

VAP Quick Guide

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AP Type: VAP, VSM (Gateway AP)

ABLOOMY Technologies



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1. Initial Configuration of AP

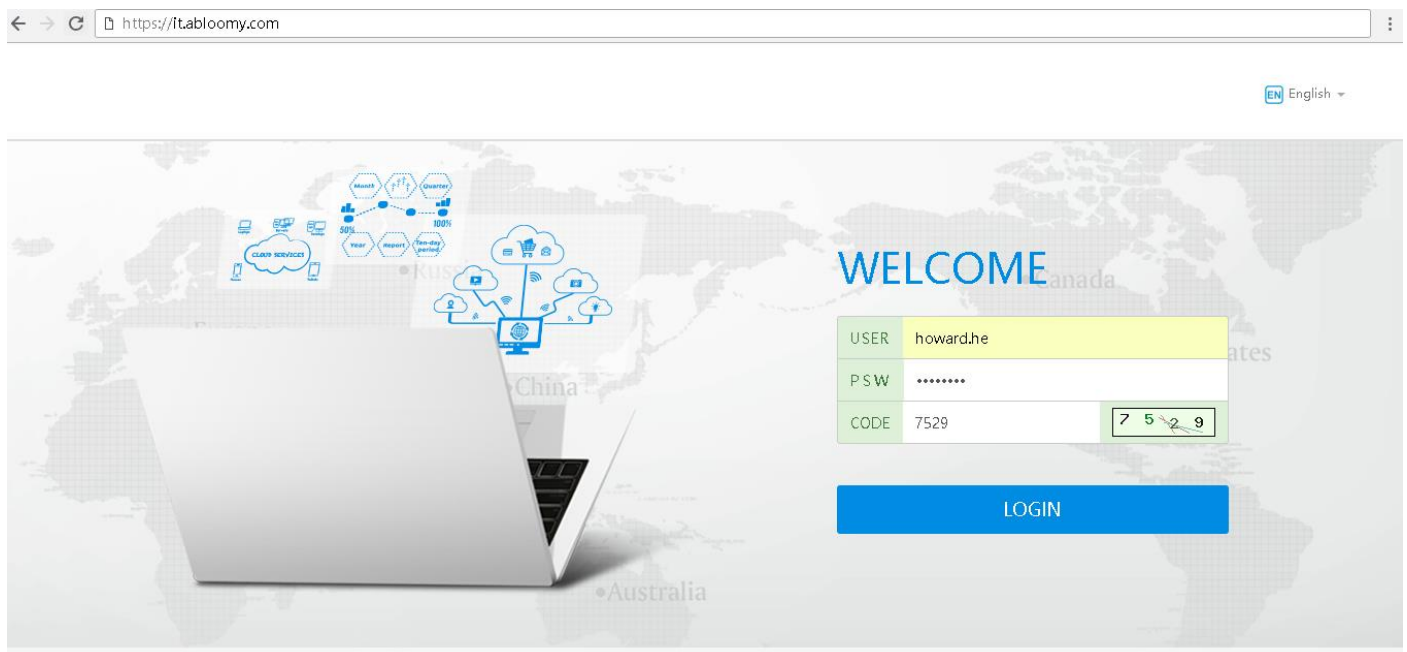
ABLOOMY AP must work with Abloomy AC. To ensure that the AP can successfully complete the connection with Abloomy AC, you must do the following process:

- 1) First, you must add the AP MAC to the corresponding account of AC (You can also do some AP pre-configured in the account, such as radio channel, SSID and output power).
- 2) Second, configure AP CSIP address and WAN port to ensure that the AP can connect online to corresponding account in AC (• The default CSIP of AP is AC domain and the default WAN port mode of AP is DHCP)
- 3) Third, power on the AP and connect to your network. AP will go online in the corresponding account and get the pre-configured radio channel, SSID and output power.

1.1. Add AP to account

Login your account, access the WiFi module and add AP in devices.

Note: This step must do first before connect AP to the network to ensure AP can register to corresponding account.



The screenshot shows a web browser window with the URL <https://itabloomy.com>. The page features a world map background with a laptop in the foreground. On the right side, there is a login form titled "WELCOME". The form includes fields for "USER", "PSW", and "CODE". The "USER" field contains the text "howard.he". The "PSW" field is masked with dots. The "CODE" field contains the text "7529". Below the "CODE" field, there is a small box with the numbers "7 5 2 9" and a green checkmark. A blue "LOGIN" button is located below the form. In the top right corner, there is a language selector showing "EN English".

USER	howard.he
PSW	*****
CODE	7529

7 5 2 9

LOGIN



**Account &
Organization**
Multi-tenants, multi-
levels account



WiFi
Reliable and
simplified wireless
network



Portal & AD
Portal template &
Ads configuration



Content
APP, games, video,
book, etc.



Alert
Accurate and
efficient alarm
monitoring center



**Asset
Management**
VM deployment &
Licenses



NFV
Network Function
Virtualization

ABLOOMY

Welcome, howan

Dashboard

Devices

Clients

Settings

System

Alerts

Overview

AP(2)

AC

GRE devices

Name

MAC

Time Zone

Country Code

Location

Organization

Tag

Address

AP1

90:cd:b6:7a:94:d1

Africa/Addis_Ababa

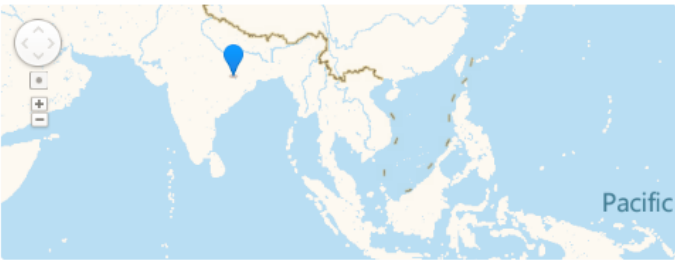
AL/Albania

Select

jefftest1

Select

Enter



Radio Policy

WLAN/LAN

Distributed AC

Save

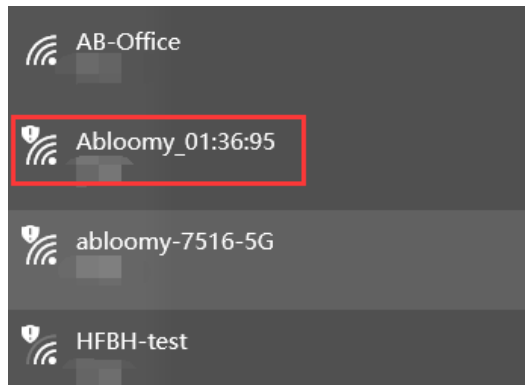
Cancel

1.2. Basic configuration of the AP

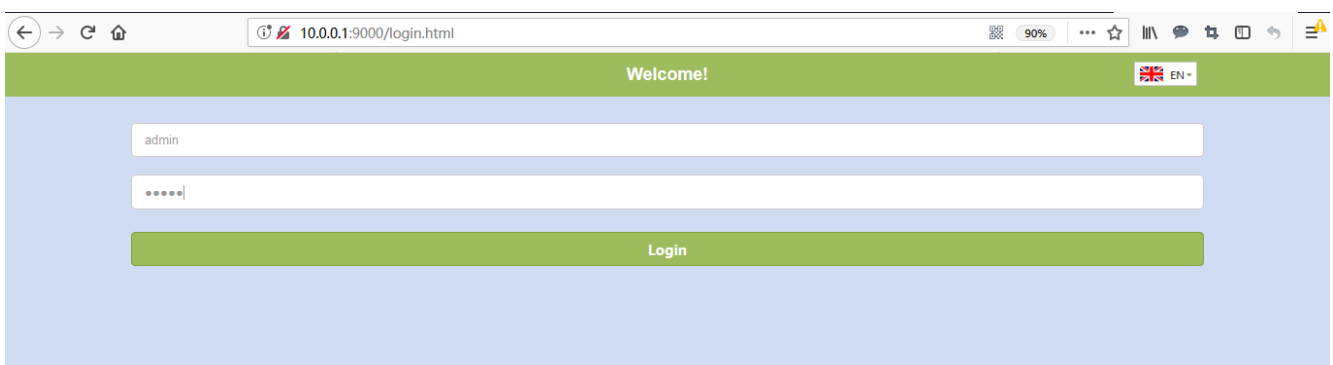
There are two ways of AP configuration: 1. WEB page configuration; 2. SSH command configuration. The configuration contents include AP WAN IP address acquisition mode: DHCP [default mode], static mode, PPPOE mode and CSIP address (The default CSIP of AP is ACS domain and the default WAN port mode of AP is DHCP)

