Wireless Management Platform

AC3000/GAPC-0516-07

User Manual

V1.0

Guépard AC3000/GAPC-0516-07

EUROPEAN TECHNOLOGY

Guépard
Connecting the world faster!

Chapter 1 Manual Introduction

This manual is subject to tell users how to use this WLAN management platform properly; Contents include description of this platform's properties, and how to configure this platform; Pre-reading this manual before operation is highly recommended;

1.1 Target reader

This manual is for those familiar with basic networking knowledge and terminology;

1.2 Conventions

Without extra explanation, this device, or WIFI management platform mentioned on this guide stands for AC3000 Wifi management platform, short for AC3000/GAPC-0516-07;

>> stand for the sequence entering interface page; Default: Class A menu>>Sub menu;

There is no sub menu on some functions;

< including words> on body part, means menu name, like <apply>

"including words"means other definition except menu on Web page, like "ARP Binding"

Particular Icons on this manual is like follows:

1.3 Chapter allocations

Chapter 1: Manual Introduction

Grasp the structure of this manual, know convention of this manual, so that make well use of this manual;

Chapter 2: Product Introduction: Introduce properties application and layout of this device;

Chapter 3: Installation Guide: Instruct users how to login and manage this platform, then introduce the device's interface briefly;

Chapter 4: Function Settings: Introduce all functions of this platform, help clients to make fully use of this device;

Appendix A: Specifications;

Chapter 2: Product Introduction

2.1 Products description

AC3000/GAPC-0516-07 is a highly performance WIFI management platform,specially for WIFI in hotel or small-medium sized enterprise;

It's capable for managing all Access point, support AP auto-detection, AP status preview, AP configuration, MAC filtering, AP software upgrade simultaneously to provide high quality & performance& reliability, easy installation & maintenance WIFI service to different clients;

2.2 Products Properties

Hardware property

- Deploy dual core CPU, 880 Mhz frequency
- Deploy high capacity & speed memory, up to 256M DDR3 SDRAM;
- 5 * 10/100/1000Mbps Gigabit Ethernet port

Software property

- AC3000 detect and connect to wireless access point automatically, no need to configure any AP, realize true centralized AP management function
- Monitor AP status in real-time, auto-inspection AP's working status(up or down), show each AP status under interface page;
- Configure related properties to each AP simultaneously, like setting SSID, connection type, Security type, etc;
- Adjust WIFI RF output manually, to fit for different networking environment, to maximum WIFI coverage;
- AP address server function can allocate IP address for different AP working in the same segment, no need to set up AP's IP address manually;
- Support smart gateway mode, working as a Gigabit router, to realize router, AC, AP address server function in the same unit;
- Adjust each AP's WIFI settings like Channels or location remark, providing auto-restarting functions on AP;
- Support WIFI MAC filtering, only allow the device, whose MAC address is in the rule list, to have WIFI access, make sure a securer network allowed;
- Full WEB management, clear and concise ,make AP management easier and much convenient;

2.3 Product Layout

2.3.1 Front Panel

AC3000 front panel is like following:

P2-1 AC3000's Front Panel Diagram

LED Indicator

LED Light	Name	Indication
Power	Power Light	Power is on, means status is up;
		Power is off, mean status is down;
Run	System Light	flashing, means system status is normal
		off or stable steady, means status is abnormal

Reset button

When need to restore the AC3000 into factory default, with the device powered on, use a pin to press and hold the reset button until all LED becomes quick-flash from slow-flash.

Then release the button and wait AC3000 to reboot to its factory default settings. After that, the default IP address of AC3000 is still 192.168.10.1,default user name and password are both admin;

RJ45 Ports: 5x 10/100M/1000Mbps auto-negotiation RJ45 Ethernet Port;

Support any connection devices in **10/100M/1000Mbps bandwidth;**

Notice: LAN/WAN port is LAN port only on the default mode, only when WAN setting is enabled then LAN/WAN port will change to WAN port;

2.3.2 Real Panel

AC3000 real panel is like following:

P2-2 AC3000 Real Panel Diagram

DC Jacket

DC Jacket located on the right side of AC3000's real panel, input power should be ac power 100-240V~ 50/60Hz 0.3A

Anti-thunder ground connection ⊕

Please deploy ground connection to avoid lightening stroke, by copper core cable in yellow and green jacket;

For detailed installations please refer to related manuals, like <<Anti-thunder installation guide in devices>>

Attention:

Please use original power cord for installation;

Set locate power outlet near the devices, to make safer and easier installation and operation

Chapter 3 Configuration Guide

3.1 Login Web Interface

Pls confirm the following points before login AC3000:

- AC3000 has normal power up, one port has been connected with the management host.
- The management host has been properly installed IE 7.0 or higher browser version
- The management host IP address has been set the same network segment with AC3000, namely 192.168.10.X (X is between 2-254 arbitrary integer Number), a subnet mask of 255.255.255.0.
- In order to ensure a better effect of Web interface displays, it is recommended to adjust the display resolution to 1024 × 768 or more pixels.

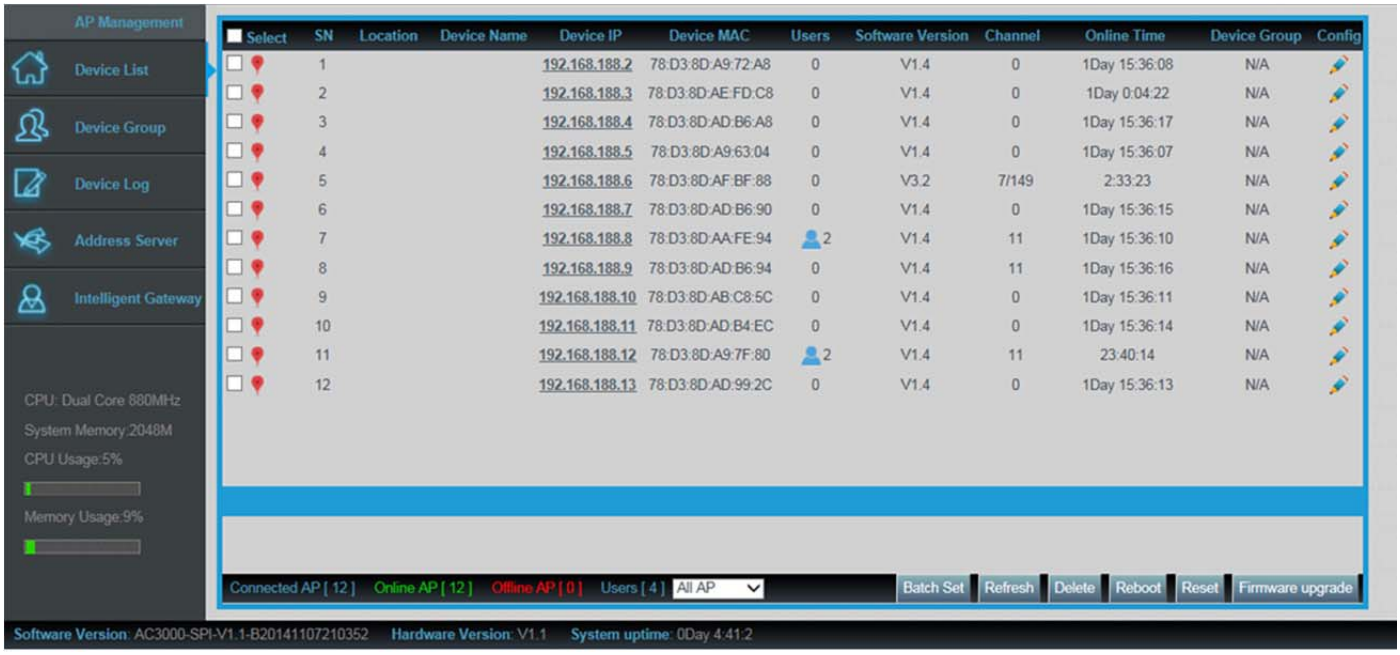
Operation Steps:

A. Open IE browser, Input http://192.168.10.1/ in the address bar to login AC3000 Web management interface.

B. AC3000 login screen shown in P 3-1. In this screen enter the AC3000 for user name and password, the factory default is admin/ admin, click <OK>.

P 3-1 Web Login page

C. After a successful login, then see AC 3000 Web interface page, shown in P 3-2.



P 3-2 AC3000's Web Interface page

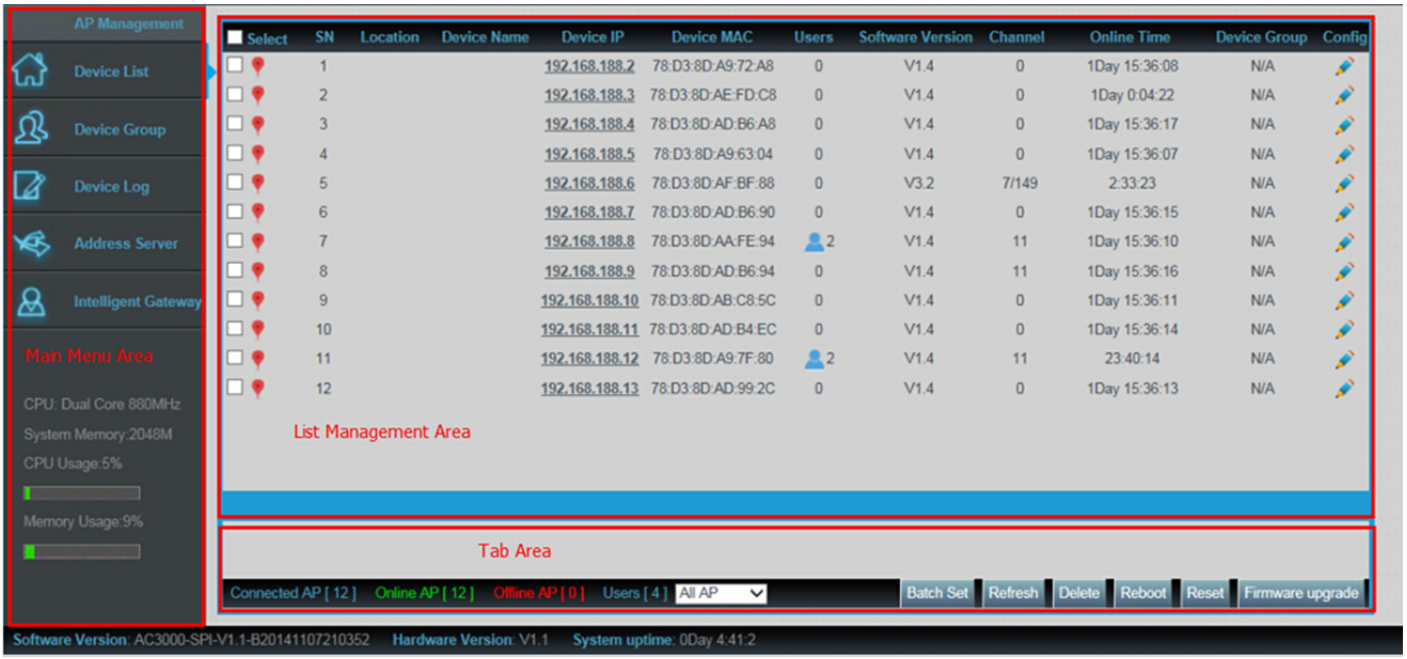
3.2 Web Interface Introduction

3.2.1 Interface Overview

AC3000 typical Web interface shown in P 3-3.

P 3-3 Web Interface

In P3-4, on the left is one menu bar and two menu bar, on the right upper area of the tab is strip menu, when a menu contains multiple tabs, you can click on the tab title to switch tabs at the same level menu. The tabs on the right is separable into two parts, the tab area and a list of management area



P 3-4 Web Menu

3.2.2 Interface buttons and operation

Button	Meaning
	Applying the current configuration information.
	Setting the current configuration information.
	Adding current configuration information.
	To delete the selected rule / entries, can batch operation.
	Restart the selected AP, can batch operation.
	Open the help screen of the current function.

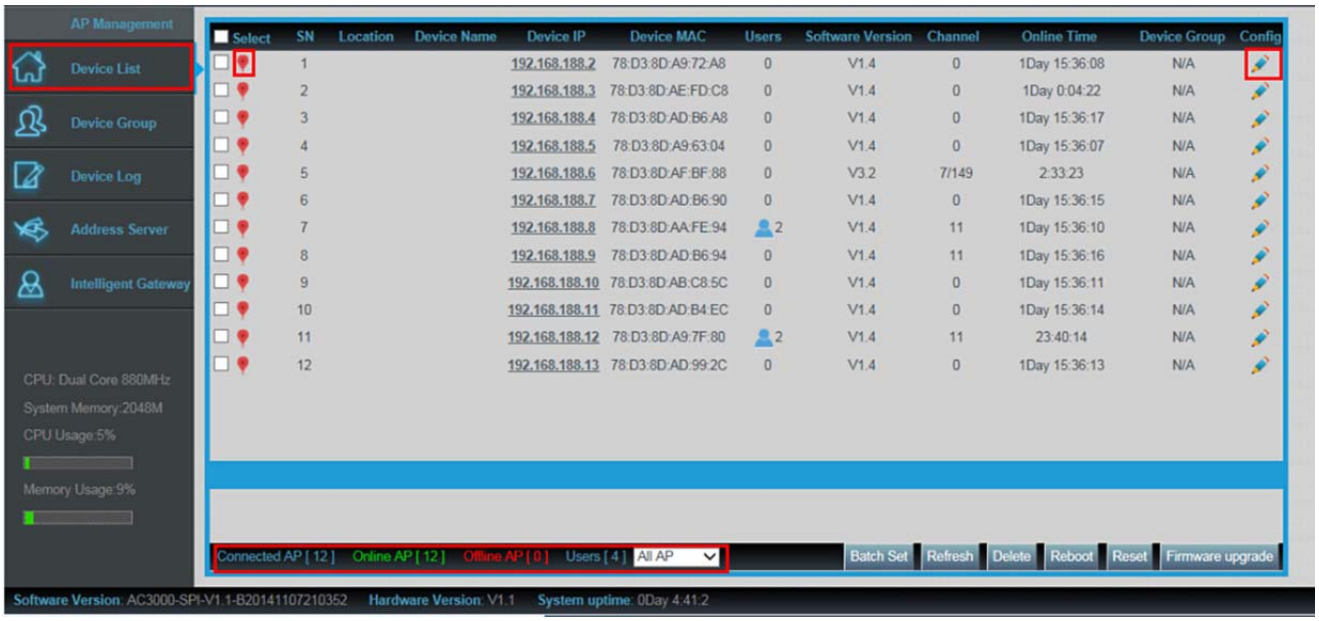
Description

When you click the configuration button <apply>, <setting>, <add>, <Delete> etc, or edited the current rules / entry, change the status, delete operation, you must configure and save synchronize functional area in the subsequent main menu if you want this configuration to take effect,, otherwise it will revert to the initial configuration when restart up AC3000 configuration

Chapter 4 Function Setting

4.1 Device List

Device list show the current wireless AP connected AC3000

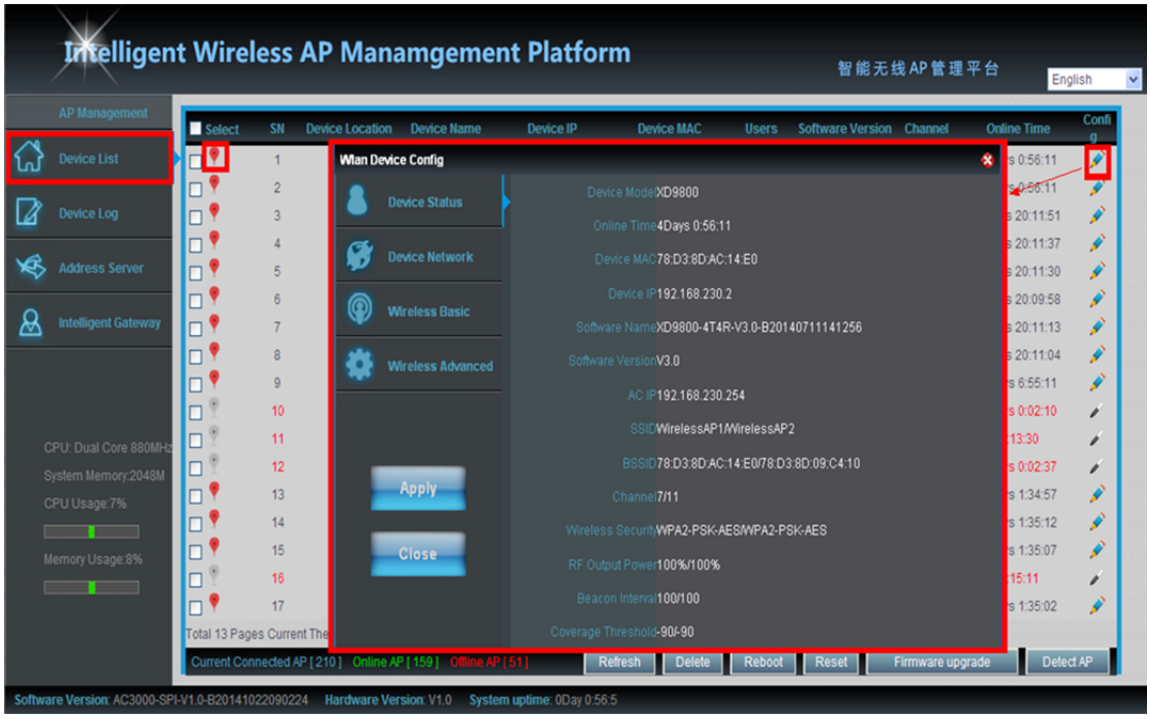


P 4-1 AP List

Device list display the total quantity of AP connected to AC3000, the quantity of AP working properly or working improperly, also shows the quantity of wireless AP access into the AC3000 as red mark in P4-1

4.1.1 Device list setting

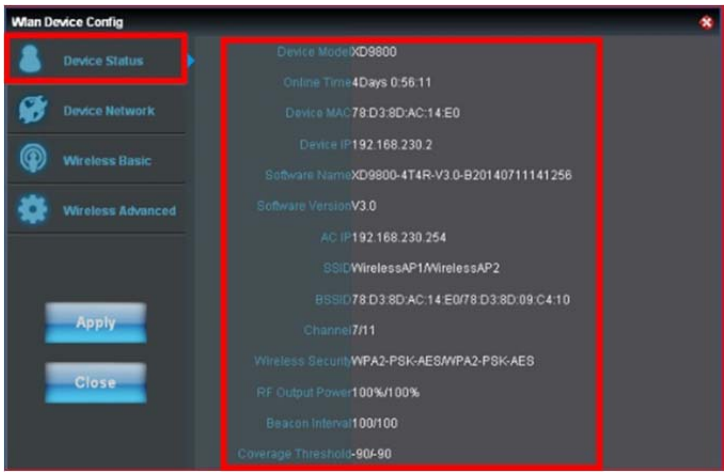
Through the device list icon  to log in corresponding AP's IP address directly, can set parameters, and view the Device Status of the AP; setting the Device Network; setting the Wireless Base; setting the Wireless Advanced as P4-1-1



P4-1-1

Description: Tick the box  next to the red dot, and click on the IP address in the same line to log into the AP's WEB setting page. Click on the icon **Apply**, it is OK to configure the functional parameters of the AP showed in red part, including viewing the selected AP status information; device network settings; wireless basic settings and wireless advanced settings. You can also refresh the whole network nodes by AP list button in the upper right corner.

4.1.2 Device status



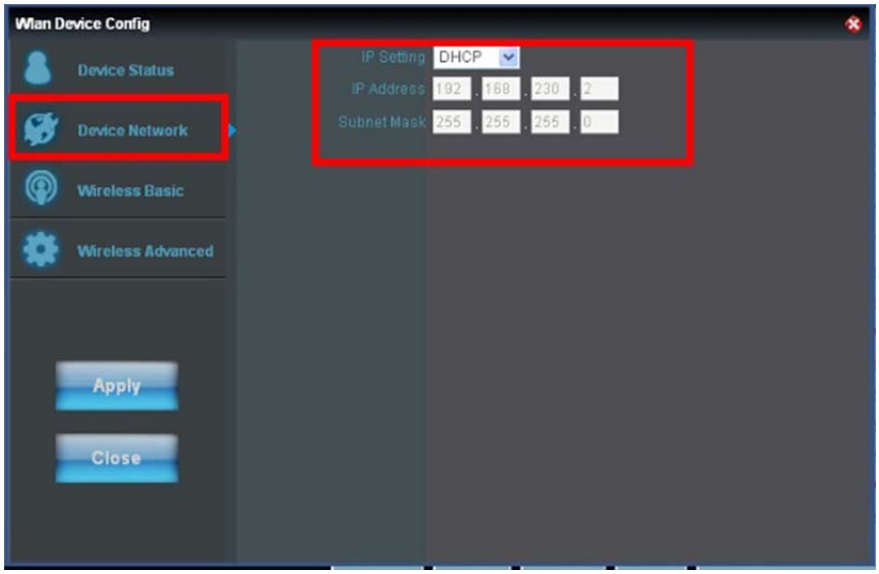
P4-1-2 Device Status

Device status can check Device Model, Online Time, Device MAC and Device IP; Software name; software version; AC IP; SSID; BSSID; Channel; Wireless Security RF Output Power; Beacon Interval; Coverage Threshold

as Figure 4-1-2

4.1.3 Device Network

AC3000's IP address is 192.168.10.1. In Device Network option, AC3000 can assign IP address for connected wireless AP. The default IP setting is DHCP, mean wireless AP can get IP address from AC3000 in dynamic way; Then IP address mean wireless AP's IP address. Subnet Mask mean Wireless AP's Subnet Mask.



4-1-3

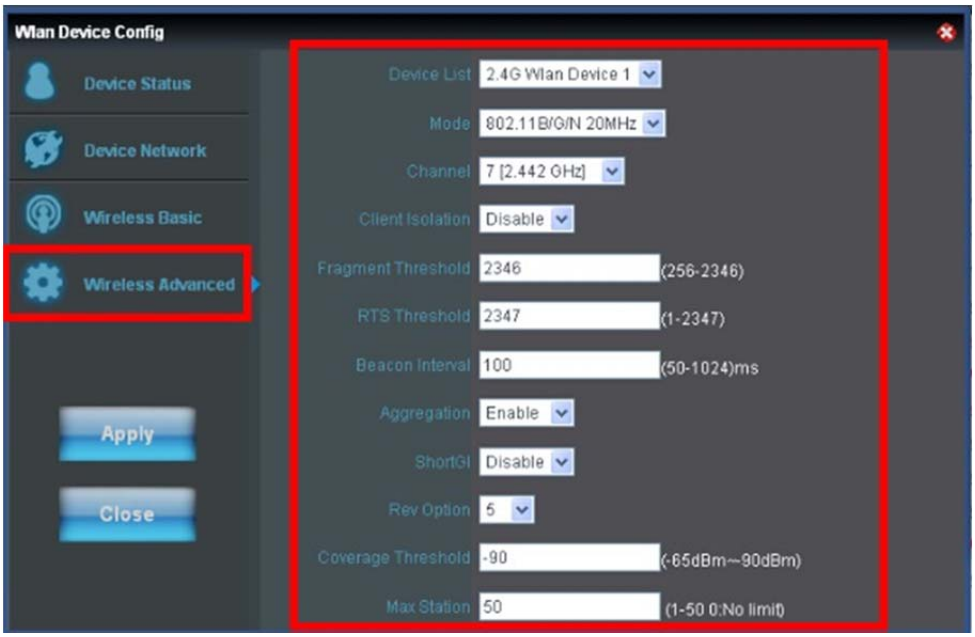
4.1.4 Wireless Basic Setting

Wireless basic setting show wireless status, like enable or disable(enabled in default); broadcast SSID is enable or disable; Virtual AP is turned on or off; Wireless Security turn open or not.

P 4-1-4 Wireless Basic Info

4.1.5 Wireless Advanced

Wireless advanced setting mainly for AP's wireless parameters, including Device List; Mode; Channel; Client isolation; Coverage Threshold; Max Station.



P 4-1-5 Wireless Advanced Setting

Device List: Display the AC controller is manage 2.4G wireless devices AP

Mode: This mode is used to set up the mode of Wireless Access Point, recommended 11b / g / n 20MHz mode.

Channels: channel range, FCC default is 1-11, ETST default 1-13

Client Isolation: The option is to make the host cannot communicate with each other on a different SSID's if this option enable.

Coverage threshold: You can set the threshold to achieve wireless signal roaming

Max Station: mean number of end users can access into wireless AP. *(The default is 32 mean 32 end users can access in this wireless AP, 0 mean unlimited)*

4.A Device Group

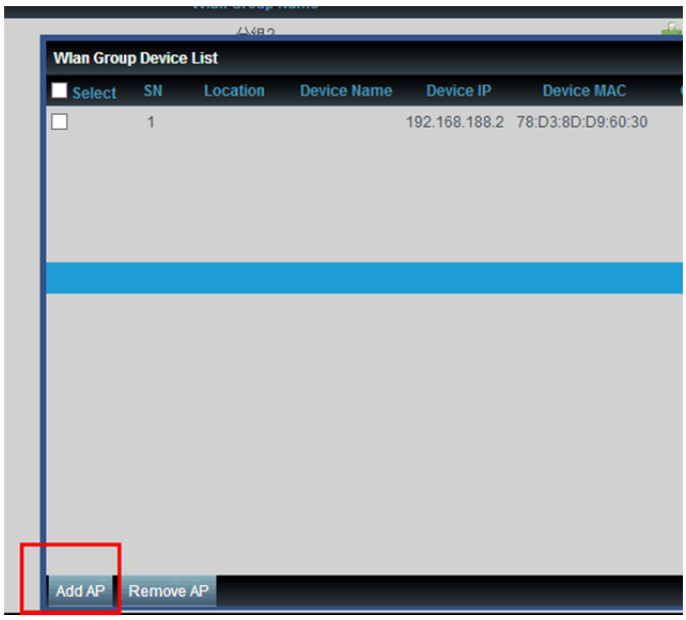
Create group of APs with centralized management policy: SSID, authentication, VLAN, encryption …

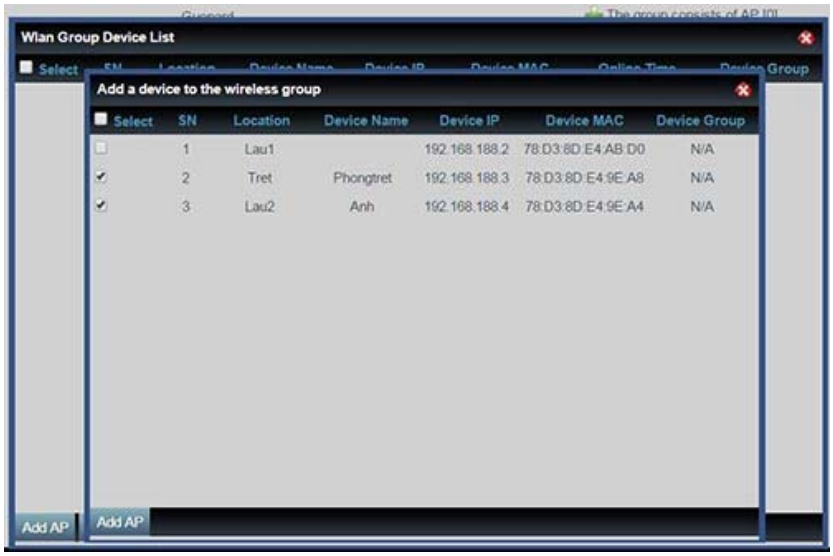
Click **New** button on right bottom to create Wlan Group; next click **Apply** for approved policy.

P 4-A1 Device Group

Adding AP into Group through icon  to add selected APs.

P 4-A2 Adding AP into Group

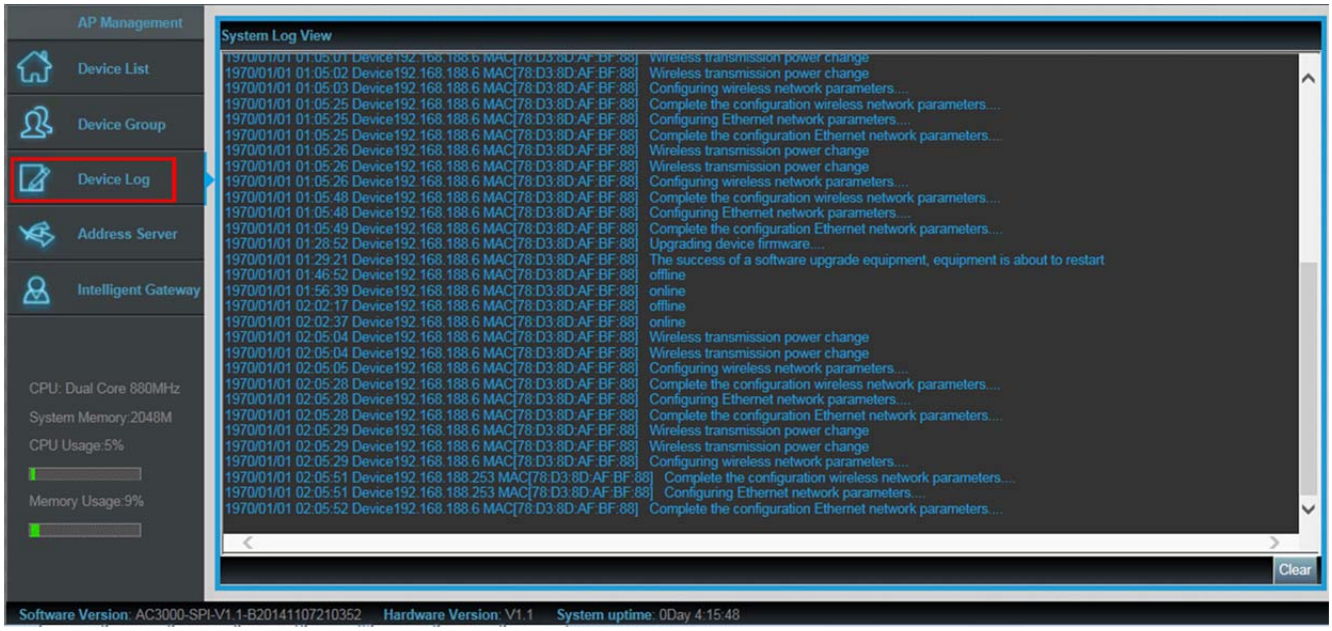




P 4-A3 Adding AP into Group

4.2 Device Log

Device Log show AP's record, such as on line recording, offline recording, device configuration recording.



P4-2 Device Log

4.3 Address Server

Through Address Server, to set server IP address, subnet mask; Server address Pool, main to assign IP address to the connected wireless AP, no need to specify the IP address for wireless AP manually when operation.

P4-3 Address Server

Server IP Address: modify the default AP address server's IP address; (default is 192.168.188.1)

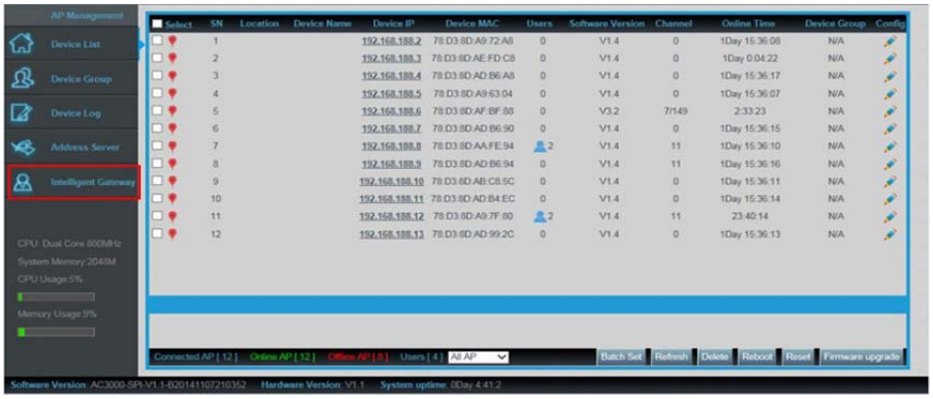
Server Subnet: Modify AC controller's subnet; 255.255.255.0 in default

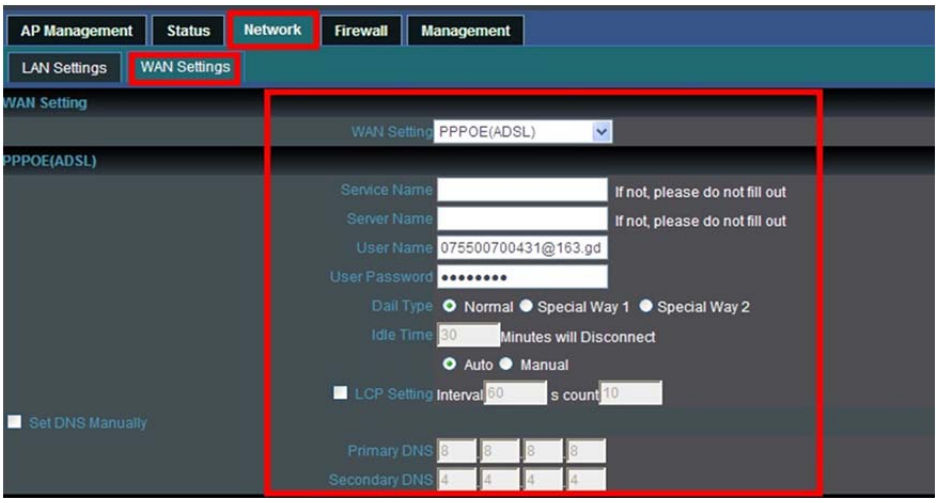
Server Address Pool: When wireless AP connected with this address server, then address server will assign IP address for wireless AP. (The default IP address pool is 192.168.188.2-192.168.188.254).

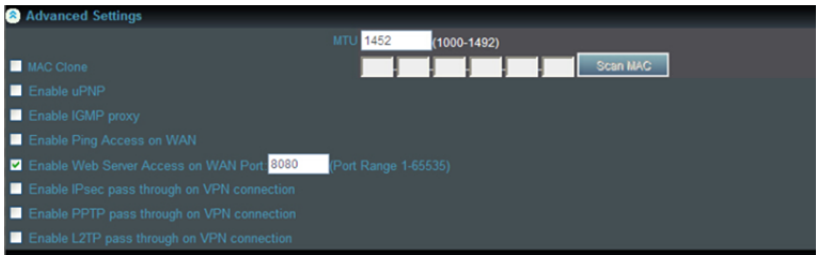
4.4 Intelligent Gateway

4.4.1 WAN Settings

Click Intelligent Gateway will automatically jump to the WAN settings as 4-4-1







P4-4-1 WAN Setting

When select to intelligent gateway, AC3000 will have a router function, can work as a main router with Gigabit WAN/LAN port. It support Dynamic IP, Static IP; PPPOE; PPTP.

Dynamic IP: WAN interface obtains IP and DNS information through DHCP mode.

PPPOE(ADSL): WAN interface obtains IP and DNS information via PPPOE dial-up mode.

Static IP: Set IP and DNS information for WAN interface manual

PPTP: WAN interface obtains IP and DNS information via PPTP mode

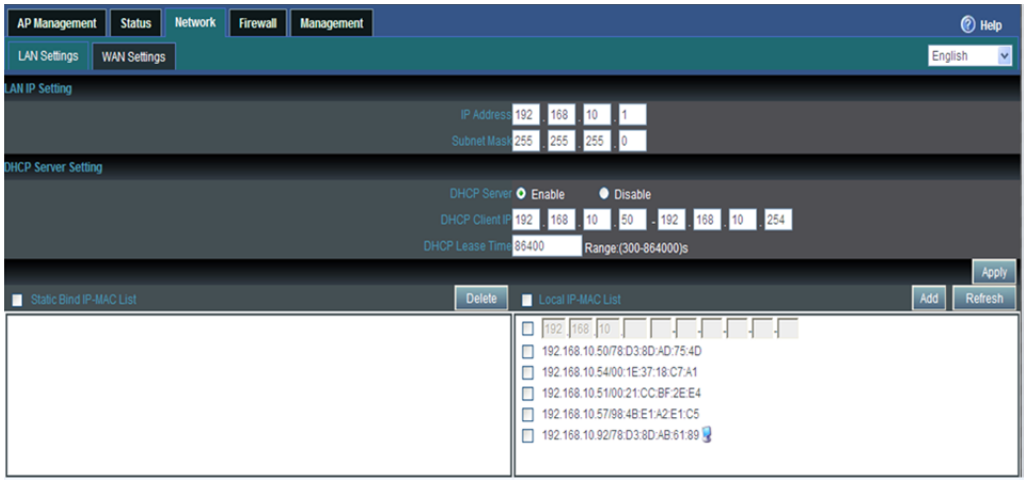
MAC Clone: Specifies the WAN interface MAC, by clicking [Search MAC Address] button, and then will pop up a connected device's MAC, select the MAC desired to clone. You can manually specify the MAC

Enable IGMP Proxy: Enables IGMP proxy, this feature can be forwarded IGMP data from WAN to the LAN

Enable Ping Address on WAN: This feature allows outer net to ping WAN

Enable Web Server Address on WAN port: Enable this feature, allows to manage AC3000 from outer net via a specified remote management port

4.4.2 LAN Settings



P4-4-2 LAN Settings

LAN IP Setting: Set IP address for LAN

Subnet mask: Set Subnet mask for LAN

DHCP Server: DHCP server enable mean it will assign IP address for users.

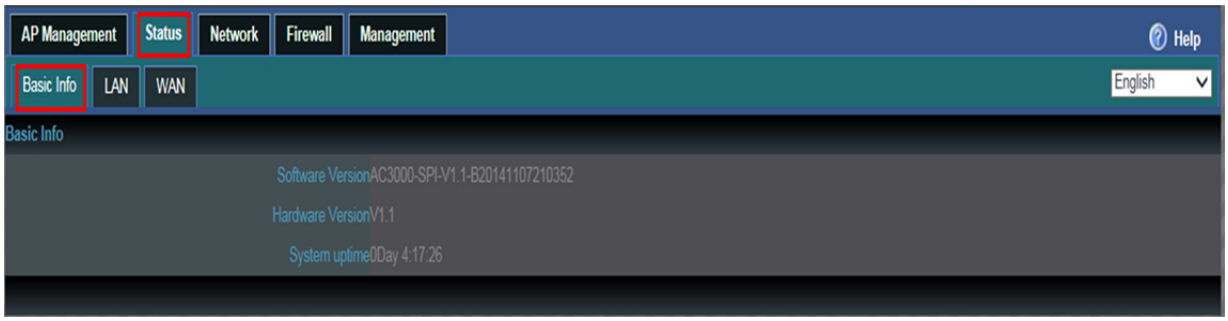
DHCP Client IP: DHCP Client IP mean the IP address range assigned by DHCP Server.

DHCP Lease Time: The networking device get IP lease time from DHCP server.

4.5 Device Status

4.5.1 Basic info

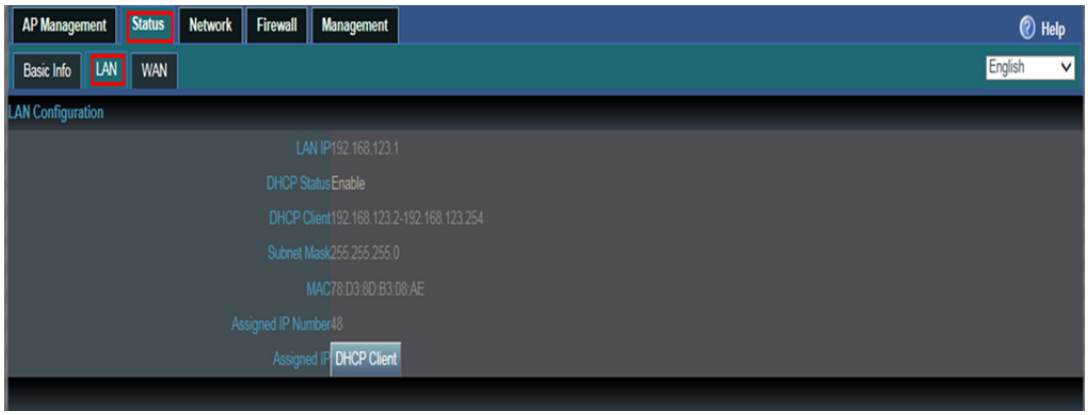
Show AC3000's firmware version, hardware version, system uptime.



P4-5-1 Basic Info

4.5.2 LAN Status

Show AC3000's LAN IP, DHCP server status and MAC address

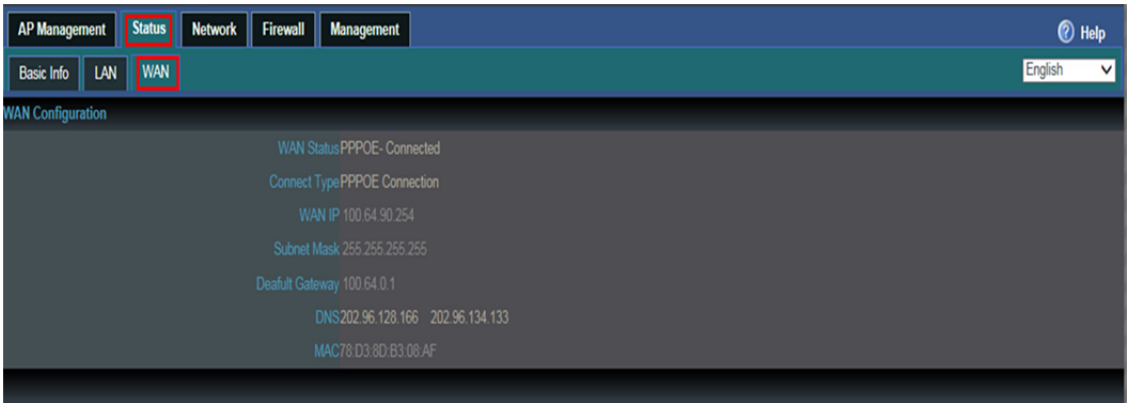


P4-5-2 LAN Status

Assigned IP: *Click* ***DHCP Client*** *button showing detail of Client list include: Host name (name of device), IP Address, MAC, Lease.*

4.5.3 WAN Status

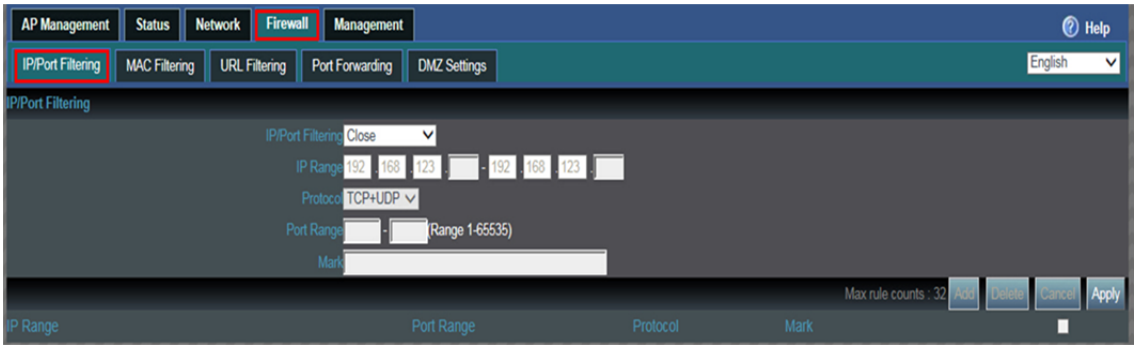
It show AC3000's WAN status, Connect Type, WAN IP, Subnet Mask, Gateway IP, DNS and MAC info.



P4-5-3 WAN Status

4.6 Firewall

4.6.1 IP/Port Filtering



P4-6-1 IP/Port Filtering

IP/Port Filtering: IP/Port forwarding enable, router will limited the data forwarding according to the filtering rule. If the filtering rule is [refuse] , then the router will refuse to forward the data in accordance with filtering rule.; If the filtering rule is [allow], the router will forward the data in accordance with filtering rule.

IP Range: Set IP address range

Protocol: Set filtering rule protocol

Port Range: Set filtering port range

Mark: A simple description of the entry rules, for user's easy management;

4.6.2 MAC Filtering

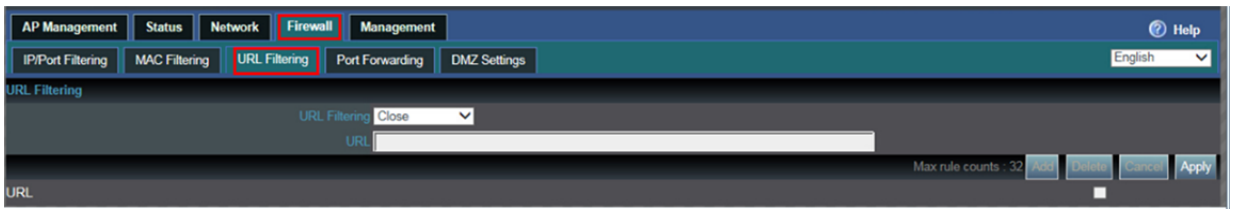
P 4-6-2 MAC Filtering

MAC Filtering: Enabling Mac filtering, router will restrict data forwarding based on the selected filtering rules; When selected Close, router will decline the pointed incoming data; When selected as Open, then router will allow the pointed incoming rules;

Mac address: Set up rules in mac address, users can click Searching Mac Address from the clients in routers, or can set up the mac address manually;

Mark: A simple description of the entry rules, for user's easier management;

4.6.3 URL Filtering

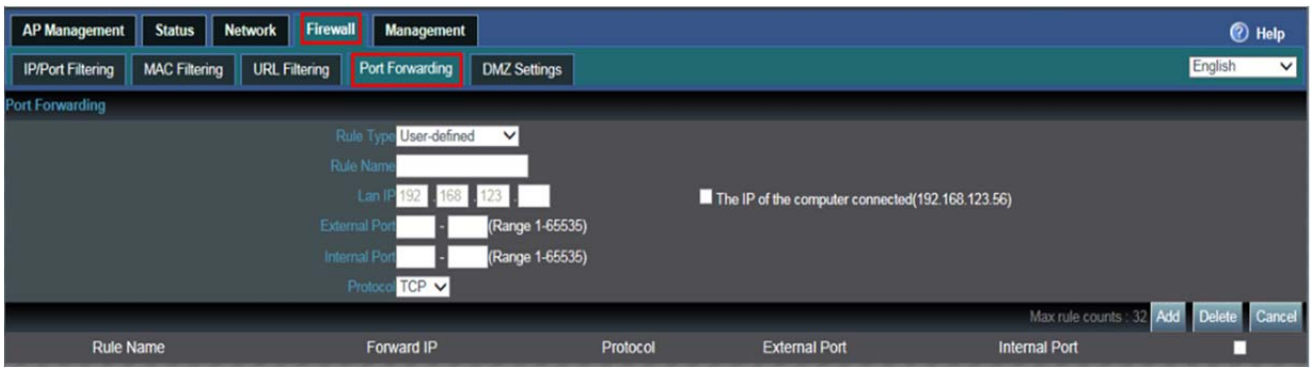


P 4-6-3 URL Filtering

URL Filtering: Enabling URL filtering, router will restrict access to the pointed URL;

URL address: Set up the declined URL address

4.6.4 Port Forwarding



P 4-6-4 Port forwarding

Port forwarding: Port forwarding is to forward data from one port to another port, enabling external users have access to an internal private IP in LAN, from an external triggered NAT router ;

Rule Type: Set up rule type, which have specific port number;

Rule name: Port forwarding rule name

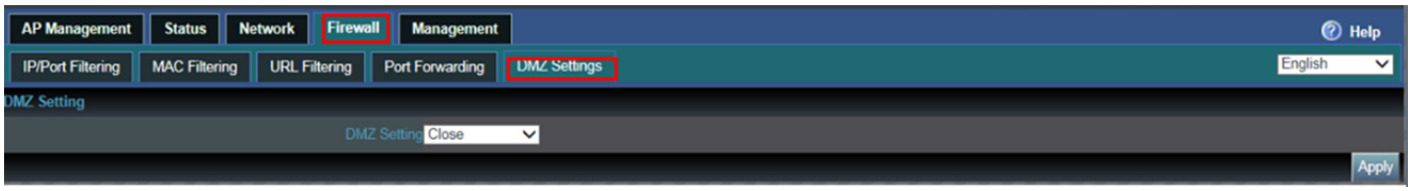
LAN IP: IP of the port forwarding

External port: External port number of port forwarding

Internal port: Internal port number of port forwarding

Protocol: Protocol used for port forwarding

4.6.5 DMZ Settings



P 4-6-5 DMZ Settings

DMZ: DMZ is short for demilitarized zone; It's a compartment between security zone and non-security zone, in order to solve the problem of external network can not access into internal server after firewall installation; This DMZ zone is a small network zone between external and internal network; While in this small zone, users usually place some open server, like web server, FTP server, or forum; DMZ will protect internal network more efficiently, because this network allocation is another obstacle for hackers, compared to normal firewall;

IP LAN IP: IP address of DMZ host

4.7 Device management

4.7.1 System management

P 4-7-1 System management

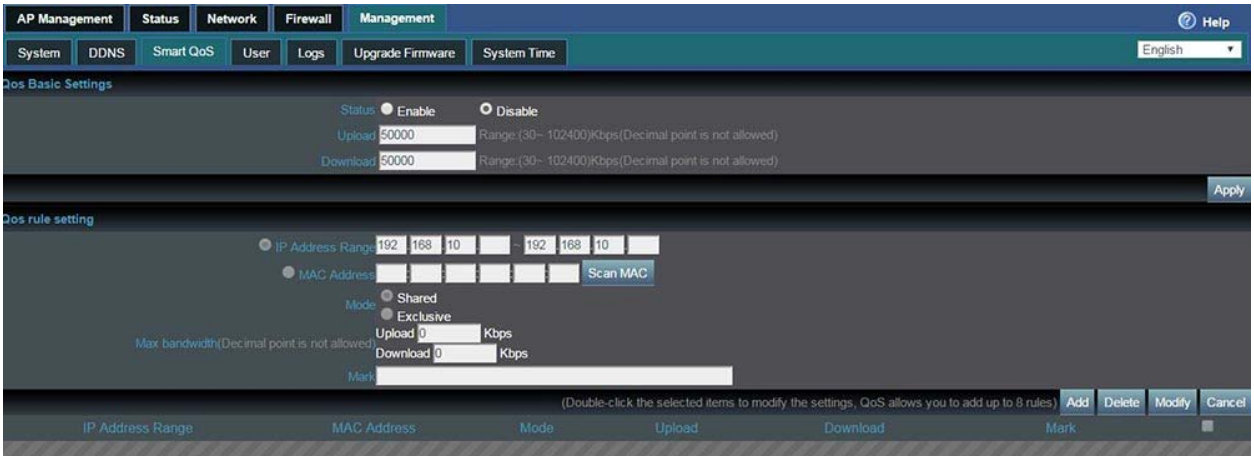
Backup: Save the configuration files to your computer

Restore: Using the saved configuration file recovery configuration

Restore default: Restore the factory default settings, please press this button

Reboot: Reboot the system

4.7.2 Smart QoS



P 4-7-2 Smart QoS

Status: Enable or Disable QoS function

Upload: Set up total uploading bandwidth

Download: Set up total downloading bandwidth

IP Address Range: Set up IP range of bandwidth

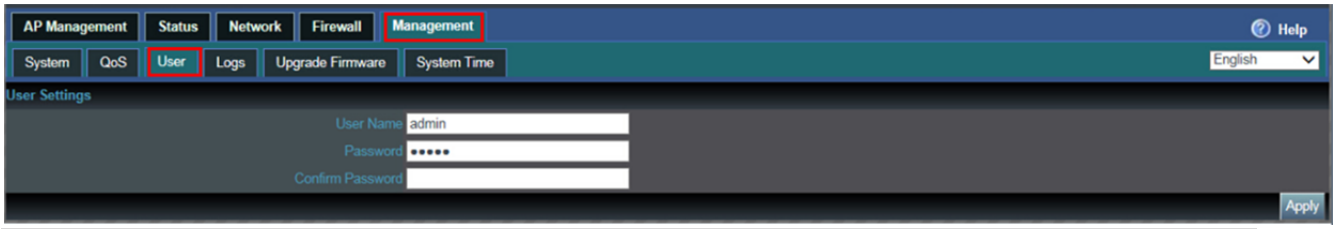
MAC address: Set up bandwidth control by mac address, user can choose it from Scan MAC, or setup by manual.

Mode: QoS mode settings, shared mode means under the QoS rules, the main PC within all IP range can share the specified bandwidth; Exclusive mode means single main PC can share the specified bandwidth;

Max bandwidth: Max bandwidth under QoS rules.

Mark: A simple description of the entry rules, for user's easier management;

4.7.3 User management



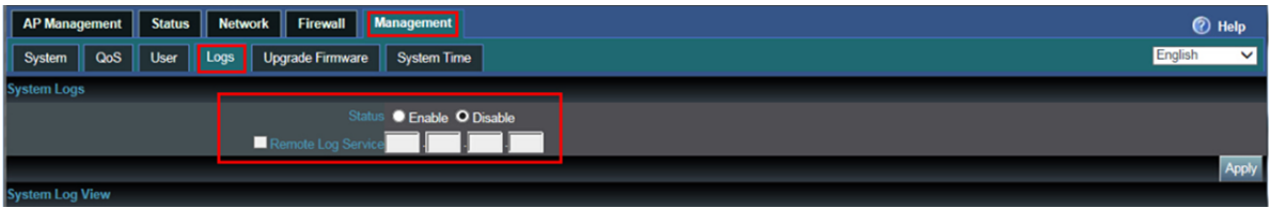
P 4-7-3 User

User Name: Reset new log-in user name

Password: Reset new log-in password

Confirm Password: Comparison to new password, to confirm user input password correctly in two times;

4.7.4 Device Logs



P 4-7-4 Logs

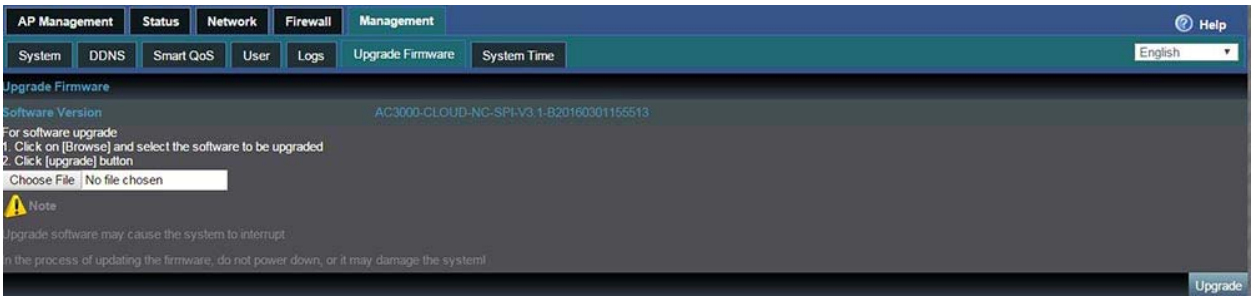
Status: Enable or Disable to show system log

Remote Log Service: To decide whether send System log into some pointed remote server synchronously;

4.7.5 Upgrade Firmware

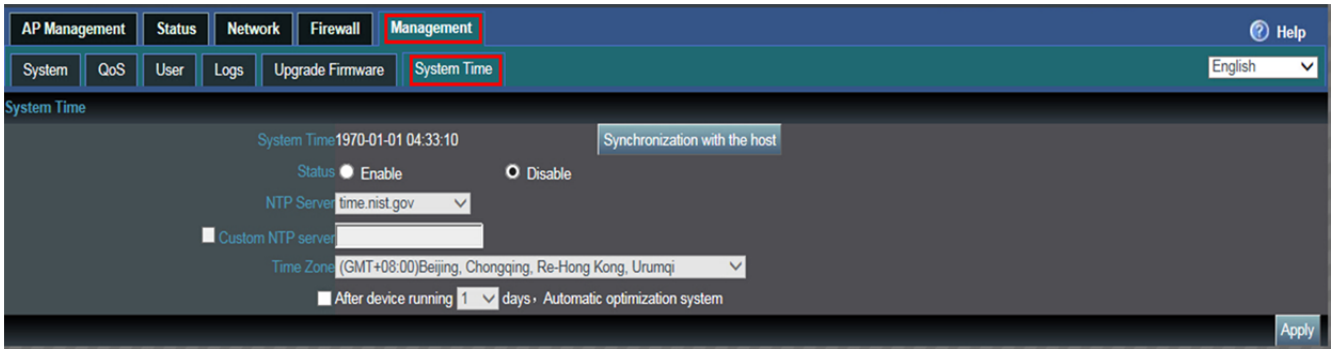
This feature allows the device firmware upgrade.

Noted: Upgrading software may cause system outage, In the process of upgrading the firmware, do not power off, otherwise it may damage the AC controller!



P 4-7-5 Upgrade Firmware

4.7.7 System Time



P 4-7-6 System Time

Synchronization with the host: Synchronization time with connected PC and router

Status: Enable or Disable NTP

NTP Server: Select the server time synchronization

Custom NTP Server: Setting user-defined synchronization server IP address

Time Zone: Setting the router's time zone

Appendix A Product SPEC

Item		Parameter
Standard Protocol		IEEE 802.3 & IEEE 802.3u
QTY of manageable AP		Default: 200pcs, Max: 252pcs
CPU		MediaTek, 880MHz (dual-core)
FLASH		128Mb
DDR3		DDR3 2048Mb
Power Consumption		< 5W
Interface	***LAN port***	4 x 10/100M/1000M RJ45 port（Auto MDI/MDIX）

	LAN/WAN port	1 x 10/100M/1000M LAN/WAN port， Default is LAN port, WAN port when open WAN mode
LED Indicator	***Power***	Adapter
	Run	System status
Demension (L x W x H)		440mm x200 mm x 45mm
Cooling		Nature cooling + Fan cooling
Working environment		Working temperature：0ºC～40ºC
		Storage temperature：-40ºC～70ºC
		Working Humanity：10%～90%RH (No condensation)
		Storage Humanity：5%～90%RH (No condensation)
Power		100-240V~ 50/60Hz