Wireless Management Platform

AC3000

User Manual V1.0

Chapter 1 Manual Introduction

This manual is subject to tell users how to use this WLAN management platform properly, suit for those familiar with basic networking knowledege and terminology,

Then this user manual including the connection of AC controller, description of this platform's properties, and how to configure this platform; Pre-reading this manual before operation is highly recommended;

Chapter 2: Products Introduction

2.1 Products description

AC3000 is a highly performance WLAN controller, specially for Indoor and outdoor wireless access points which set up 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, 880Mhz 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:



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

If need to restore the AC3000 into factory default, pls do following procedure: Power on AC3000, 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:



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

2.3.3 Connection



Pls power the AC controller, and connect the AP in following working diagram:

Pls note, in above picture, can make Wireless AP connect with PoE switch, PoE switch's uplink

port connect with AC controller's WAN port, total connection will be based on the application

environment.

Chapter 3 Configuration Guide

3.1 Login Web Interface

Pls confirm the following points before login AC3000:

1)Connect the managment host(PC) to LAN port of AC controller or UP-link port of switch in the whole networking.

2)The management host(PC) has been properly installed IE 7.0 or higher browser version 3)The management host' s 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.

4) In order to ensure a better effect of Web interface displays, it is recommended to adjust the display resolution to 1024 $\, imes\,$ 768 or more pixels.

Operation Steps:

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

management interface.

http:// 192.168.10.1

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

v

| Connect to 192. | 168.0.1 |
|-----------------|----------------------|
| R | I I I I |
| User name: | 🖸 admin 👻 |
| Password: | ••••• |
| | Remember my password |

3. After a successful login, then see AC 3000 Web interface page

| | Select | SN | Location | Device Name | Device IP | Device MAC | Usern | Software Version | Charmel | Online Time | Device Group | Config |
|-----|-----------|--------|------------|---------------|----------------|-------------------|-------|------------------|-----------|-----------------|------------------|--------|
| | | t. | | | 192.168.188.2 | 78.03.80.49.72.48 | 0 | V1.4 | 0 | 1Day 15:36:08 | N/A | 3 |
| un | | 2 | | | 192.168.188.3 | 78103/80/AE FD/C8 | a | V1.4 | 0 | 10ay 0.04 22 | NA | |
| R | | 3 | | | 192.168.188.4 | 78.D3.8D.AD.86.A8 | 0 | V1.4 | 0 | 1Day 15.36.17 | N/A | |
| er. | | 4 | | | 192.168.188.5 | 78.D3.8D.A9.63.04 | 0 | V1.4 | 0 | 1Day 15.36.07 | NA | 1 |
| | | 5 | | | 192.168.188.6 | 70:D3:0D:AF:DF:00 | 0 | V3.2 | 7/149 | 2:33:23 | NIA | |
| | | 6 | | | 192.168.188.7 | 78.D3.8D.AD 86.90 | g | V1.4 | 0 | 1Day 15:36.15 | NA | * |
| \$ | | 7 | | | 192.168.188.8 | 78.D3.8D.AA.FE.94 | 22 | √1.4 | 11 | 1Day 15:36:10 | N/A | 1 |
| | | 8 | | | 192.168.188.9 | 78.D3.8D.AD.86.94 | 0 | V1.4 | 11 | 1Day 15.36.16 | N/A | 8 |
| æ | | 9 | | | 192.168.188.10 | 70 DBBD AB CBSC | 0 | V1.4 | 0 | 1Day 15:36:11 | N/A | 1 |
| | | 10 | | | 192.158.188.11 | 78.D3.8D.AD.84.EC | 0 | V1.4 | 0 | 1Day 15.35.14 | NGA | * |
| | | . 11 | | | 192.160.188.12 | 78 D3 8D A9 7F 80 | 22 | V1.4 | 11 | 23:40:14 | N05 | |
| | • | 12 | | | 192.168.188.13 | 78:D3:8D:AD:99:2C | 0 | V1.4 | 0 | 1Day 15:36:13 | N/A | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | - |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | 1000 | - | _ |
| | Connected | WH I D | Children A | P V Other | APTIN Users | AI AP 🗸 | | Batch Set | Refresh 1 | ielste Rebort F | Seset Firmware u | pgrada |
| | 2 data | | _ | | | | | | | | | |

3.2 Web Interface Introduction

3.2.1 Interface Overview

AC3000 typical Web interface shown in following picture



In this picture, on the left is the main menu area, to show AP device list, AP device group, AC controller' s LOG info, AP address server and Intelligent Gateway.

The upper area on the right is the list management area, to show AP' s Location, name, SSID, IP address, MAC...And users can config the AP status from this part.