1.2.1. Configure AP by web page

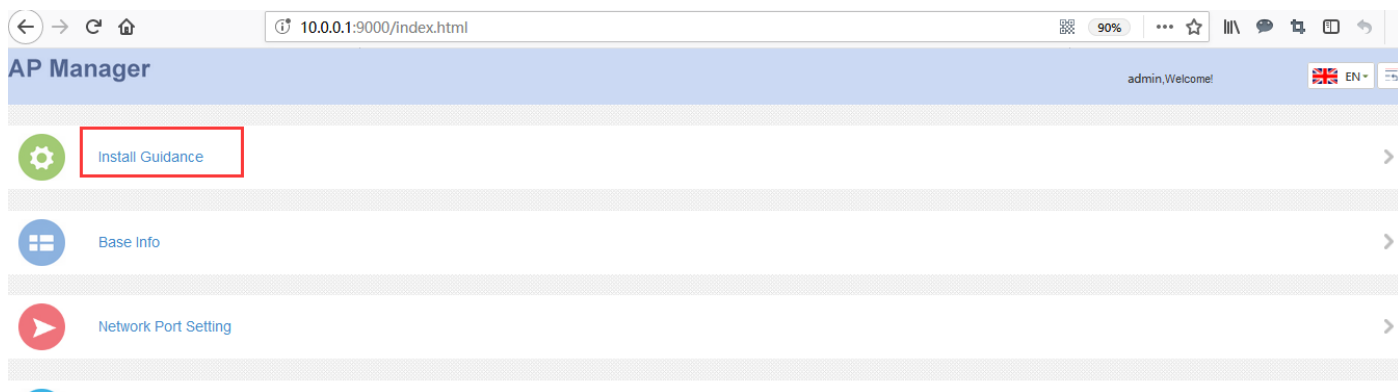
- 1) First, power on the AP (**do not connect to the network**). AP will send out SSID by the name ABLOOMY_XX:XX:XX. Use your laptop connect the SSID.



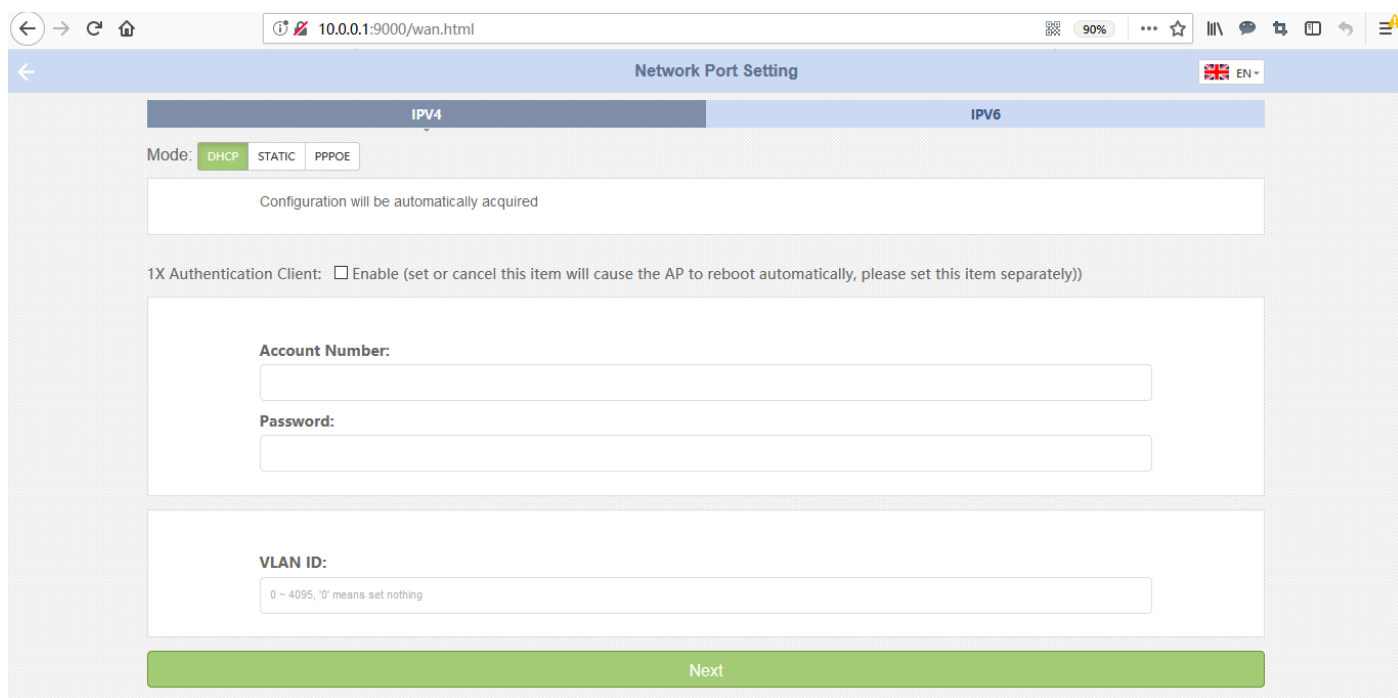
- 2) Open you IE or Firefox, type in IP 10.0.0.1:9000. Login the management page by username: **admin** password: **admin**



