Setup Wizard" on the left menu to configure the device. The detailed

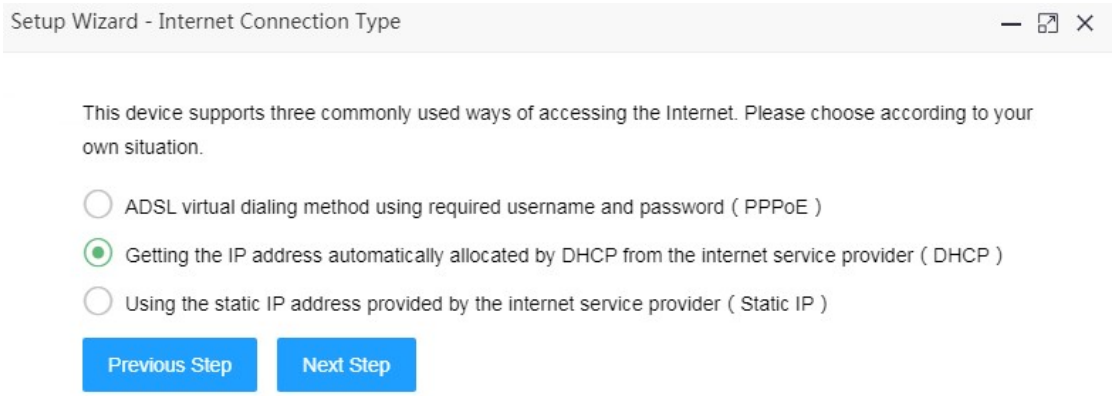
steps are as shown below:



There are three Internet access modes supported by the device: PPPoE, dynamic IP and static IP, which can be configured according to the Internet access provided by the network service provider. As shown below:



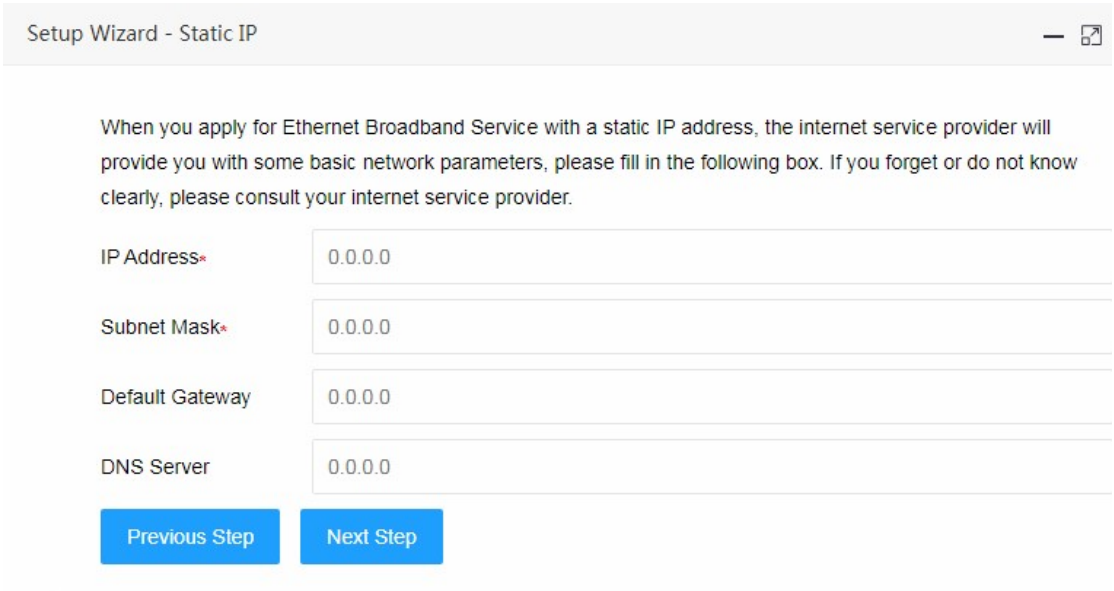
5.2.1 Dynamic IP



Select the way the Internet is dynamic IP，will jump directly to the next wireless setting.

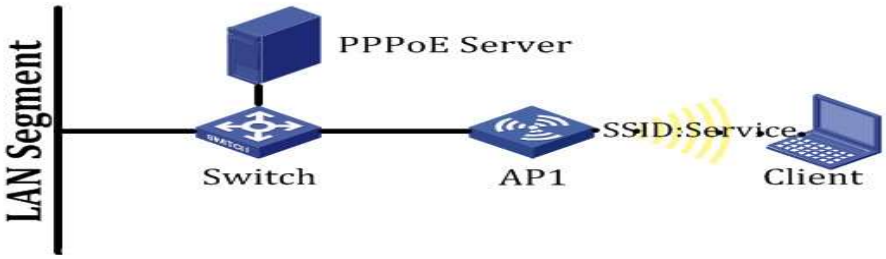
5.2.2 Static IP

Select the way the Internet is static IP，need to configure static IP address，as shown below：

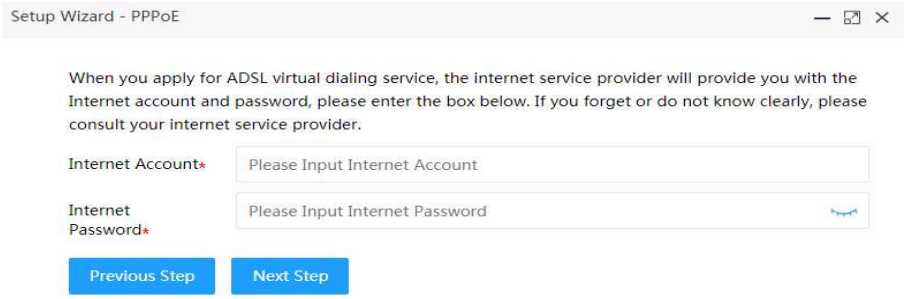


5.2.3 PPPoE

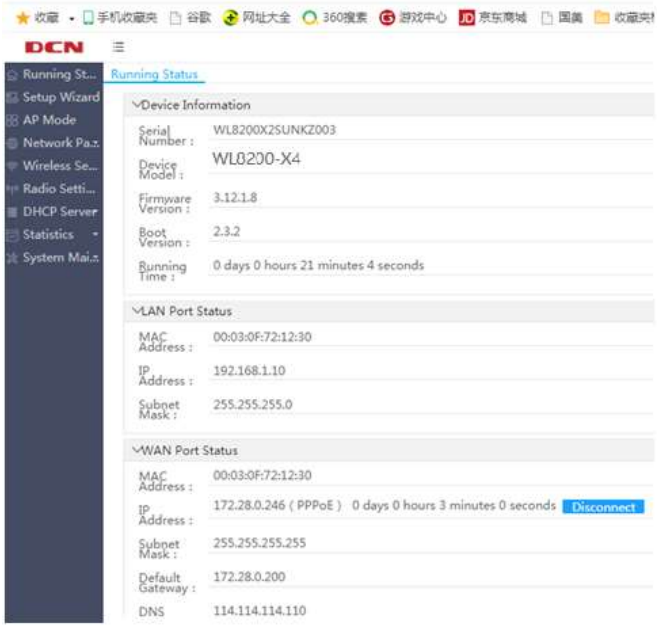
PPPoE topology:



Select the way the Internet is PPPoE，need to fill in the online account and password provided by the ISP, as shown below:



Dialing successful, after completing the AP wireless network settings, you can see the following picture:

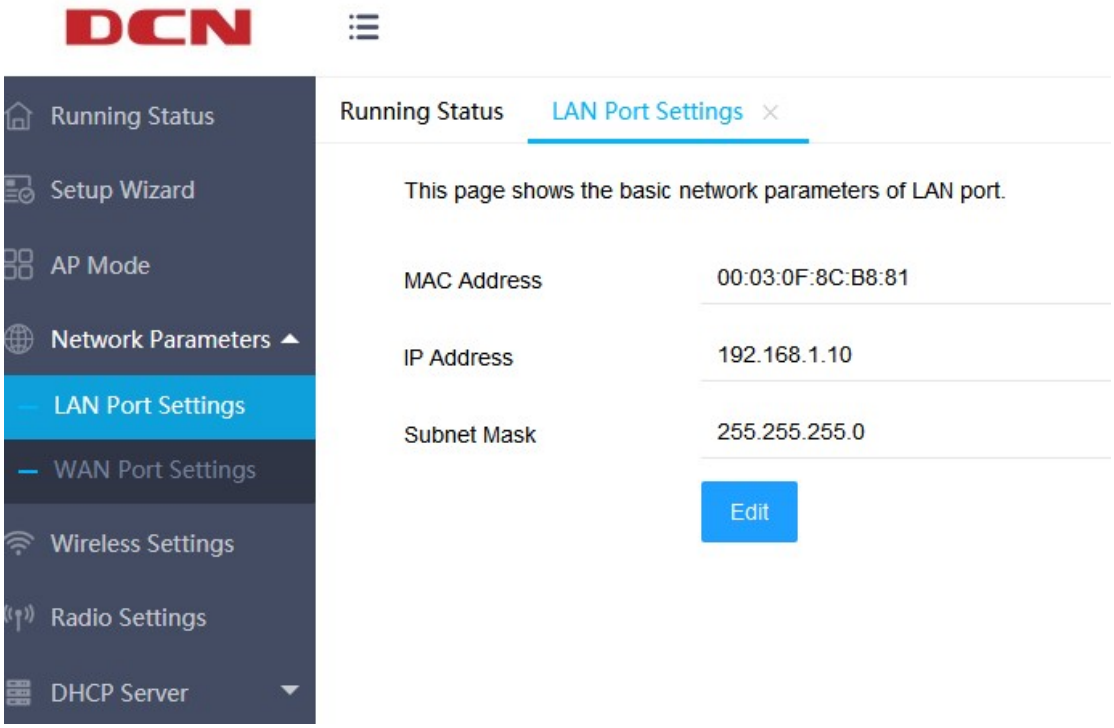


5.3 Network Parameter Settings

5.3.1 LAN Port Setting

Click "Network Parameters">> "LAN Port Settings" on the left menu to set the LAN side IP address and subnet mask. When the LAN port IP parameters are changed, to ensure that the DHCP server can work normally, the address pool, static address set in the DHCP server and the new LAN port IP should be on the same network segment. After saving the settings, please enter IP address to visit this page.

As shown below:



MAC Address: The MAC address of the AP to the LAN is used to identify the local area network and cannot be changed.。

IP Address: The IP address of the AP to the LAN. The factory default value of

this IP address is 192.168.1.10 and you can change it if needed.

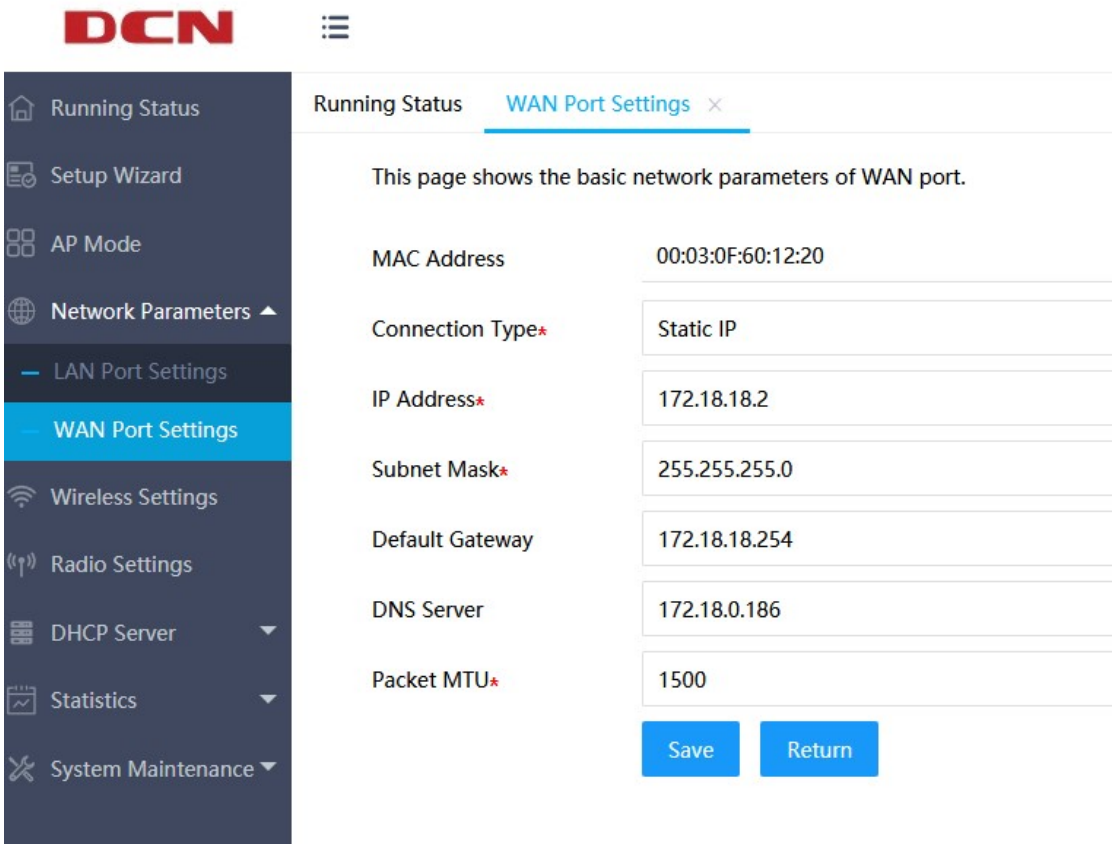
Subnet Mask: The subnet mask of this AP to the LAN. You can enter different subnet masks based on the actual network status.

5.3.2 WAN Port Settings

Click "Network Parameters">> "WAN Port Settings" on the left menu to modify the basic parameters of the WAN port.

There are currently three ways to obtain the IP address of the WAN port: static IP, dynamic IP, and PPPoE, which can be set according to the Internet access method provided by the service provider. Compared to the setup wizard, the information configured on this page is more comprehensive.

If the selected IP address acquisition method is static IP, as shown below:



IP Address: The IP address of the AP to the WAN. Please enter the public IP address provided by the ISP. It must be set.

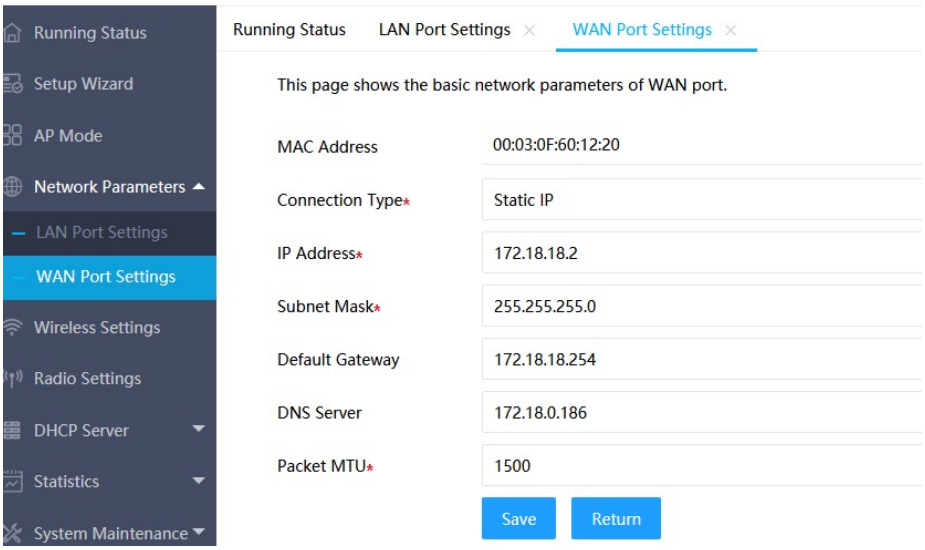
Subnet Mask: The subnet mask of this AP to the WAN. Please enter the subnet mask provided by the ISP. According to different network types, the subnet mask is different, generally 255.255.255.0 (class C).

Default Gateway: Please enter the gateway provided by the ISP. It is the IP address of the connected ISP.

DNS Server: Please enter the DNS server provided by the ISP.

Packet MTU: The MTU is a data transmission unit throughout, and the default value is 1500. Please ask the ISP if you need to change it, but don't change it unless it is specifically needed.

If the selected IP address acquisition method is dynamic IP, as shown below:

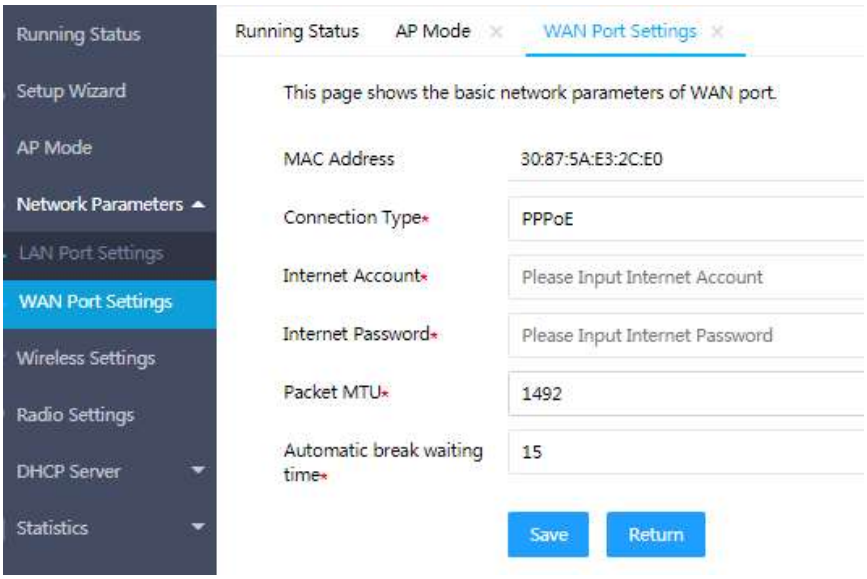


DNS Server: This shows the DNS server address automatically obtained from the ISP.

Packet MTU: The MTU is a data transmission unit throughout, and the default

value is 1500. Please ask the ISP if you need to change it, and don't change it unless it is specifically needed.

If the selected IP address acquisition method is PPPoE, as shown below:



Internet Account and Password: Please enter the Internet account and password provided by the ISP correctly. This item must be filled in.

On-demand Connection: If you select the on-demand connection mode, the system will automatically connect when there is a network access request from the local area network. If there is no network request within the set time (automatic disconnection waiting time), the system will automatically disconnect. For users who are billed based on usage time, this connection method can be selected to effectively save Internet access costs.

Automatic Connection: If the automatic connection mode is selected, the system will automatically connect after power on. During use, if the network is disconnected due to external reasons, the system will try to connect at regular intervals until the connection is successful. If your network service is a monthly

subscription, you can choose this connection method.

Manual Connection: Select this option to require the user to dial-up manually after power-on. If there is no network request within the specified time (automatic disconnection waiting time), the system will automatically disconnect. You can choose this connection method if your Internet service pays according to the time of use

Automatic Break Waiting Time: The default value is 15 minutes. If there is no network access traffic for this set period of time, the network connection will be automatically disconnected to protect your online resources. This setting is only effective for "On-demand connection" and "Manual connection".

Packet MTU: The MTU is a data transmission unit throughout. The default value is 1492. Please ask the ISP if you need to change it, and don't change it unless it is specifically needed.

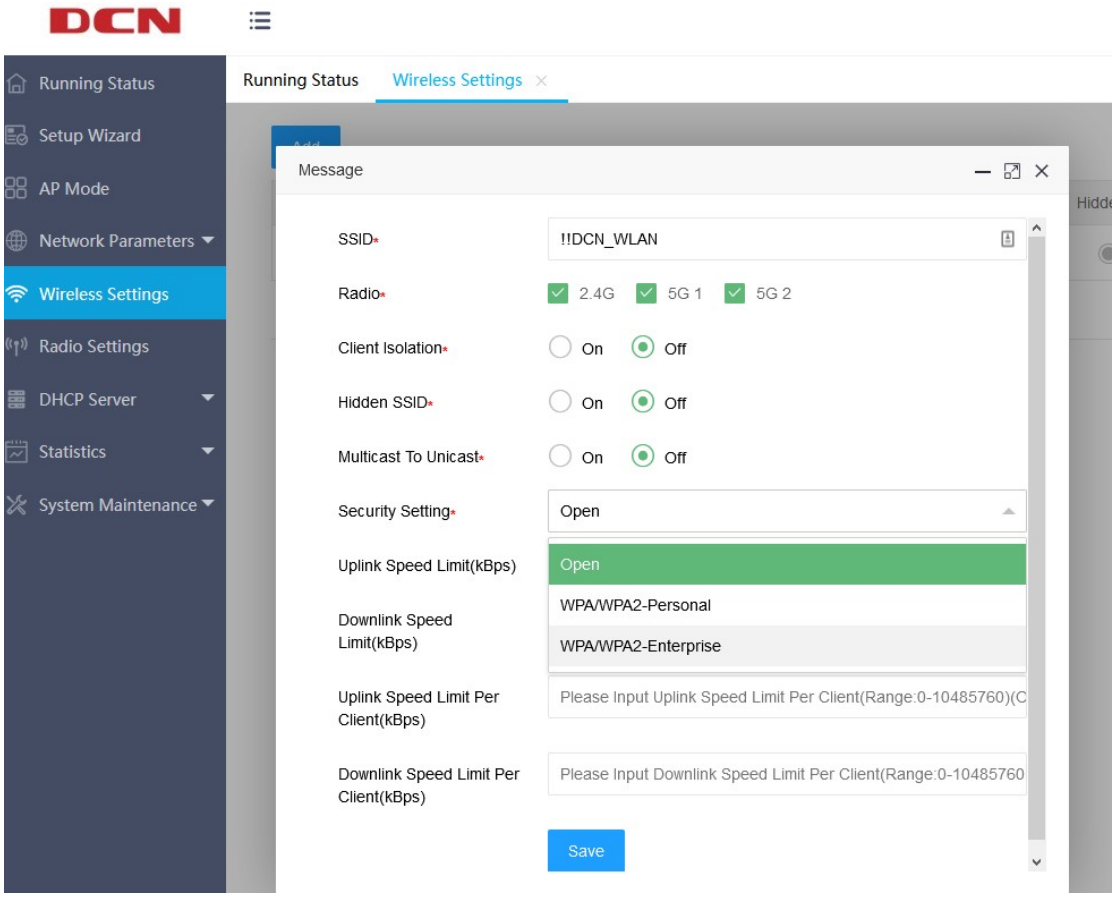
5.4 Wireless Settings

The wireless settings mainly set the basic parameters of the router wireless network. The first SSID is reserved by the system and can be edited but not deleted. The maximum number of SSIDs is 16. As shown below:

Client Isolation: Communication control between wireless clients. After being turned on, wireless clients cannot communicate with each other. Off by default.

Hidden SSID: When the hidden SSID is turned on, the wireless client will not be able to search for this SSID information.

Security Settings: This router supports three security settings: open, WPA / WPA2-Personal, WPA / WPA2-Enterprise.



The OPEN mode does not need to set a password, and the wireless client can directly access;

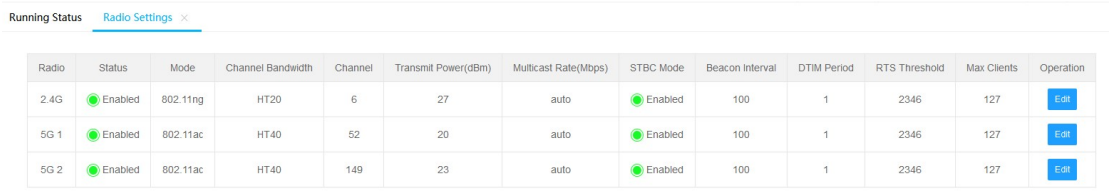
In WPA / WPA2-Persional mode, the user need to set a password with a length of 8 to 63 characters;

WPA / WPA2-Enterprise mode is authenticated by the radius server, so you need to bind the radius template. For details, refer to section 2.5.4.

5.5 Radio Settings

The radio setting page displays all radio information in a list with no new

features. Click " Edit " in the operation column to modify the radio settings, including status, channel, channel bandwidth, transmit power, multicast rate, STBC mode, Beacon interval, DTIM period, RTS period, max clients, etc., as shown below:

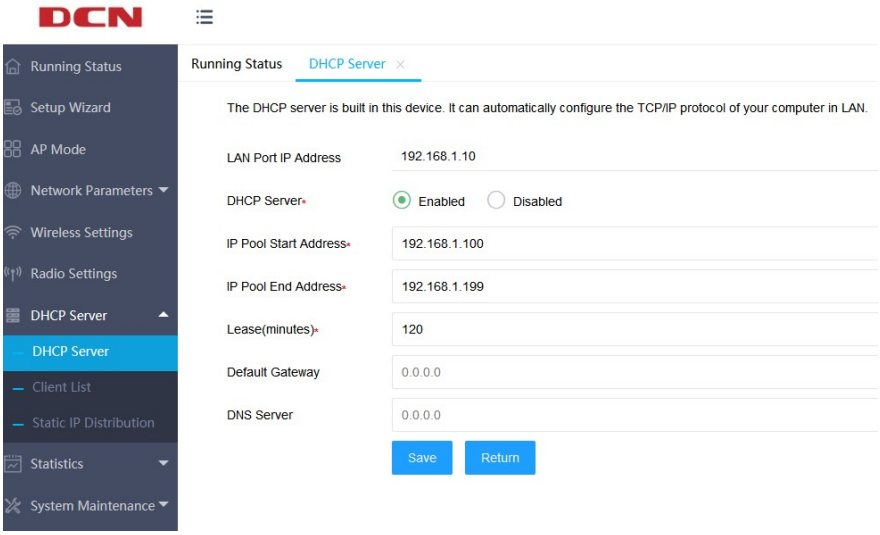


5.6 DHCP Server

DHCP refers to the Dynamic Host Control Protocol. The WL8200-T3 (IT3) has a built-in DHCP server that can automatically assign IP addresses to computers in the local area network. It is not easy for users to configure TCP / IP protocol parameters for all computers in the local area network. It includes IP address, subnet mask, gateway, DNS server, etc. The DHCP service can solve these problems.

5.6.1 DHCP Server

Click "DHCP Server">> "DHCP Server" on the left menu to set the DHCP server parameters. As shown below:



IP Pool Start Address and IP Pool End Address: These two items are the start address and end address when the DHCP server automatically allocates IP addresses. After setting these two items, the IP address obtained by the intranet host will be between these two addresses.

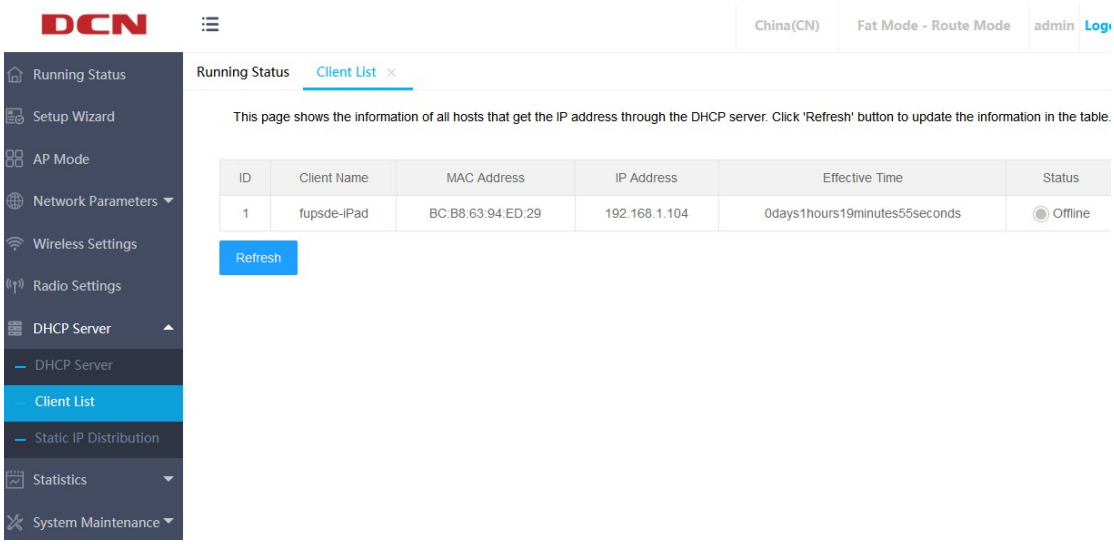
Address Lease: This item refers to the valid use time of the dynamic IP address assigned by the DHCP server to the client host. During this time, the server will not assign IP addresses to other hosts.

Default Gateway: This item should be filled in the IP address of the router LAN port. The default is 192.168.1.10.

DNS Server: Enter the DNS server provided by the ISP.

5.6.2 Client List

Click "DHCP Server"-> "Client List" on the left menu, you can see the information of all the hosts that have obtained the IP address through the DHCP server. As shown below:



Client Name: This field displays the client name that has obtained the IP address.

MAC Address: This field displays the MAC address of the client that obtained the IP address.

IP Address: This field displays the IP address assigned by the DHCP server to the client host.

Effective Time: This item refers to the lease period of the IP address obtained by the client host. Each IP address has a certain lease time, and the client software will automatically renew the lease before it expires.

Status: The online / offline status of the client that has obtained the IP address is displayed here.。

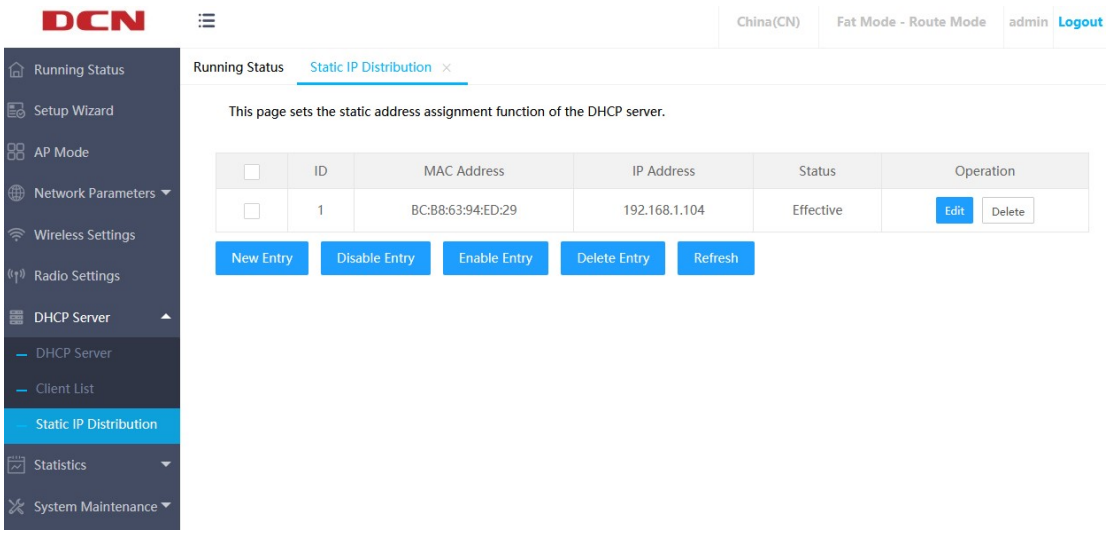
5.6.3 Static IP Distribution

Click "DHCP Server">>"Static IP Distribution" on the left menu to manually set a static IP address.

The static reserved IP address assignment function can reserve IP addresses for

specific clients, allowing IP addresses to establish a fixed binding relationship with MAC addresses.

For a client that has established a binding relationship, when requesting an IP address, the DHCP server preferentially assigns a bound IP address to it. As shown below:

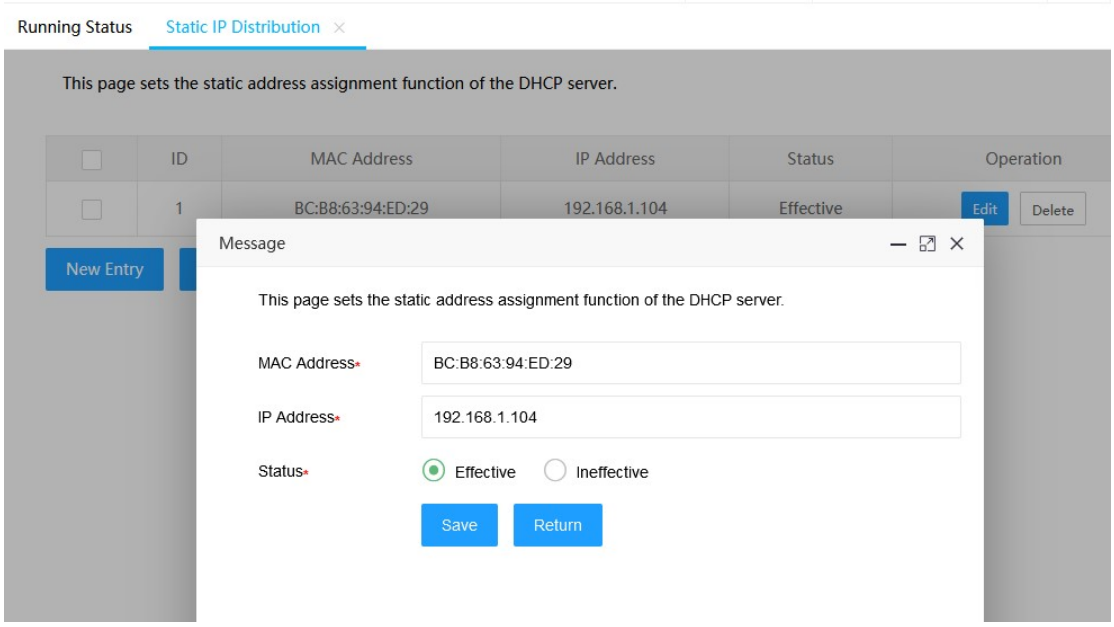


MAC Address: The MAC address of the client that will reserve the IP address.

IP address: Refers to the IP address reserved for the client.

Status: The status displays "Effective" or "Ineffective", that is, only binding rules marked as "Effective" will take effect.

New Entry: Click this button, you can add a new reserved address entry in the subsequent interface, as shown below:



Enable Entry: Click this button to make the selected item effective.

Disable Entry: Click this button to invalidate selected items.

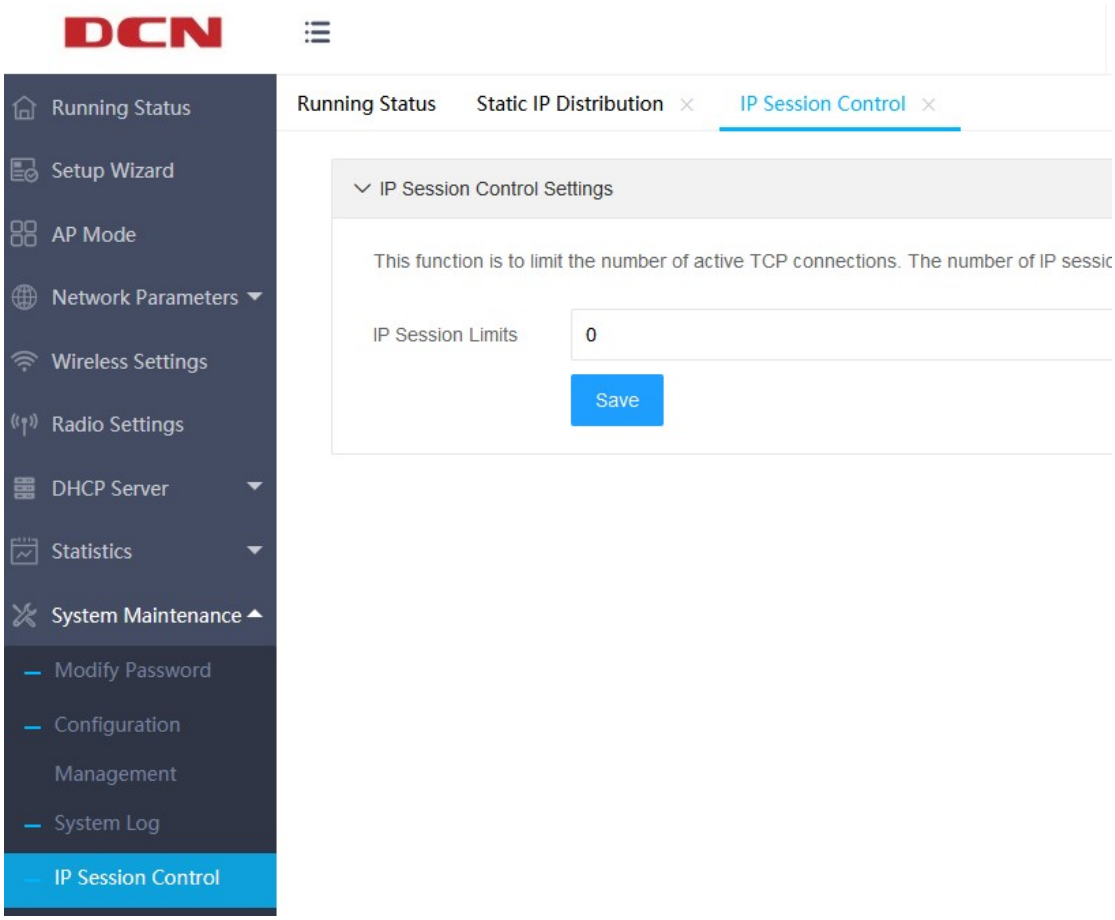
Delete Entry: Click this button to delete all entries in the table.。

5.7 System Maintenance

5.7.1 IP Session Control

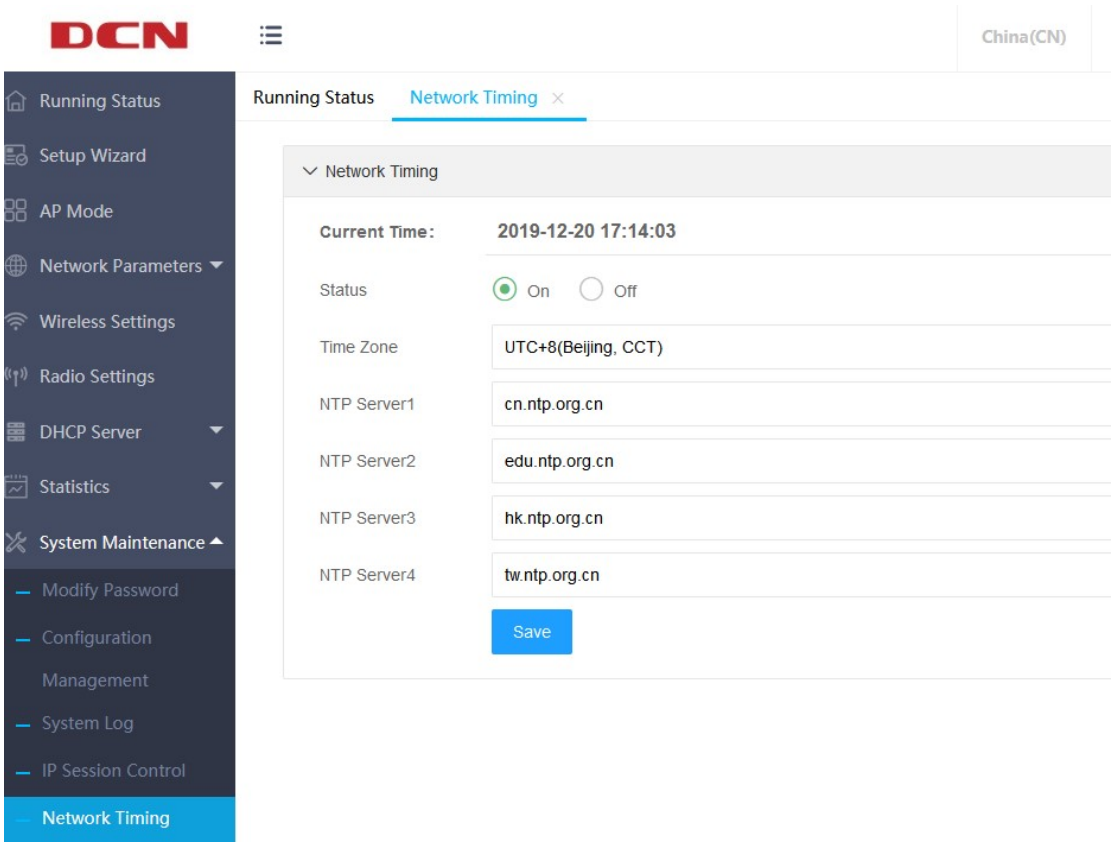
Click "System Maintenance"-"IP Session Control" on the left menu to enter the IP session control page, where you can set the number of TCP connections that each client can use simultaneously. If the number of connections reaches the specified number, the new TCP connections will be rejected. Note that closed TCP connections are not counted in the number of connections.

The default is 0, which means unlimited. As shown below:



5.7.2 Network Timing

Click "System Maintenance" >>" Network Timing", you can set NTP network time, turn on the off status and NTP server. It supports up to 4 NTP server settings. As shown below:


DCN
China(CN)
Running Status
Setup Wizard
AP Mode
Network Parameters
Wireless Settings
Radio Settings
DHCP Server
Statistics
System Maintenance
Modify Password
Configuration
Management
System Log
IP Session Control
Network Timing
Running Status
Network Timing
Network Timing
Current Time:
2019-12-20 17:14:03
Status
On
Off
Time Zone
UTC+8(Beijing, CCT)
NTP Server1
cn.ntp.org.cn
NTP Server2
edu.ntp.org.cn
NTP Server3
hk.ntp.org.cn
NTP Server4
tw.ntp.org.cn
Save

Appendix A FAQS

Question 1: How to restore the factory settings if the user forgets the device password?

Take WL8200-X10 as an example. In the power-on state, long press the Reset button for 5 seconds and release the reset button, the AP will restore the factory settings and restart. After restart, the user name and password are reset to the initial user name and password.

After restoring the factory settings, all settings will be deleted and restored to fit mode.

There may be differences between different products. For details, please refer to the product specifications.

Question 2: Can't open the device webpage using the default address of 192.168.1.10?

The address 192.168.1.10 is the default static address of the device. It may happen that the device webpage cannot be opened through this address in the following situations:

1. When the AP is in fit mode or fat bridge mode

(1) The device may have obtained another IP address through the POE port. Please access it through the current address of the AP.

(2) The IP address of the device may be modified;

2. When the AP is in fat routing mode:

(1) The device used to access the AP is located on the WAN side of the AP.

Please access the AP from the lan side.

(2) The address on the LAN side of the device may have been modified by the administrator;

Question 3: After switching from thefit mode or the fat bridge mode to the fat routing mode, the page cannot be returned, and refresh cannot be accessed?

When switching from other modes to routing mode to access the network, in order to ensure security, WAN-side device access is blocked by default. If the device is accessed from the POE port side before the switching, the switching will fail to return and cannot access. You need to ensure that you are accessing the device using https://192.168.1.10 on the LAN side or WLAN device.