The bottom area on the right is the Tab Area, show the AP QTY and status in this WLAN controller, then can reset/reboot Wireless AP from this part also.

The bottom area of this page is AP' s firmware and hardware info, mostly for technical support.

Chapter 4 Function Setting

4.1 Device List

Device list show the status of current wireless AP connected with AC3000

| | Intelligent Wireless AP Management Platform | | | | | | | | | | | | | |
|---------|---|----------------|----------|-----------|------------------|----------------------|--------------------|------------|----------------------|---------------|----------------|---------------|----------|--|
| | | Select | SN | Location | Device Name | Device IP | Device MAC | Users | Software Versio | n Channel | Online Time | Device Grou | p Config | |
| ដ | Device List | ₽₹ | 1 | | | <u>192.168.188.2</u> | 0A:D3:8D:D6:02:53 | 2 1 | V1.1 | 7 | 0:06:59 | N/A | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| × | | | | | | | | | | | | | | |
| & | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| CPU: | | | | | | | | | | | | | | |
| Syster | | | | | | | | | | | | | | |
| CPUI | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| Merric | | | | | | | | | | | | | | |
| | | Connected | AP [1] | Online AF | [1] Offline AF | [0] Users [1 |] Ali AP | ✓ D | evice status refresh | interval 15 N | Minute | | | |
| | | Search | by IP | | Searc | h by MAC | Sear | ch Batc | h Set Refresh | Delete Reb | oot Reset Firr | mware upgrade | | |
| Softwar | re Version: AC6000-SF | PI-V4.1-B20160 | 122114 | 122 Hardy | ware Version: V1 | 1 System up | time: 0Day 0:15:31 | | | | | | | |

Let' s introduce following button one by one:



White box: click it to make hook, mean select this AP



to set the AP's Location and Device name



Picture showed as follow:

SN: Show how many AP access into this AC controller Location & Device: show where the AP setup, and what's the name of this AP. Device IP: AP's IP address Device MAC: AP's MAC address Users: How many end users access into this AP Software Version: The firmware version of this AP

Channel: the channel of this wireless AP

Online Time: How long this wireless AP online and access into this AC controller.

Device Group: you can set some AP in one group, then this part will show group name mainly.

| Con | fig: click | will sh | iow follo | wing pictu | re: | | | | | | | | |
|---|---------------------|------------------|---------------|---------------------------|-------------------------------|-------------------|-----------------|-----------|-----------|-----------|-------------|------------|--------|
| Intelligent Wireless AP Management Platform | | | | | | | | | | | lish | | |
| | AP Management | Select SN | Location Devi | ce Name Device I | P Device MAC Us | ers Softv | ware Versi | on Char | nel | Online Ti | ime Dev | vice Group | Config |
| | Device List | □ • 1 | Wian Dev | 102 469 49 vice Config | 0 2 0A-D2-0D-D8-02-62 | 1 | V4 1 | 7 | | 0.06.5 | * | N/A | |
| | Device Group | | 8 | | Device ModelX Online Time0 | (D9341):06:59 | | | | | | | |
| Ø | Device Log | | ۲ | | Device MACO | A:D3:8D:D6: | 02:53 | | | | | | |
| × | Address Server | | 9 | | Software NameX | (D9341-SPI-2 | - 2T2R-V1.1- | V5.3-B20* | 151203225 | 401 | | | |
| A | Intelligent Gateway | | 8 | Wireless Advanced | | 1.1 | | | | | | | |
| | | | - | | AC IP1 | 92.168.188.1 | 1 | | | | | | |
| | | | | | BSSID | 8:D3:8D:D6: | 02:53 | | | | | | |
| CPU: | Dual Core 880MHz | | | Amelia | | | | | | | | | |
| Syster | m Memory:4096M | | | Арргу | Wireless Security | VPA2-PSK-A | ES | | | | | | |
| CPU U | Usage:1% | | | Close | | 00% | | | | | | | |
| Memo | ory Usage:7% | | | | | 00 | | | | | | | |
| | | | | | Coverage Threshold-9 | 90 | | | | | | | |
| | | Connected AP [1] | Onlir | | Device Auto optimization | lisabled | | _ | | _ | | | |
| | | Search by IP | | Search by MAC | Search | Batch Set | Refresh | Delete | Reboot | Reset | Firmware up | grade | |

From this picture, will show each AP's status, Basic info, and advanced setting. If any data you want to make, then Apply to finish.

Device Status: show AP' s Model number, online time, MAC address, IP address, firmware info, channel, RF Power...