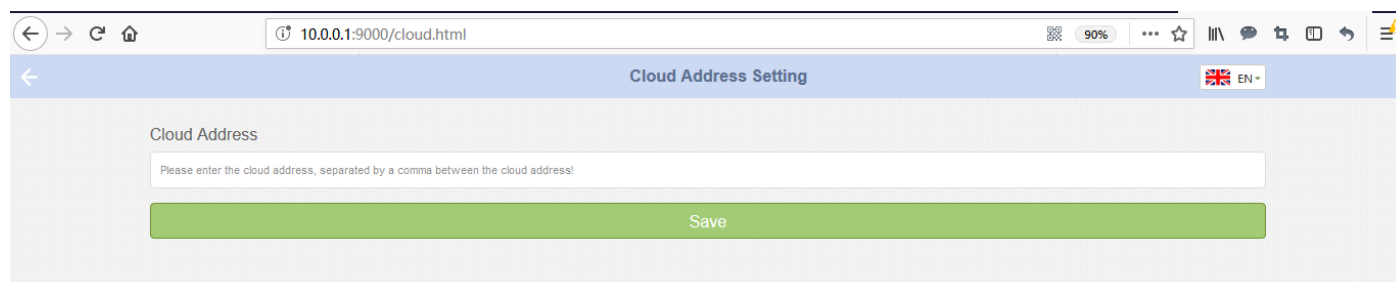
3) Click install guidance



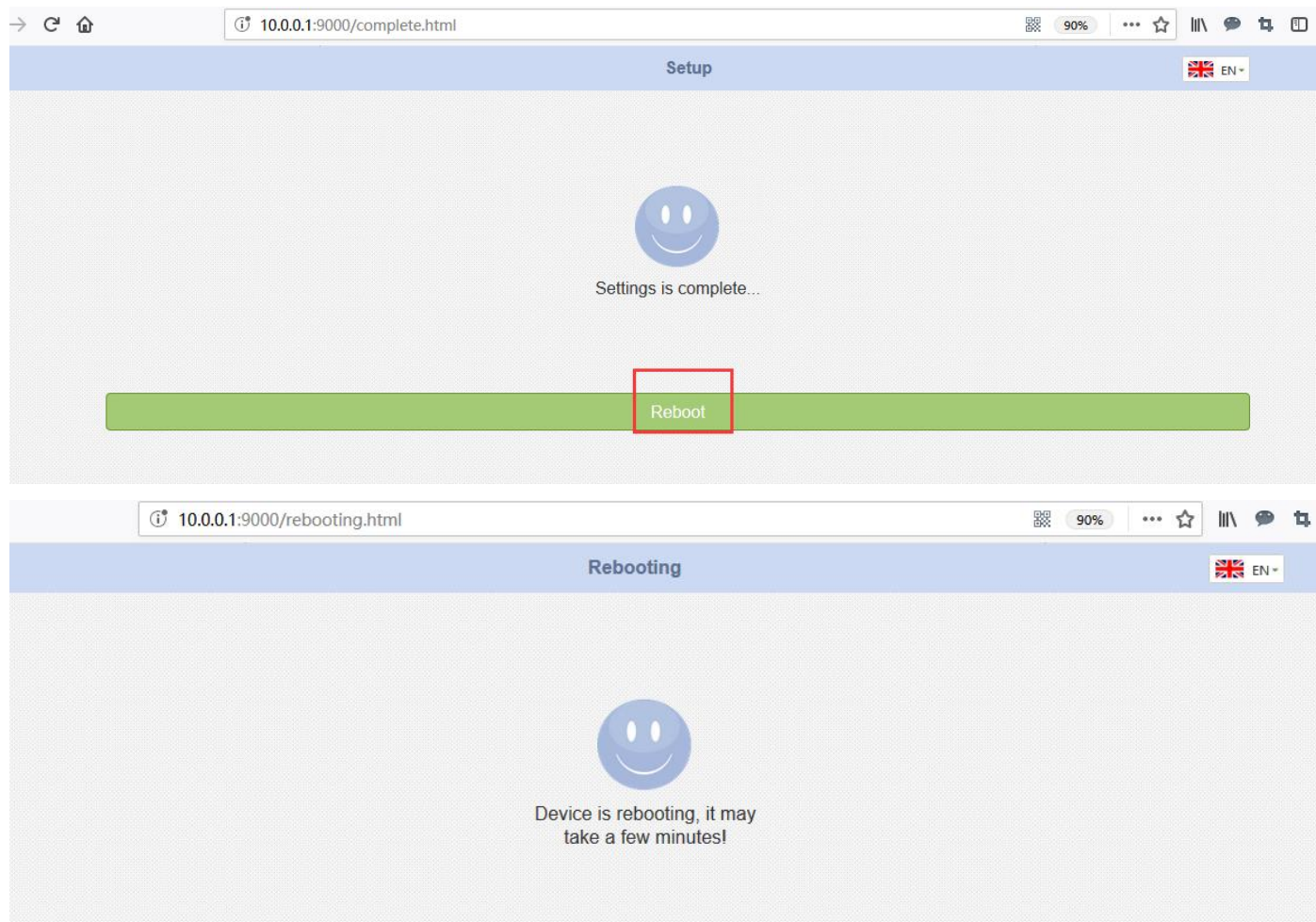
4) Configure AP WAN IP address acquisition mode: DHCP (default mode), STATIC, PPPOE according to network types. Also configure AP wan port VLAN (default is none).



5) Fill the IP address of AC (or domain) in the AP Cloud Address page (default is ACS domain). Then, click Save.



6) Click reboot and connect AP to network. After AP reboot, it will go online to the corresponding account of AC.



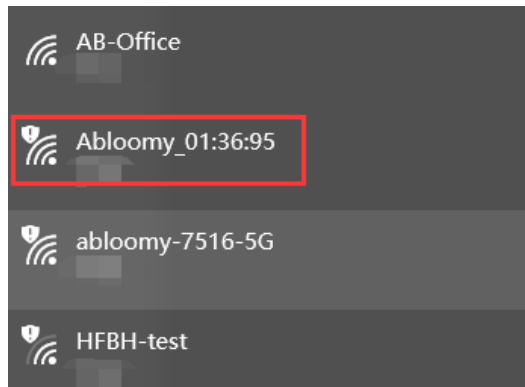
Login the account. In WiFi—Devices—AP, You will see AP is online.

The screenshot shows the 'Devices' page of the ABLOOMY web interface. The left sidebar contains 'Dashboard', 'Devices', 'Clients', and 'Settings'. The main content area shows a table with columns: Name, MAC, Public IPv4, Private IPv4, Status, Clients, Hardware, Firmware, and Online. The 'Status' column for the '3051A-LYP' device is highlighted with a red rectangular box, showing 'Running'.

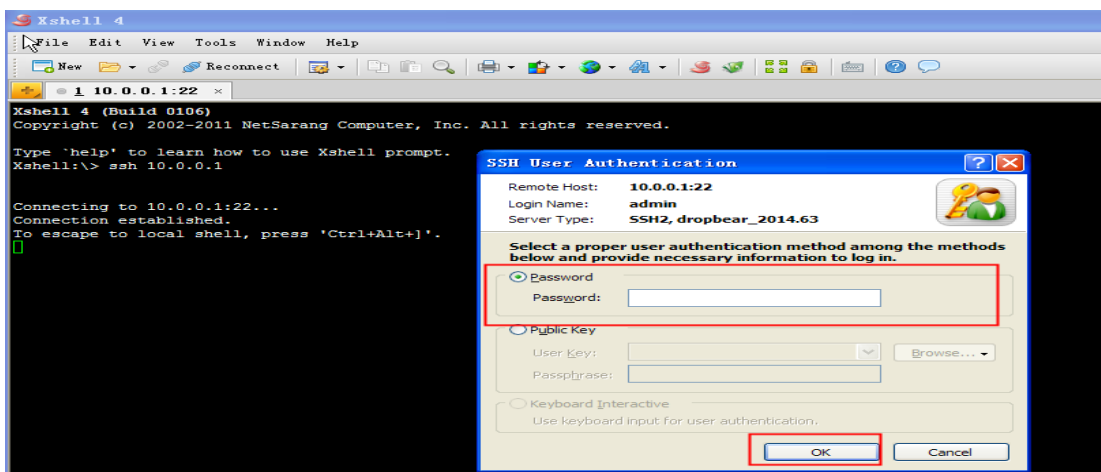
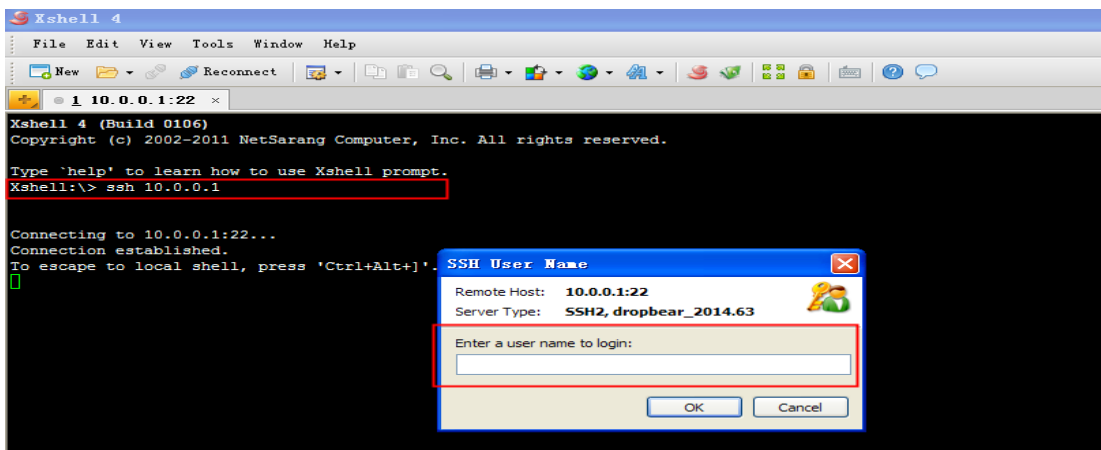
Name	MAC	Public IPv4	Private IPv4	Status	Clients	Hardware	Firmware	Online
-	60:CD:A9:01:FF:F2	47.74.232.75	192.168.2.100	Running	1	VSM80	6.5.1(y1259.830.1375.207)	5 Hour 46 Minute
3051A-LYP	60:CD:A9:02:18:D6	223.72.71.34	192.168.1.3	Running	-	VAP3051A	6.5.1(y1258.821.1365.207)	3 Day 13 Hour

1.2.2. Configure AP by SSH command

- 1) First, power on the ap (**do not connect to the network**). AP will send out SSID by the name ABLOOMY_XX:XX:XX. Use your laptop connect the SSID.



- 2) Open the Xshell and use command **ssh 10.0.0.1** login the AP by username: **admin**, password: **admin**



Input **help**, you can see the common configuration command line.

```

using dumb terminal settings.
Abloomy>help
Command list:
    set csip <address>...
    set wan dhcp [vlanid <vlanid>]
    set wan static <ip> <mask> <gateway> <dns1> <dns2> [vlanid <vlanid>]
    set wan pppoe <username> <password> [demand <timeout> |persist <fail_tim
es>] <mtu>

    show csip
    show wan
    show wlan
    show station
    show version
    show log
    show uptime
    show arp
    show route
    password
    ping <target>
    reboot
    reset config

    set wan-webui {on|off}
    show wan-webui
    upgrade <ftp_fileurl>
Abloomy>

```

- 3) Configure AP WAN IP address acquisition mode: DHCP (default mode), STATIC, PPPOE according to network types.

Set wan dhcp (DHCP mode)

```

Abloomy> set wan dhcp
set wan config success

```

Set wan PPPOE **account password** 6000 1492 (PPPOE mode)

```

Abloomy> set wan pppoe abloomy 123456 6000 1492
set wan config success

```

Set wan static **IP subnet-mask gateway DNS1 DNS2** (static mode)

```

Abloomy> set wan static 192.168.106.32 255.255.255.0 192.168.106.1 114.114.114.114 8.8.8.8
set wan config success

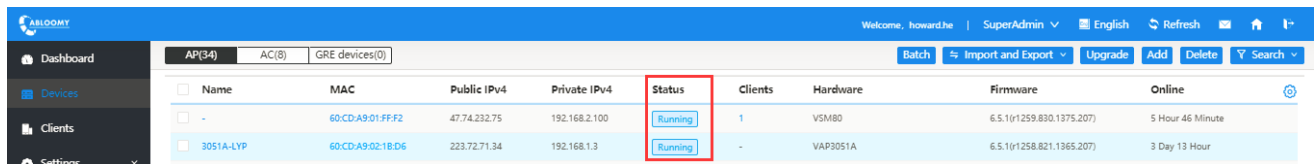
```

4) Configure AP csip address.

Set csip **xx.xx.xx.xx** (AC IP address or domain)

```
Abloomy> set csip 42.62.11.62
Abloomy> show csip
CSP address:
42.62.11.62
option 43:
```

Login the account. In WiFi—Devices—AP, you will see AP is online.



The screenshot shows the Abloomy web interface. The top navigation bar includes the Abloomy logo, user information (Welcome, howard.he | SuperAdmin), language (English), and action buttons (Refresh, Home, Logout). The left sidebar contains navigation links: Dashboard, Devices, Clients, and Settings. The main content area displays a table of Access Points (APs) under the 'AP(34)' tab. The table has columns for Name, MAC, Public IPv4, Private IPv4, Status, Clients, Hardware, Firmware, and Online. Two APs are listed: one with MAC 60:CD:A9:01:FF:F2 and another with MAC 60:CD:A9:02:18:D6. Both have a 'Running' status, which is highlighted with a red box in the original image. The 'Online' column shows the time since the last update: '5 Hour 46 Minute' and '3 Day 13 Hour' respectively.

Name	MAC	Public IPv4	Private IPv4	Status	Clients	Hardware	Firmware	Online
-	60:CD:A9:01:FF:F2	47.74.232.75	192.168.2.100	Running	1	VSM80	6.5.10(1259.830.1375.207)	5 Hour 46 Minute
3051A-LYP	60:CD:A9:02:18:D6	223.72.71.34	192.168.1.3	Running	-	VAP3051A	6.5.10(1258.821.1365.207)	3 Day 13 Hour

2. Business Configuration of AP

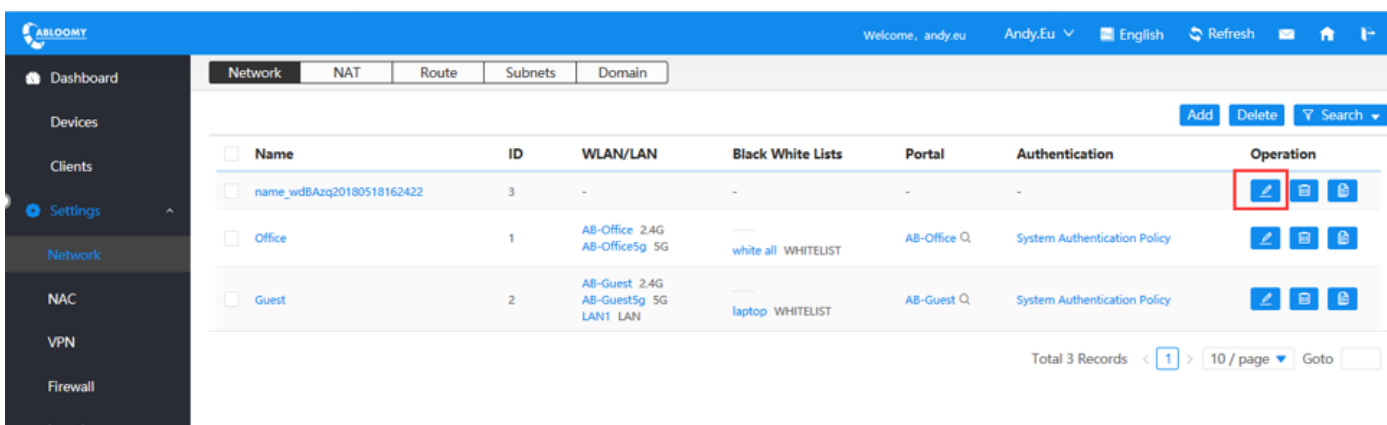
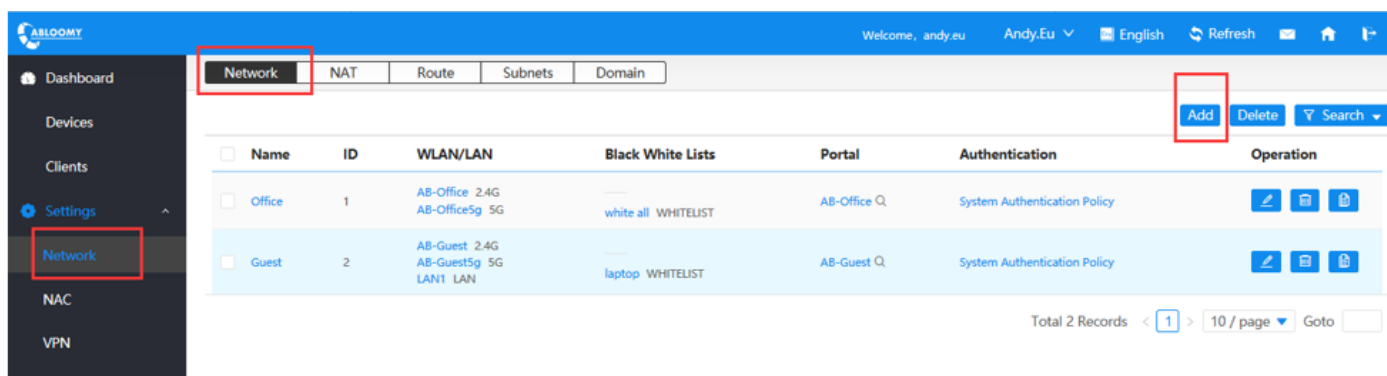
This section will show you the detail configuration of AP include: WLAN /LAN(SSID), LAN, Radio, Output power, Portal, Authentication, White &Black list.

2.1. Network policy configuration

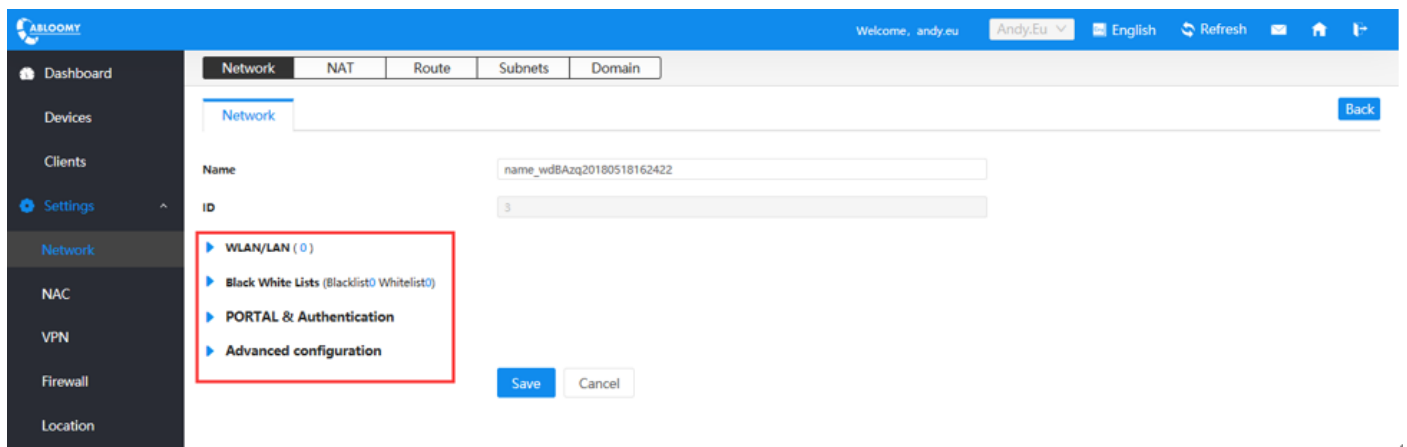
Network policy is used to bind WLAN/LAN (SSID), White &Black list, Portal and Authentication together. When AP get the WLAN/LAN (SSID) policy, it will get the corresponding network policy.

2.1.1. Network configuration

Enter WiFi—Network—Network, there are 2 default Network policies, you can modify or create a new one.

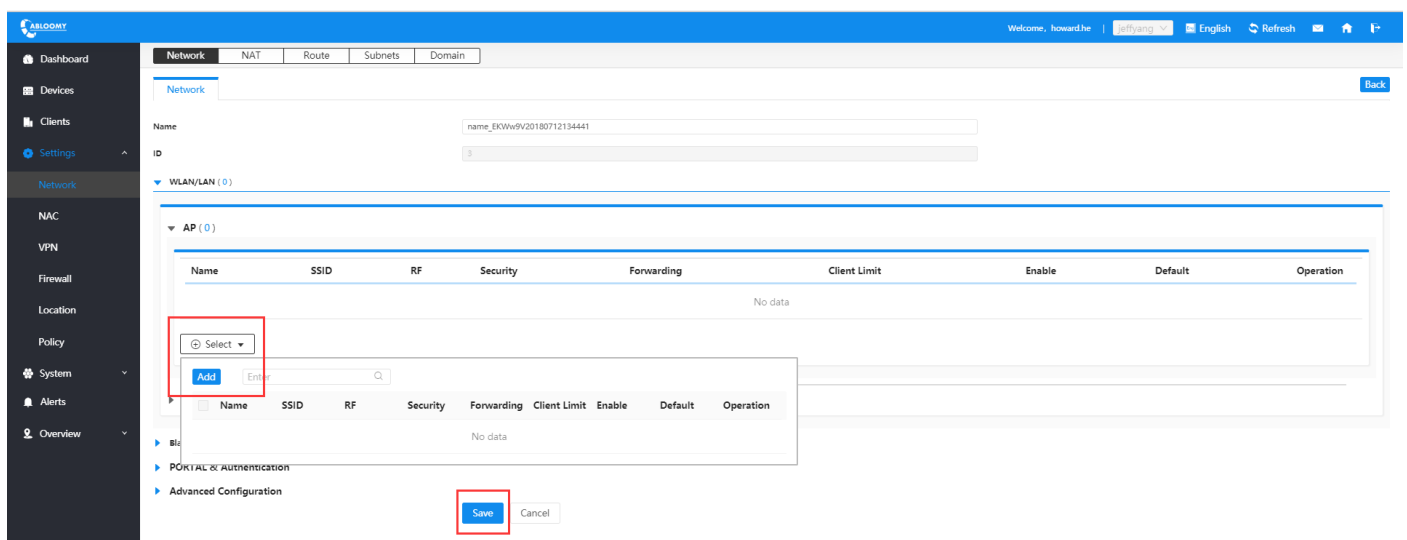


Click add to create a new Network policy, click edit and enter the following page.

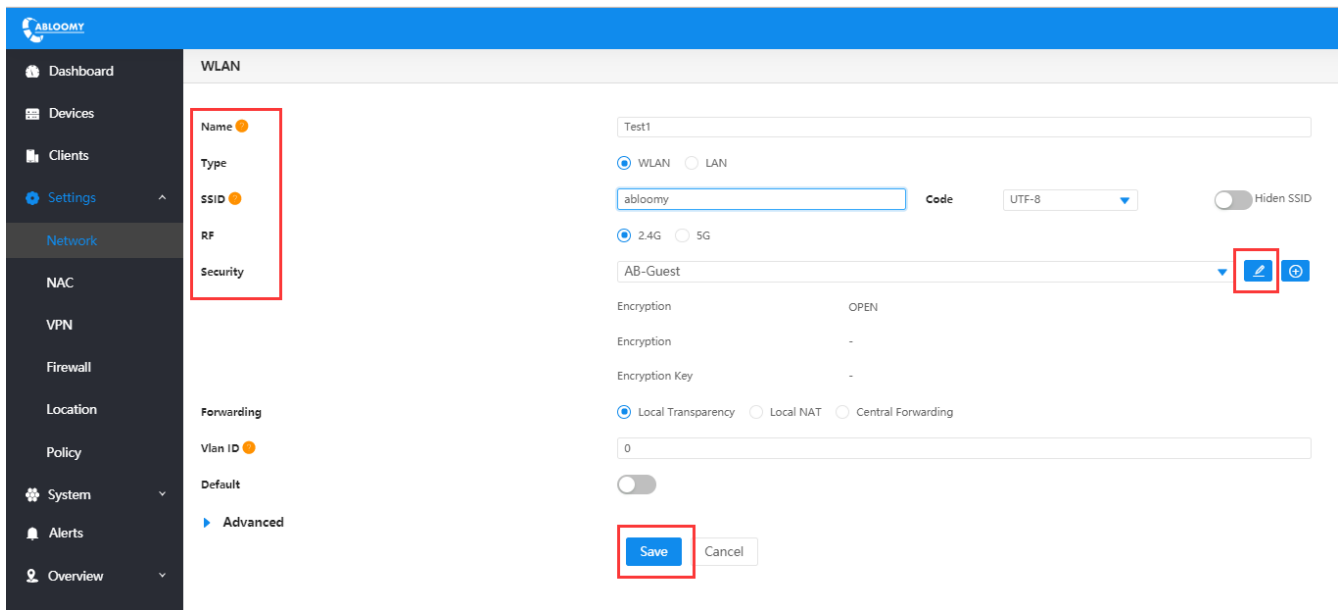


2.1.2. WLAN (SSID) configuration

WLAN (SSID) policy: Create the AP's wireless WLAN (SSID) policy. These policies can be shared to different APs. After being configured, they can be directly assigned to AP and the AP can broadcast automatically.

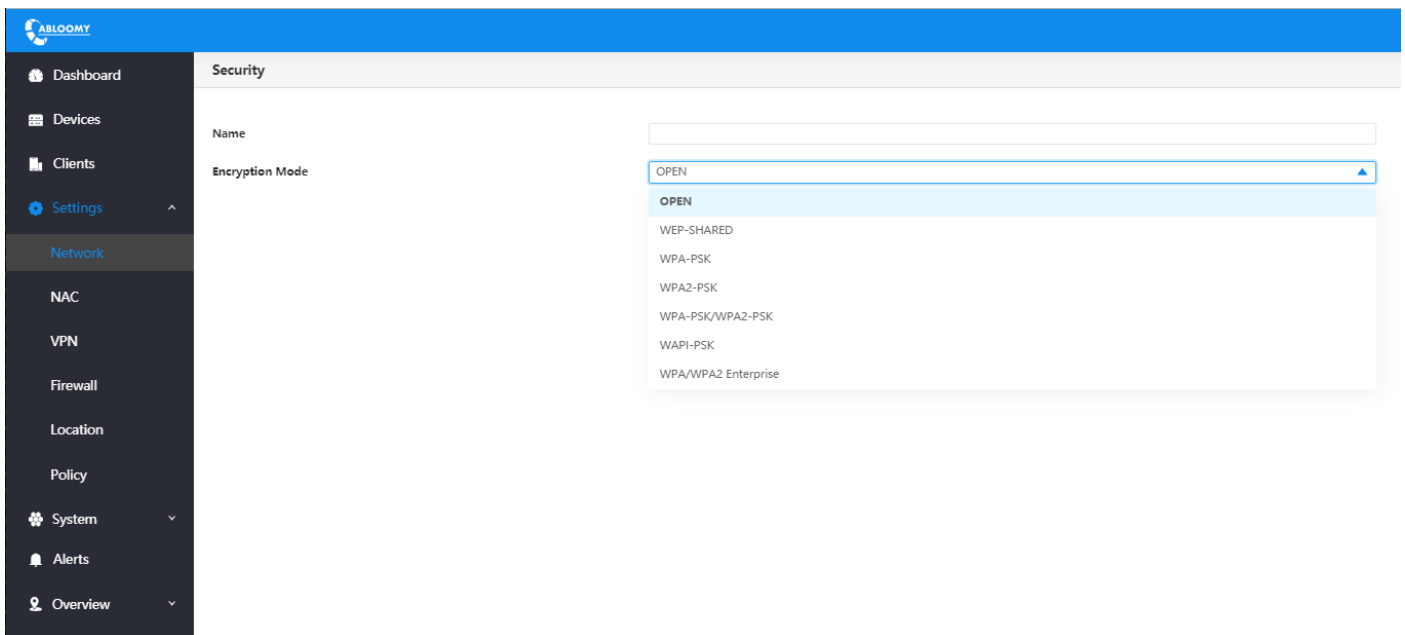


Set Name, Type, SSID, RF and Security policy



Under Security, there are many type of SSID Encryption Mode.

By default, two Security policies are created (wpa-psk/wpa2-psk and open). You can directly use them or add a new one.



2.1.3. LAN configuration

Some gateway AP have several LAN ports, you need to configure a LAN policy to enable the port.

2.1.4. Blacklist and Whitelist configuration

Blacklist: disable client connecting to the SSID.

Whitelist: enable client connecting to the SSID without portal authentication.

Name	MAC	IP Address	Apply To	Enable	Action
No data					

2.1.5. Portal configuration

There are 2 default portals you can use or you can also create a new portal.

ABLOOMY

Dashboard
Devices
Clients
Settings
Network
NAC
VPN
Firewall
Location
Policy
System
Alerts
Overview

Network
NAT
Route
Subnets
Domain

Name	IP Version	IP	IP/DHCP Mask
No data			

Select

Black/White List (Blacklist0 Whitelist0)
PORTAL & Authentication

MAC Authentication
Portal Policy
Type
URL
Mode
Advanced
Authentication Policy

AB-Guest

Add

Enter

Name	URL	Operation
AB-Guest	http://47.74.172.188/ad-U1wiCebj/KwMEVQ/index.php	
AB-Office	http://47.74.172.188/ad-U1wiCebj/qLs1jV/index.php	

System Authentication Policy

Advanced Configuration

SaveCancel

ABLOOMY

Dashboard
Devices
Clients
Settings
Network
NAC
VPN
Firewall
Location
Policy
System
Alerts
Overview

Portal Policy

Name

EnterName

Portal
Built-in
External

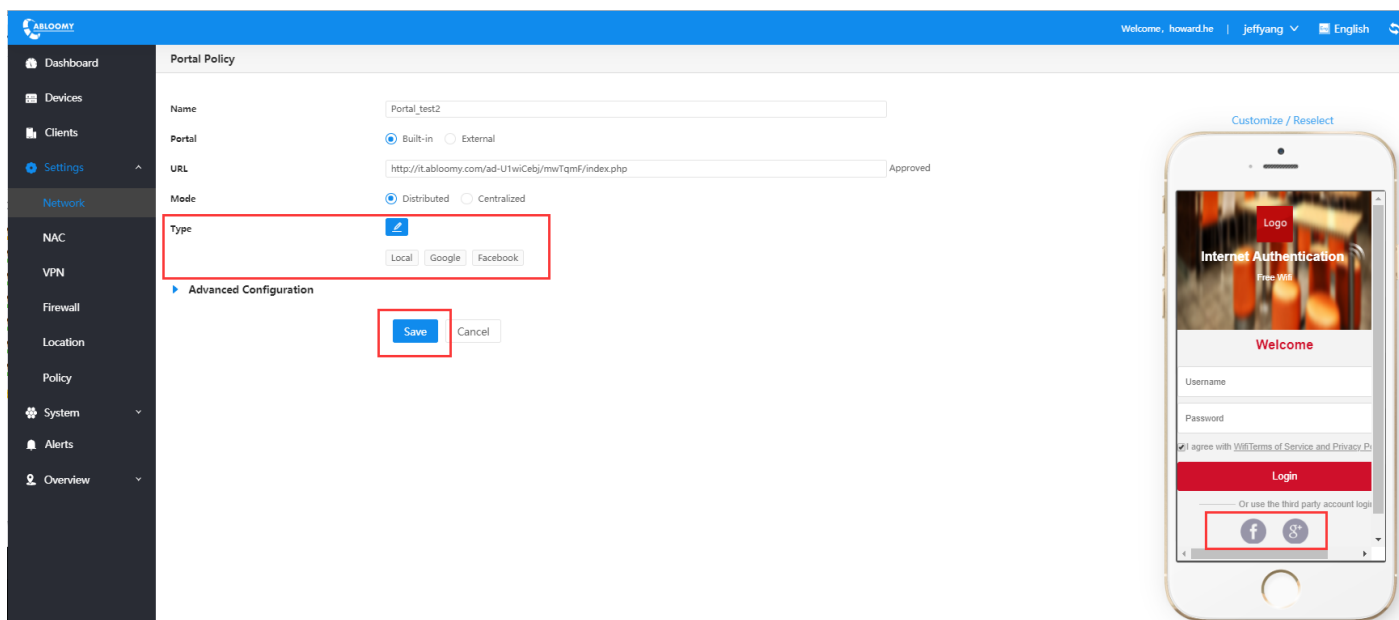
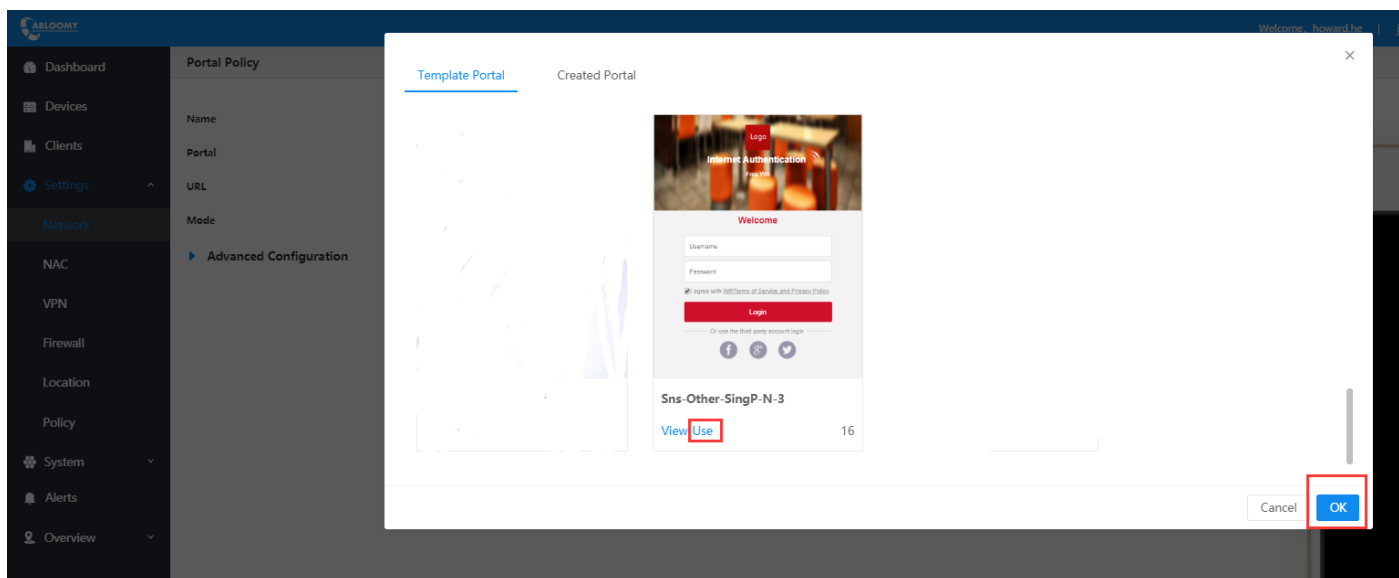
URL

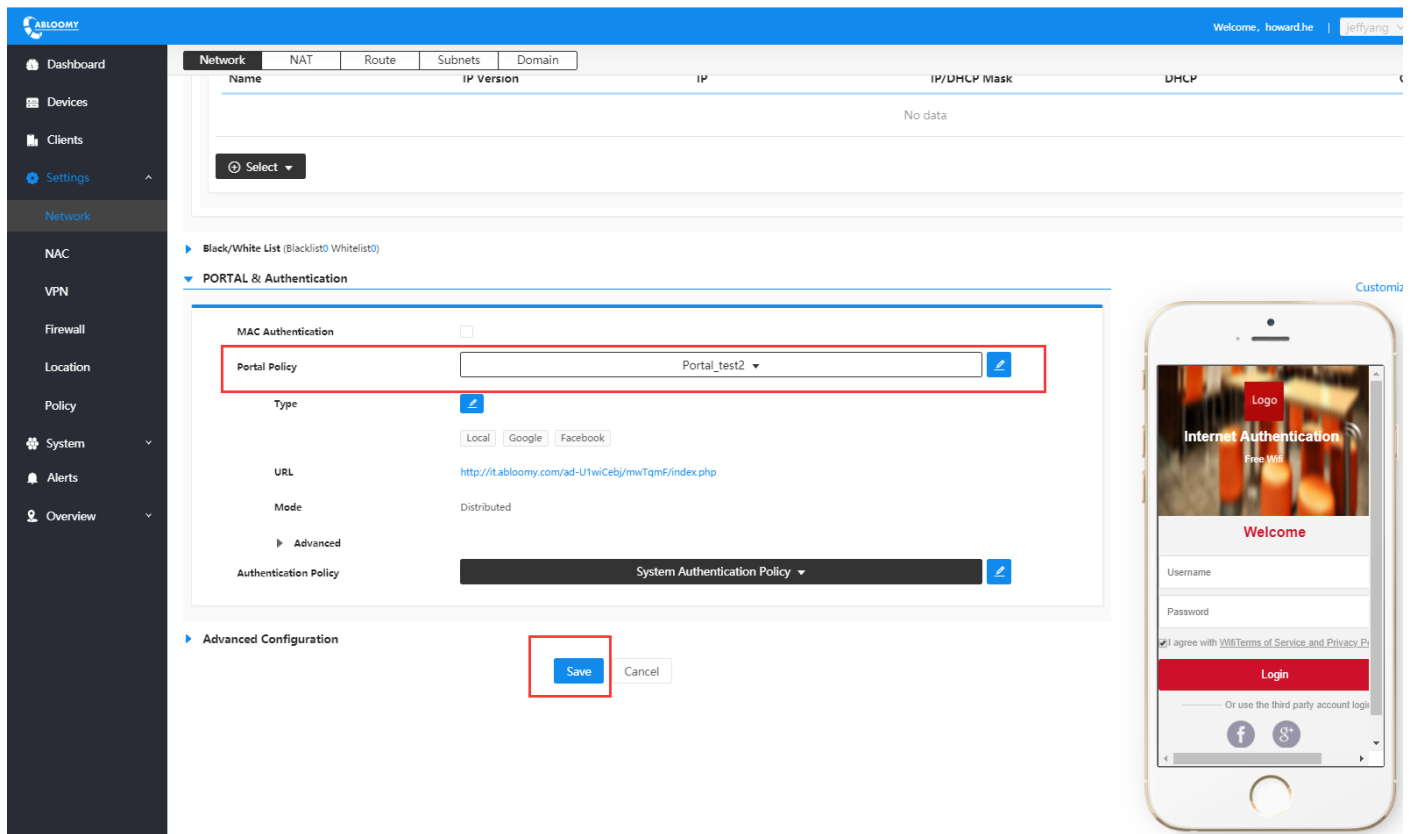
Please select or create Portal

Mode
Distributed
Centralized

Advanced Configuration

SaveCancel





2.1.6. Authentication configuration

We have a built-in Authentication Policy. If you need third-party authentication, you can create a new Authentication Policy. We support **RADIUS** and **LDAP** protocol.

ABLOOMY

Welcome, howard.he | jeffyang | English

Dashboard
Devices
Clients
Settings
Network
NAC
VPN
Firewall
Location
Policy
System
Alerts
Overview

Network NAT Route Subnets Domain

Select

Black/White List (Blacklist0 Whitelist0)

PORTAL & Authentication

MAC Authentication ☐

Portal Policy Portal_test2

Type Local Google Facebook

URL http://it.abloomy.com/ad-U1wiCebj/mwTqmF/index.php

Mode Distributed

Advanced

Authentication Policy

System Authentication Policy

Add Enter

Name	Type	Server	Operation
System Authentication Policy	Built-in	-	

Advanced Configuration

Customize

ABLOOMY

Welcome

Dashboard
Devices
Clients
Settings
Network
NAC
VPN
Firewall
Location
Policy
System
Alerts
Overview

Authentication Policy

Service RADIUS

Name Built-in RADIUS LDAP/AD

Server

Password

Confirm Password

RADIUS Billing ☒ Port 1813

Advanced Configuration

Save Cancel

ABLOOMY

Welcome, howard.he | jeffyang | English Refresh

Dashboard
Devices
Clients
Settings
Network
NAC
VPN
Firewall

Network NAT Route Subnets Domain

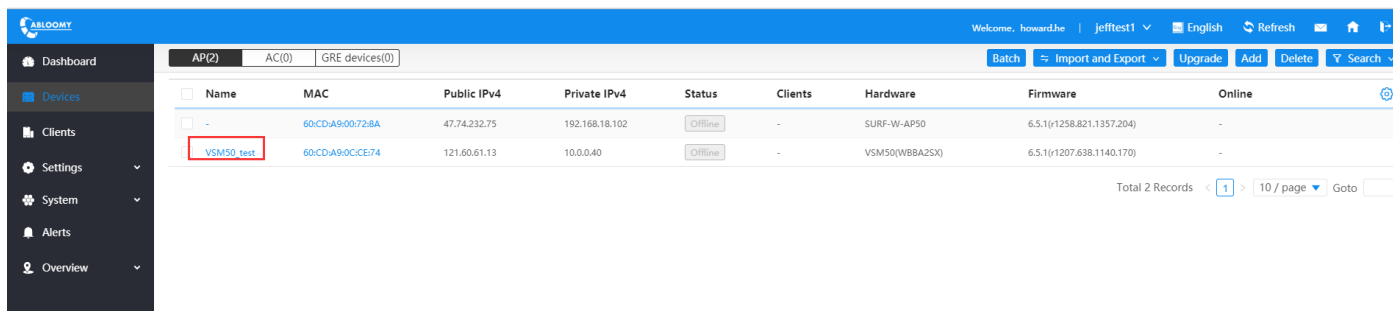
Name	ID	WLAN/LAN	Black/White List	Portal	Authentication	Operation
name_EKWv9V20180712134441	3	Abloom_Lan LAN	-	Portal_test2 Q	System Authentication Policy	
Office	1	AB-Office 2.4G AB-Office5g 5G Office LAN	AB-WHITELIST WHITELIST	AB-Office Q	System Authentication Policy	
Guest	2	AB-Guest-Jeff 2.4G AB-Guest5g 5G	Laptop WHITELIST	AB-Guest Q	System Authentication Policy	

Total 3 Records < 1 > 10 / page Goto

2.2. Assign policy to AP

In this section will show you how to assign Radio and WLAN/LAN (SSID) policy to AP.

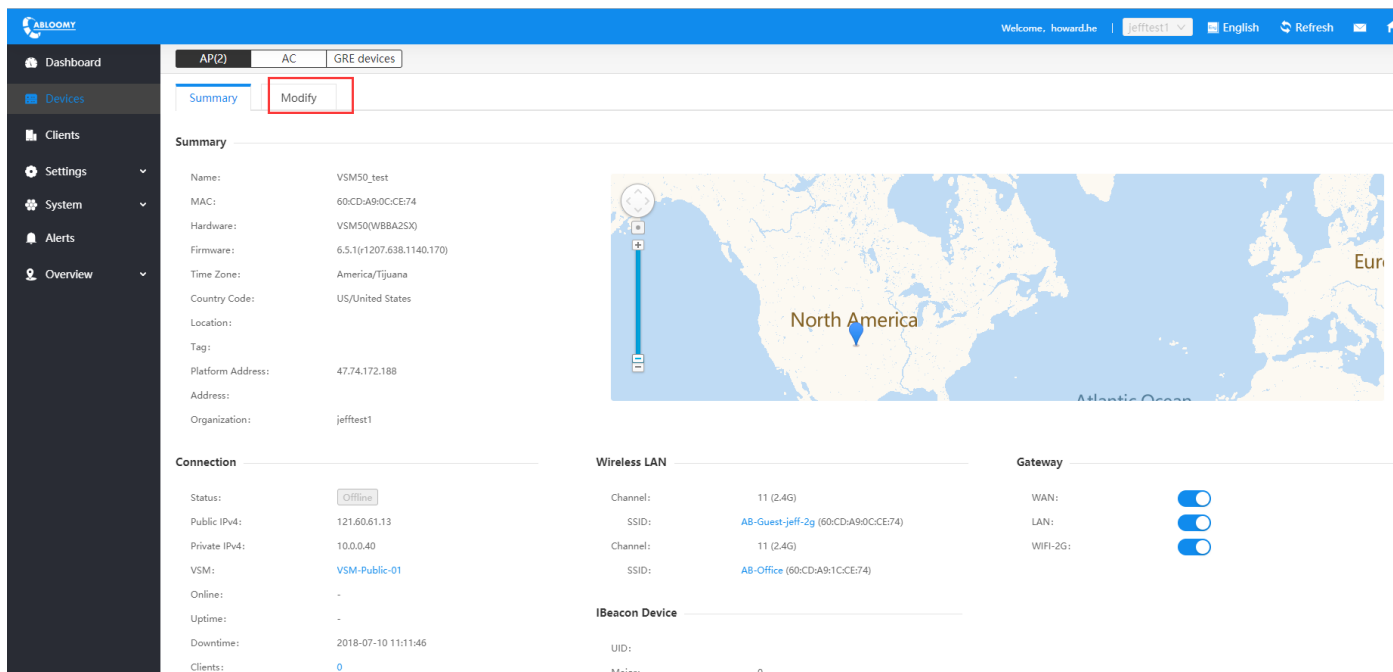
Enter WiFi—Devices—AP



The screenshot shows the ABLOOMY dashboard with the 'Devices' tab selected. A table lists two APs. The second row, 'VSM50_test', is highlighted with a red box. The table has columns for Name, MAC, Public IPv4, Private IPv4, Status, Clients, Hardware, Firmware, and Online.

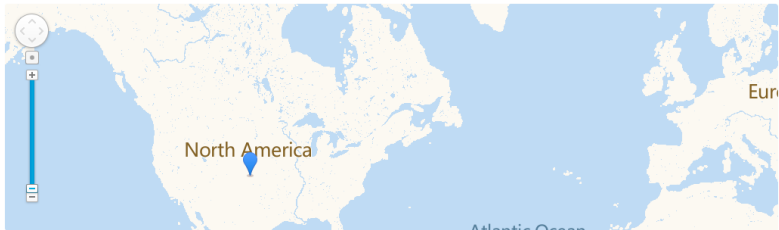
Name	MAC	Public IPv4	Private IPv4	Status	Clients	Hardware	Firmware	Online
-	60:CD:A9:00:72:8A	47.74.232.75	192.168.18.102	Offline	-	SURF-W-AP50	6.5.1(r1258.821.1357.204)	-
VSM50_test	60:CD:A9:0C:CE:74	121.60.61.13	10.0.0.40	Offline	-	VSM50(WBBA25X)	6.5.1(r1207.638.1140.170)	-

Click Modify



The screenshot shows the 'Modify' page for the 'VSM50_test' device. The page is divided into several sections: Summary, Connection, Wireless LAN, Gateway, and iBeacon Device. The 'Summary' section contains fields for Name, MAC, Hardware, Firmware, Time Zone, Country Code, Location, Tag, Platform Address, Address, and Organization. The 'Connection' section shows the device's status as 'Offline' and its IP addresses. The 'Wireless LAN' section shows the channel and SSID for the device. The 'Gateway' section shows the WAN, LAN, and WiFi-2G settings. The 'iBeacon Device' section shows the UID and Major number.

Summary

Name: VSM50_test
MAC: 60:CD:A9:0C:CE:74
Hardware: VSM50(WBBA25X)
Firmware: 6.5.1(r1207.638.1140.170)
Time Zone: America/Tijuana
Country Code: US/United States
Location: 
Tag:
Platform Address: 47.74.172.188
Address:
Organization: jefftest1

Connection

Status: Offline
Public IPv4: 121.60.61.13
Private IPv4: 10.0.0.40
VSM: VSM-Public-01
Online: -
Uptime: -
Downtime: 2018-07-10 11:11:46
Clients: 0

Wireless LAN

Channel: 11 (2.4G)
SSID: AB-Guest-jeff-2g (60:CD:A9:0C:CE:74)
Channel: 11 (2.4G)
SSID: AB-Office (60:CD:A9:1C:CE:74)

Gateway

WAN: ☒
LAN: ☒
WiFi-2G: ☒

iBeacon Device

UID:
Major: 0

ABLOOMY

Welcome, h

Dashboard

Devices

Clients

Settings

System

Alerts

Overview

AP(2) AC GRE devices

Name VSM50_test

MAC 60:CD:A9:0C:CE:74

Hardware VSM50(WBBA2SX)

Firmware 6.5.1(r1207.638.1140.170)

Time Zone America/Tijuana

Country Code US/United States

Location Select

Organization jefftest1

Tag Select

Address Enter

North America

Save Cancel

Radio Policy

WLAN/LAN

Distributed AC

2.2.1. Radio policy

Click Add:

Radio Policy

Name	Mode	Bandwidth	Channel	Power	Min RSSI(dBm)	Operation
No data						

Select

Add Enter

Name	Mode	Bandwidth	Channel	Power	Min RSSI(dBm)	Operation
No data						

ps://47.74.172.188/bois/devices/radio/edit

Choose Mode, BandWidth (suggest HT20), Channel and Power.

2.2.2. WLAN (SSID) policy

Click Select, choose the WLAN policy for the AP.

The screenshot shows the ABLOOMY web interface. On the left is a sidebar with navigation options: Dashboard, Devices, Clients, Settings, Network, NAC, VPN, Firewall, SNMP, Location, Policy, System, Alerts, and Overview. The main content area is titled 'Radio Policy' and has tabs for 'AP(1)', 'AC', and 'GRE devices'. A dropdown menu 'WLAN/LAN' is open, showing a list of policies. The 'AB-Guest5g-Jeff' policy is highlighted with a red box. Below the list is a 'Select' button. A modal window is open, showing a search bar and a table of policies. The 'AB-Guest5g-Jeff' policy is selected in this modal, also highlighted with a red box.

Name	SSID	Radio Type	Encryption	Data Forwarding	Clients Limits	Network	Advanced	Operation
AB-Guest-Jeff	AB-Guest-Jeff	2.4G	OPEN	Local NAT	64		More	Edit Delete
AB-Guest5g-Jeff	AB-Guest-Jeff	5G	OPEN	Local NAT	64		More	Edit Delete

Name	SSID	Radio Type	Encryption	Data Forwarding	Clients Limits	Advanced	Operation
☒ AB-Guest-Jeff	AB-Guest-Jeff	2.4G	OPEN	Local NAT	64	More	Edit Delete
☒ AB-Guest5g-Jeff	AB-Guest-Jeff	5G	OPEN	Local NAT	64	More	Edit Delete
☐ AB-Office	AB-Office	2.4G	WPA-PSK/WPA2-PSK	Local NAT	64	More	Edit Delete
☐ AB-Office5g	AB-Office	5G	WPA-PSK/WPA2-PSK	Local NAT	64	More	Edit Delete
☐ LAN_1	-	LAN	-	Local Transparency	-	More	Edit Delete

If AP is online. Wait for a while, you can see the assigned SSID broadcasted.

2.2.3. LAN policy

Click Select, choose the LAN policy for the AP.

The screenshot shows the ABLOOMY web interface. On the left is a sidebar with navigation options: Dashboard, Devices, Clients, Settings, Network, NAC, VPN, Firewall, SNMP, Location, Policy, System, Alerts, and Overview. The main content area is titled 'Radio Policy' and has tabs for 'AP(1)', 'AC', and 'GRE devices'. A dropdown menu 'WLAN/LAN' is open, showing a list of policies. The 'LAN_1' policy is highlighted with a red box. Below the list is a 'Select' button. A modal window is open, showing a search bar and a table of policies. The 'LAN_1' policy is selected in this modal, also highlighted with a red box.

Name	SSID	Radio Type	Encryption	Data Forwarding	Clients Limits	Network	Advanced	Operation
AB-Guest-Jeff	AB-Guest-Jeff	2.4G	OPEN	Local NAT	64		More	Edit Delete
AB-Guest5g-Jeff	AB-Guest-Jeff	5G	OPEN	Local NAT	64		More	Edit Delete
LAN_1	-	LAN	-	Local Transparency	-		More	Edit Delete

Name	SSID	Radio Type	Encryption	Data Forwarding	Clients Limits	Advanced	Operation
☒ AB-Guest5g-Jeff	AB-Guest-Jeff	5G	OPEN	Local NAT	64	More	Edit Delete
☐ AB-Office	AB-Office	2.4G	WPA-PSK/WPA2-PSK	Local NAT	64	More	Edit Delete
☐ AB-Office5g	AB-Office	5G	WPA-PSK/WPA2-PSK	Local NAT	64	More	Edit Delete
☒ LAN_1	-	LAN	-	Local Transparency	-	More	Edit Delete