Device Network: Show the Wireless AP's WAN network info and IP address



Wireless Basic: Mainly to setup the AP' s SSID, VLAN, Security.

For the VLAN, the top networking should be with VLAN switch, and input the switch's VLAN ID in

the blank part. The VLAN ID range is 0~4094.

| Wlan De | vice Config | | | | * | | | | | | | | | | | |
|------------|-------------------|-----------|---|------------------------|-------------------------|-----|--|--|--|--|--|--|--|-------------------|--|---------|
| | Dovico Status | | Device List Wlan Device 1 🗸 | | | | | | | | | | | | | |
| - | Device status | Main | AP Configuration[78:D3:8D:D6:02:53] | | | | | | | | | | | | | |
| 6 | Device Network | | Status Enable 🗸 SSID | Brodcast SSID Enable 🗸 | | | | | | | | | | | | |
| 2 | | | SSID Wireless AP | Vlanid 0 (| 0-4094) ^{VLAN} | | | | | | | | | | | |
| \bigcirc | Wireless Basic | Wir | eless SecurityOpen System | Config | Security | | | | | | | | | | | |
| | | Virtu | al AP Configuration1[7A:D3:8D:D6:02:53] | <u> </u> | | | | | | | | | | | | |
| - | Wireless Advanced | | Config | * | | | | | | | | | | | | |
| | | | Authentication OPEN | ✓ | 0-4094) | | | | | | | | | | | |
| | | w Virt | Key Length WEP64 Bit 🗸 | | _ | | | | | | | | | | | |
| | | | w | Key Formate ASCII 🗸 | | | | | | | | | | | | |
| | Apply | | | | | | | | | | | | | Encryption TKIP V | | 0-4094) |
| | | | | | | Key | | | | | | | | | | |
| | Close | Virt | Remark None | | _ | | | | | | | | | | | |
| | | | | Apply | | | | | | | | | | | | |
| | | | SOL WEARS | | 0-4094) | | | | | | | | | | | |
| | | | eless SecurityOpen System | Config | | | | | | | | | | | | |

Wireless Advanced: user can configure the AP' s mode, channel, Fregament Threshold, coverage threshold, Max Station...

| Wian De | vice Config | | | | * |
|---------|------------------|-------------|------------------------------------|-------------------------------|--------------------|
| 8 | Device Status | | Wlan Device 1 🗸 | | |
| (Th. | | | 802.11B/G/N 20MHz 🗸 | | |
| M. | Device Network | | 7 [2.442 GHz] 🗸 | | |
| Ŷ | Wireless Basic | | Disable 🗸 | | |
| * | | | 2346 | (256-2346) | |
| | Wheless Advanced | | 2347 | (1-2347) | |
| | | | 100 | (50-1024)ms | |
| _ | | | Enable V | | |
| | Apply | | Enable 🗸 | | |
| | Close | | 12 🗸 | | |
| | CIUSC | | -90 | (-65dBm~-90dBm) | |
| | | Max Station | 40 before modification 0:No lin | Specific indicators re nit | efer to the device |

Remark: For Fragment Threshold, RTS Threshold, Beacon Interval, Aggregation, ShortGI, Rev Option, we recommand to keed in default.

Max Station, mean QTY of end users. 0 mean no limited.

Coverage Threshold: Applicated in Roaming mainly, the working status showed as follow:

Set AP1's Coverage Threshold is -75dBm Set AP2's Coverage Threshold is -90dBm AP1 and AP2, with same SSID and password End user move from A to B to C, then will connect with AP1 in place A, connect with AP2 in place B and C, even AP1's signal strength stronger than AP2; Just because in place B, AP2's Coverage Threshold less than AP1



Current Connected AP: Show how many pieces AP connected into this AC controller in total.

Online AP: QTY of AP which online in this AC controller

Offline AP: QTY of AP which offline in this AC controller

Search by IP: mean search the wireless AP by IP address, make hook in the white box, input IP address, then search.

Search by MAC: mean search the wireless AP by MAC address, make hook in the white box, input MAC address, then search

Batch Set: mean can configure the wireless AP' s data in batch.

Refresh: Scan the AP list again.

Delete: Select some AP, then delete from this AC controller.

Reboot: Select some AP, then restart this AP

Reset: Select some AP, revert to factory default.

Firmware upgrade: can upgrade firmware for wireless AP.

4.2. Device Group:

Click Device Group at first, then will show New/Delete, Click New, then configure the data in Wireless Basic and Wireless Advanced part; Pls note, this data will be applicated for all the AP in this group. After finish all, set an group name, then Apply to finish. For detail procedure, pls refer to following picture: