

VAP Quick Guide

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AP Type: VAP, VSM (Gateway AP)

ABLOOMY Technologies




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1. Initial Configuration of AP

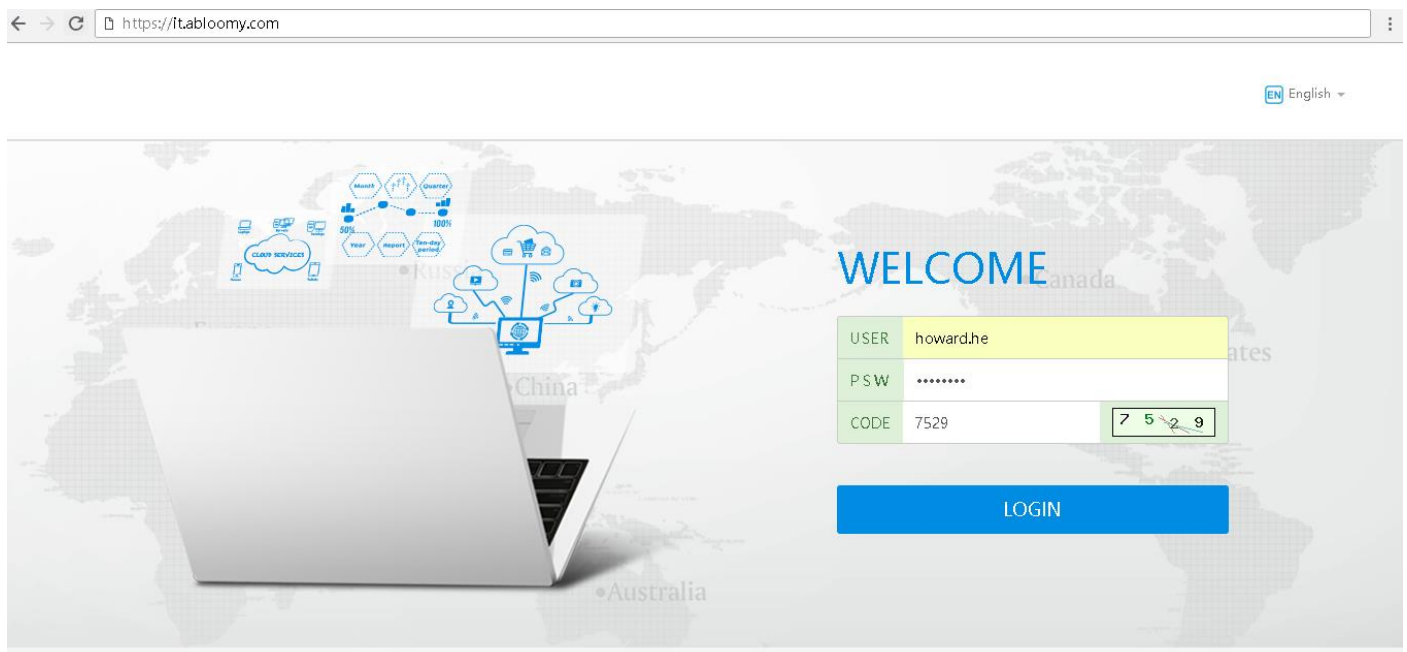
ABLOOMY AP must work with Abloomy AC. To ensure that the AP can successfully complete the connection with Abloomy AC, you must do the following process:

- 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.



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 | AP(2) | AC | GRE devices

Name AP1

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

Time Zone Africa/Addis_Ababa

Country Code AL/Albania

Location Select

Organization jefftast1

Tag Select

Address Enter

▶ Radio Policy

▶ WLAN/LAN

▶ Distributed AC

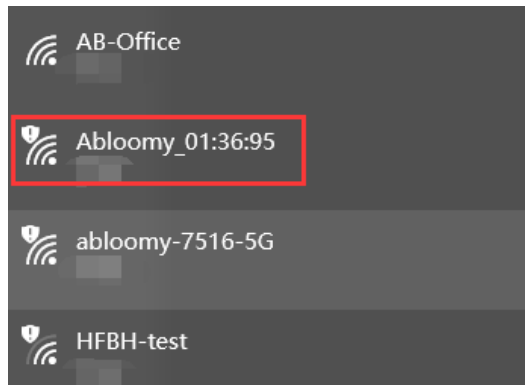
Save Cancel

1.2. Basic configuration of the AP

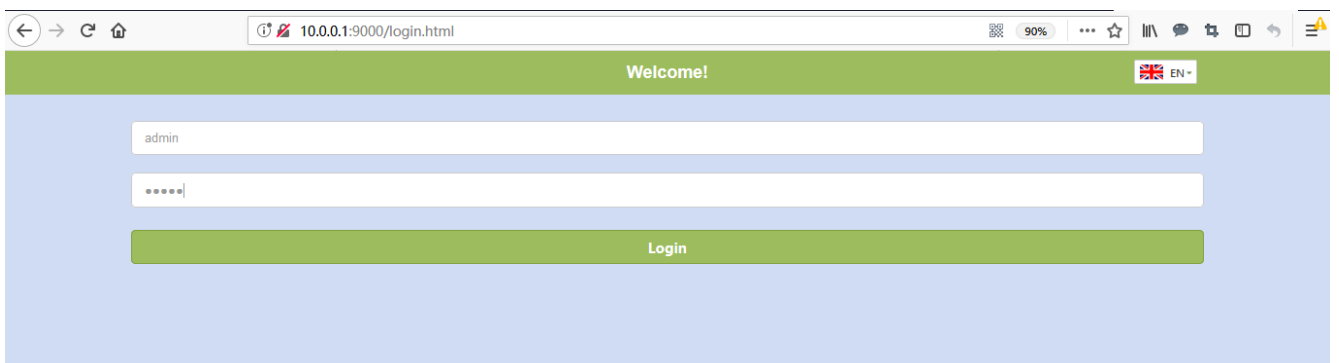
There are two ways of AP configuration: 1. WEB page configuration; 2. SSH command configuration. The configuration contents include AP WAN IP address acquisition mode: DHCP [default mode], static mode, PPPOE mode and CSIP address (The default CSIP of AP is ACS domain and the default WAN port mode of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

1.2.1. Configure AP by web page

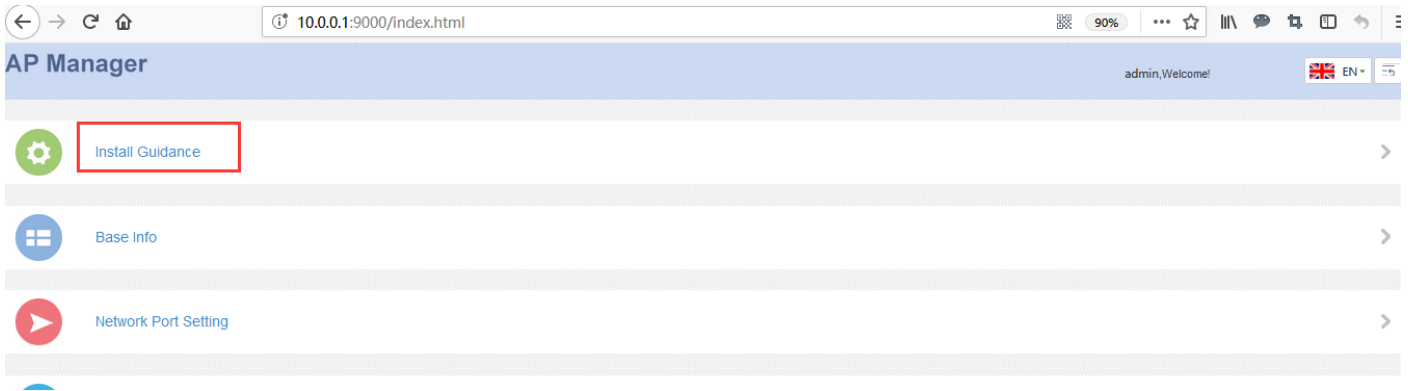
- 1) First, power on the AP (**do not connect to the network**). AP will send out SSID by the name ABLOOMY_XX:XX:XX. Use your laptop connect the SSID.



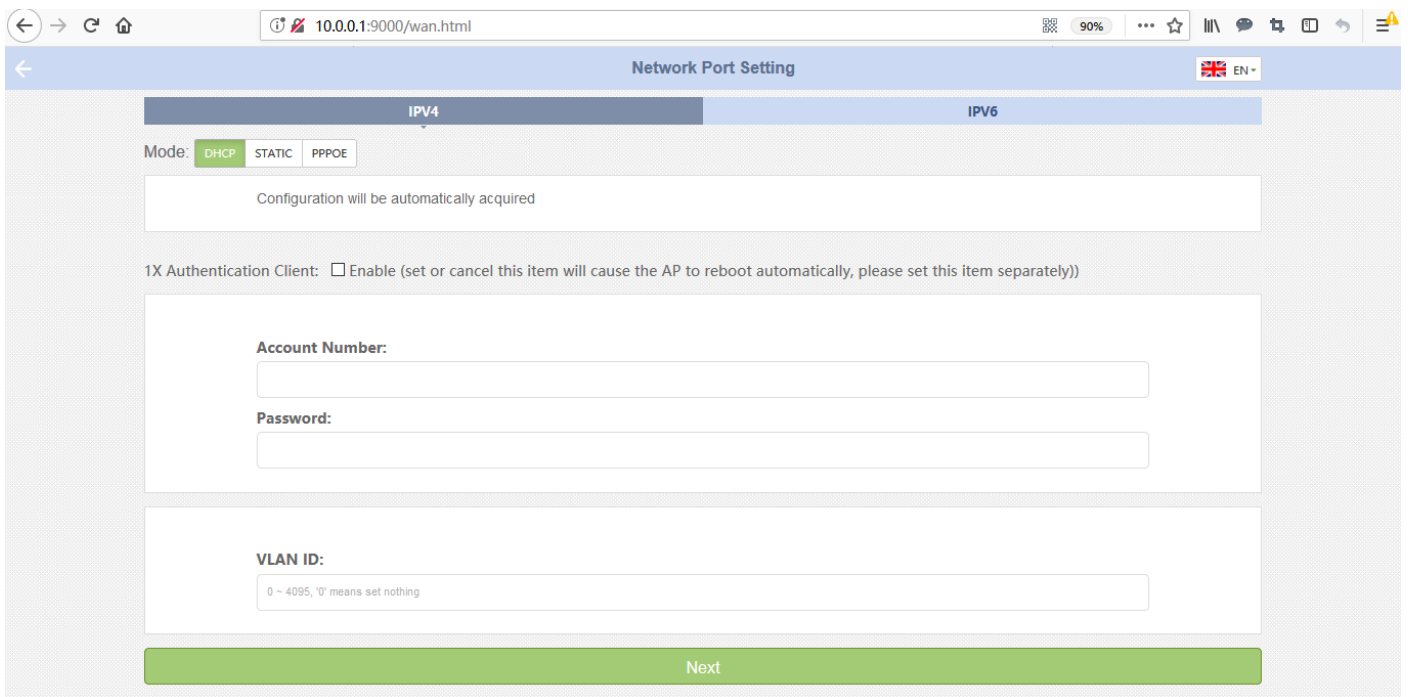
- 2) Open you IE or Firefox, type in IP 10.0.0.1:9000. Login the management page by username: **admin** password: **admin**



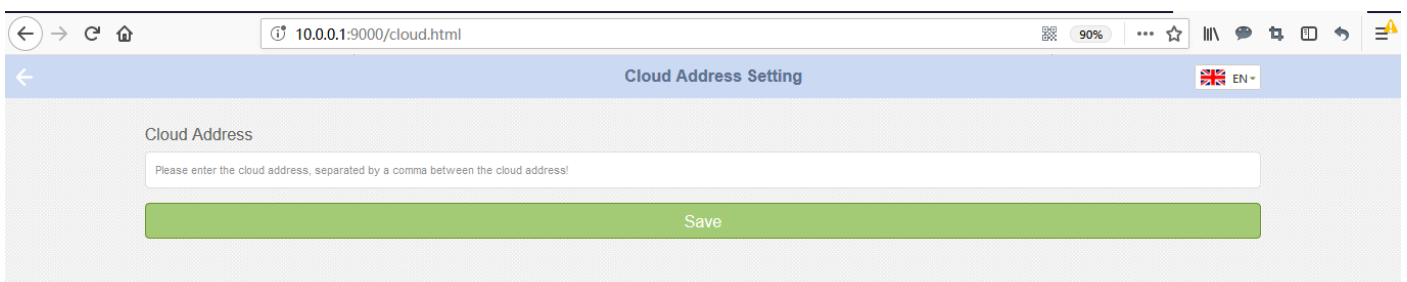
3) Click install guidance



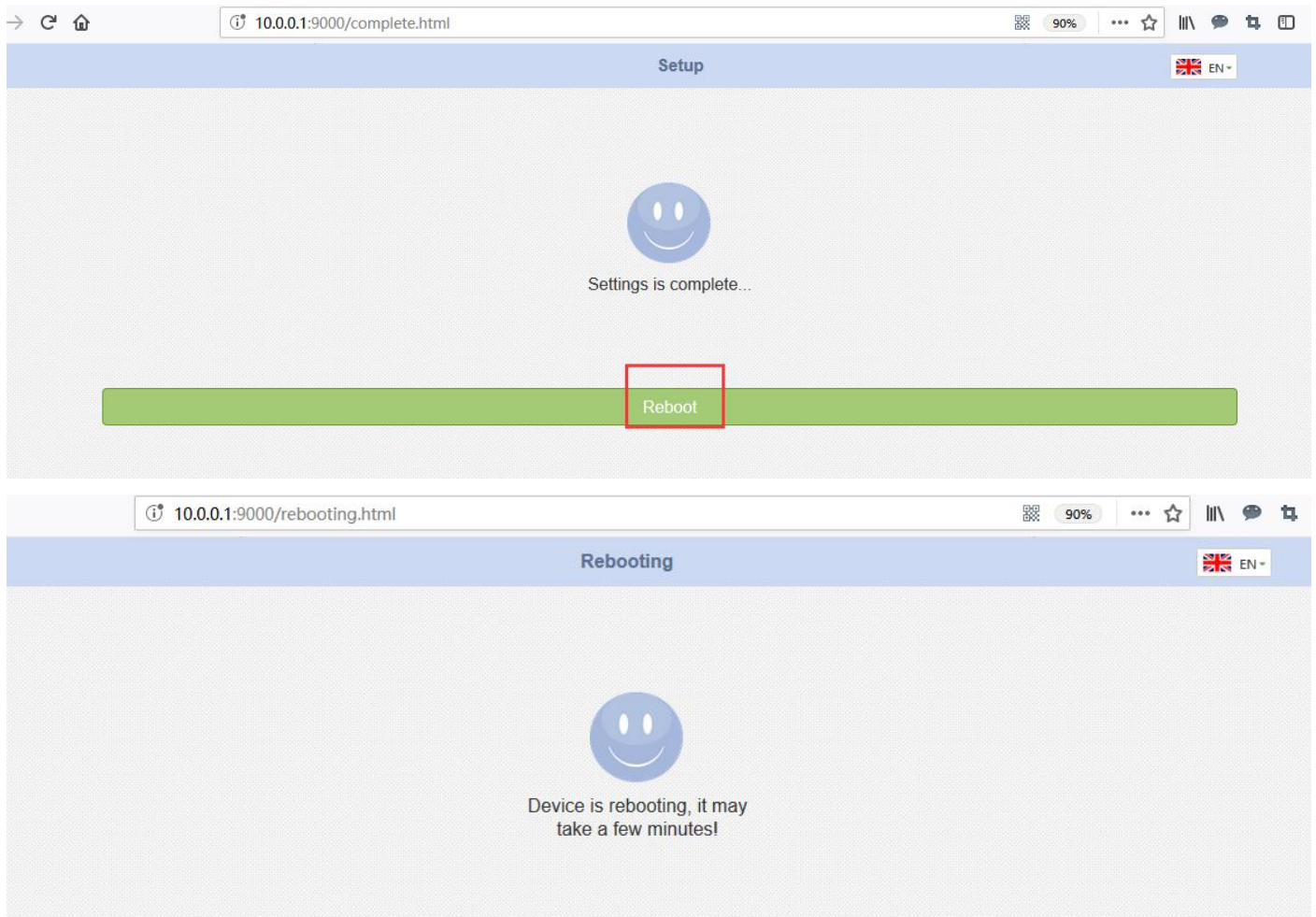
4) Configure AP WAN IP address acquisition mode: DHCP (default mode), STATIC, PPPOE according to network types. Also configure AP wan port VLAN (default is none).



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.



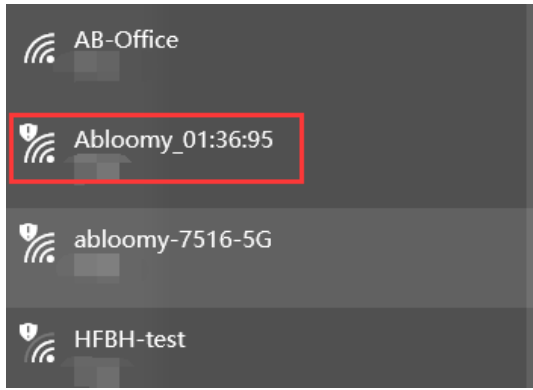
Login the account. In WiFi—Devices—AP, You will see AP is online.

The screenshot shows the Abloomy management dashboard. The top navigation bar includes 'Welcome, howard.he | SuperAdmin | English | Refresh | Home | Logout'. The main content area has a sidebar with 'Dashboard', 'Devices', 'Clients', and 'Settings'. The 'Devices' section is active, showing a table of APs. The table has columns for Name, MAC, Public IPv4, Private IPv4, Status, Clients, Hardware, Firmware, and Online. The 'Status' column for the device '3051A-LYP' is highlighted with a red box and shows 'Running'.

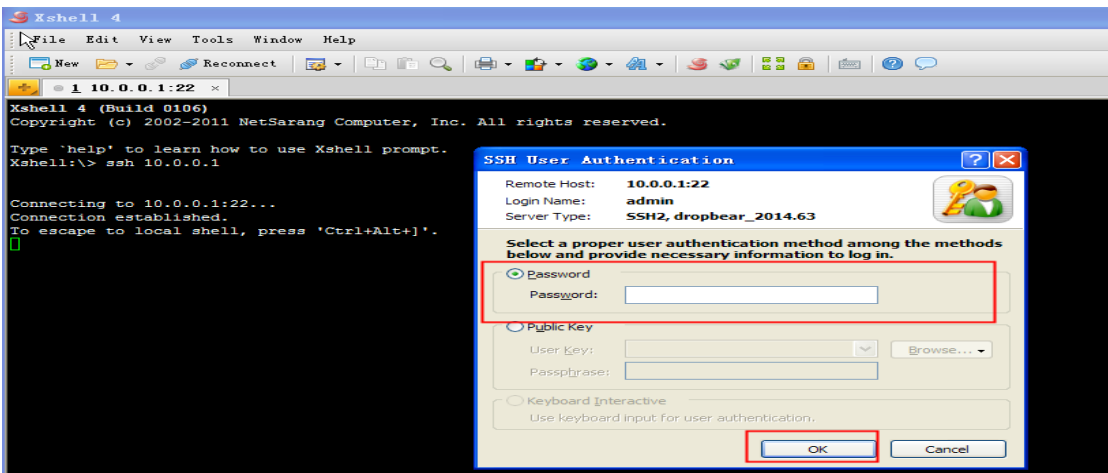
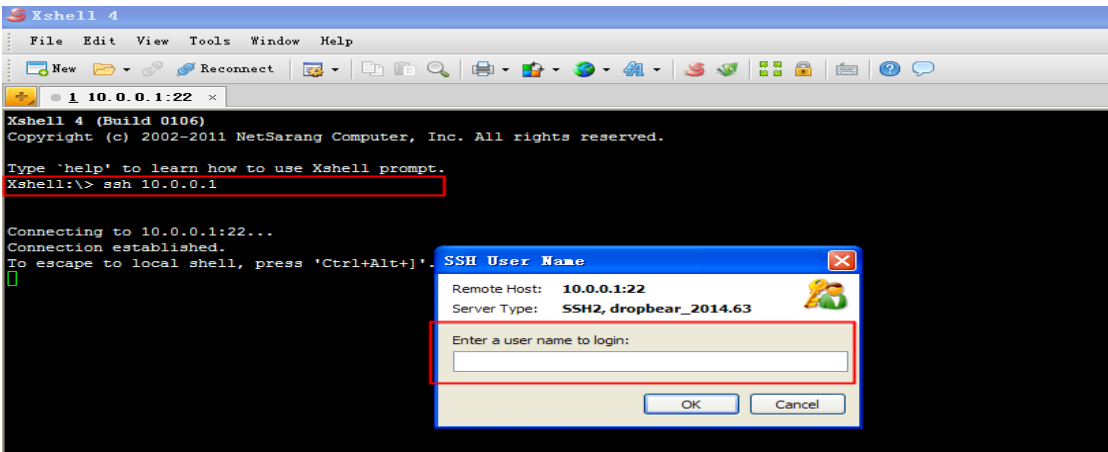
Name	MAC	Public IPv4	Private IPv4	Status	Clients	Hardware	Firmware	Online
-	60:CD:A9:01:FF:F2	47.74.232.75	192.168.2.100	Running	1	VSM80	6.5.10(1259.830.1375.207)	5 Hour 46 Minute
3051A-LYP	60:CD:A9:02:18:D6	223.72.71.34	192.168.1.3	Running	-	VAP3051A	6.5.10(1258.821.1365.207)	3 Day 13 Hour

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.

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

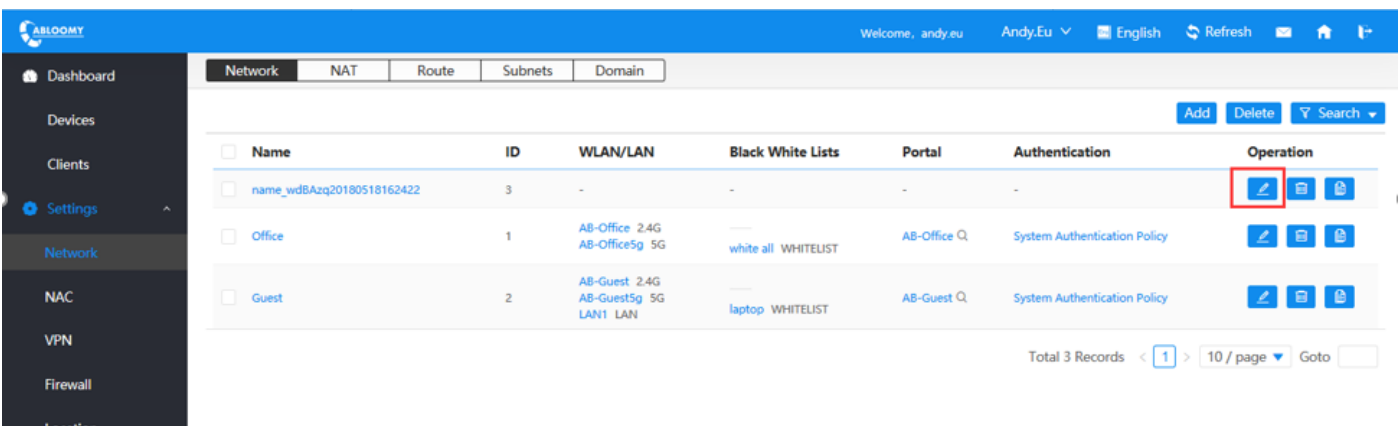
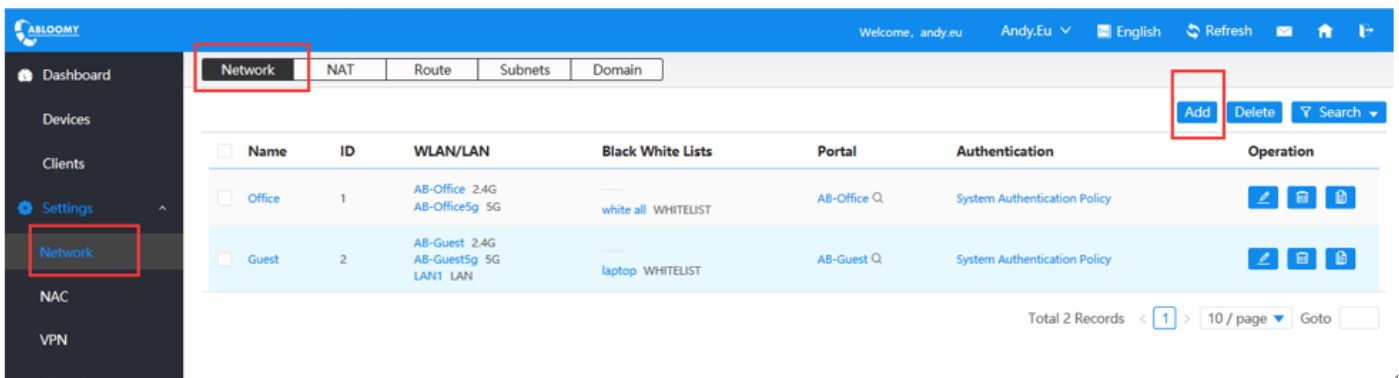
This section will show you the detail configuration of AP include: WLAN /LAN(SSID), LAN, Radio, Output power, Portal, Authentication, White &Black list.

2.1. Network policy configuration

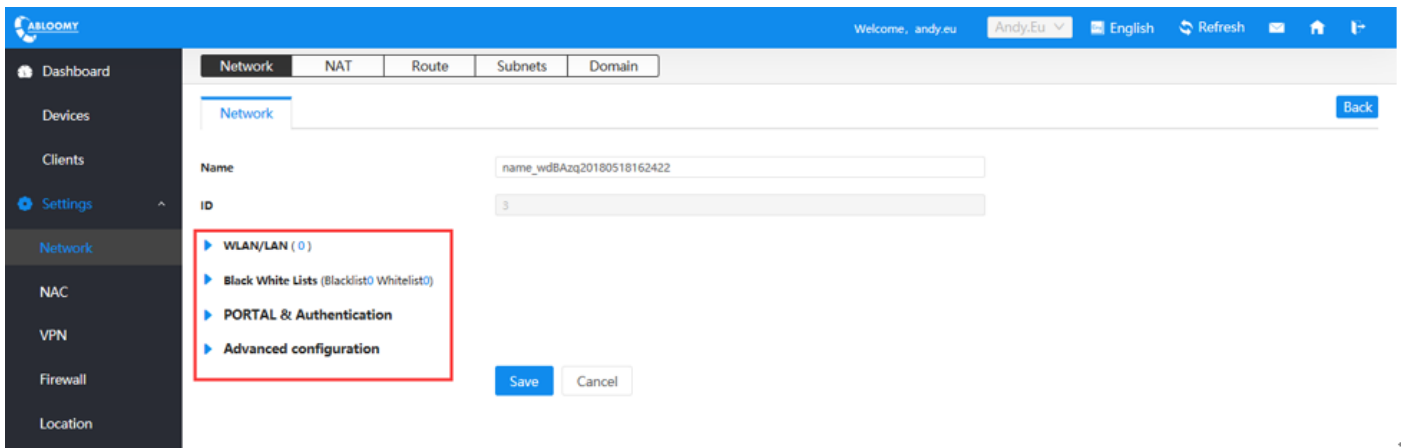
Network policy is used to bind WLAN/LAN (SSID), White &Black list, Portal and Authentication together. When AP get the WLAN/LAN (SSID) policy, it will get the corresponding network policy.

2.1.1. Network configuration

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

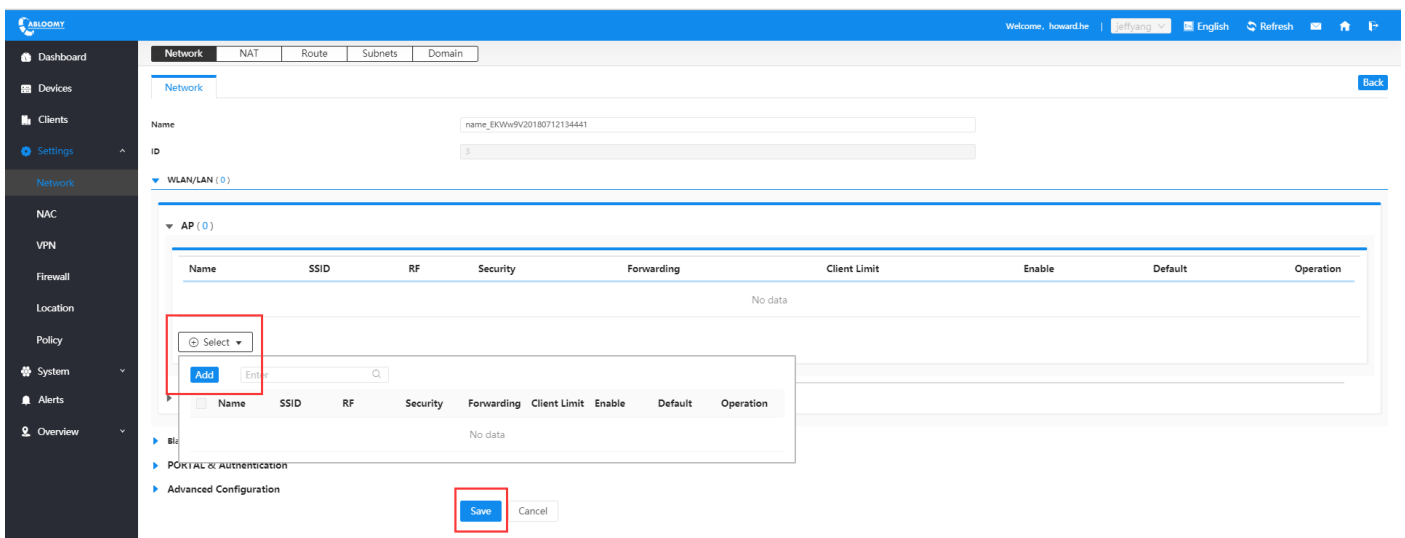


Click add to create a new Network policy, click edit and enter the following page.

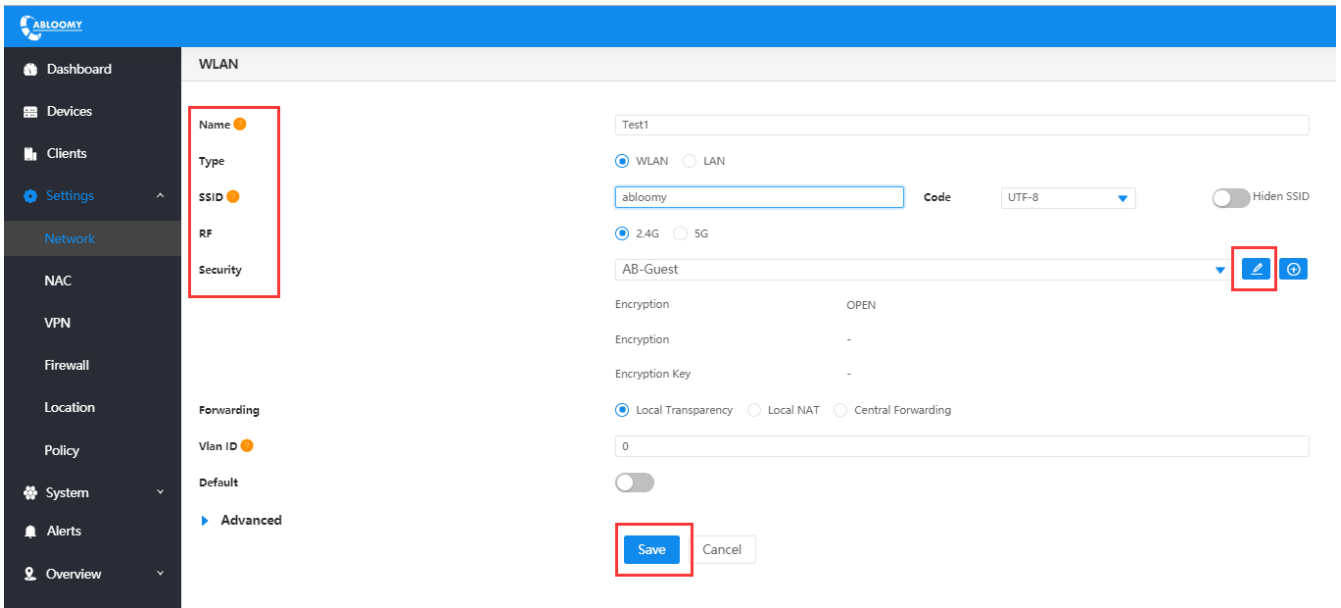


2.1.2. WLAN (SSID) configuration

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.

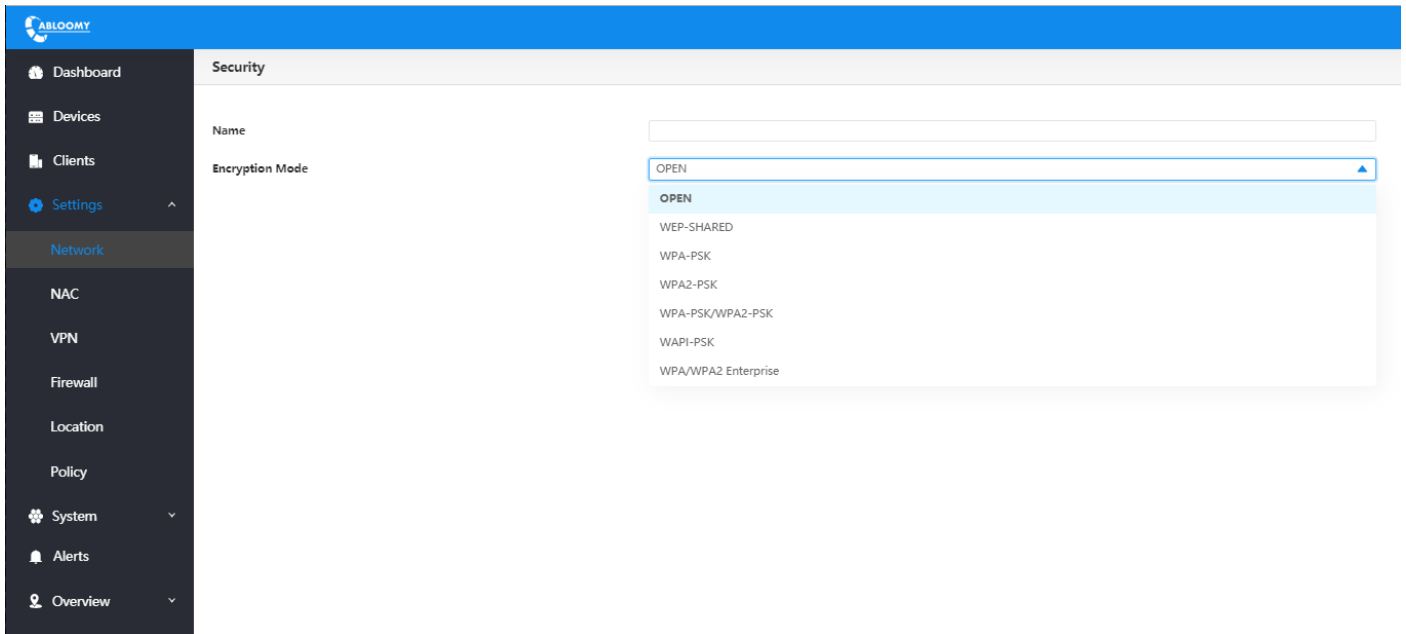


Set Name, Type, SSID, RF and Security policy



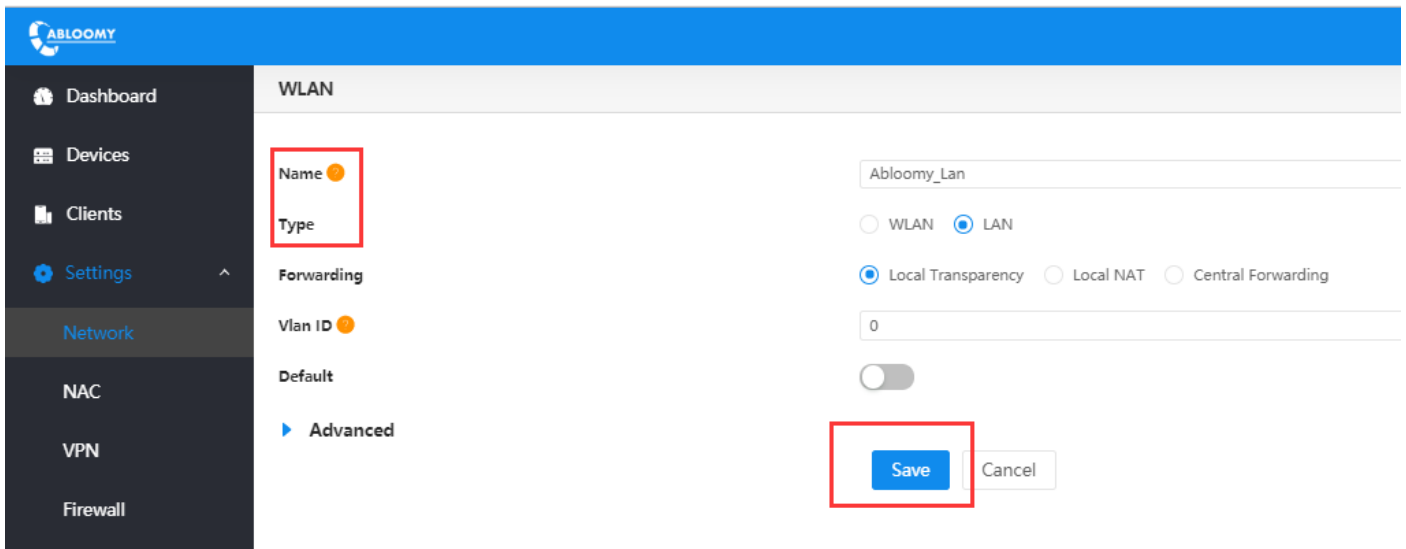
Under Security, there are many type of SSID Encryption Mode.

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

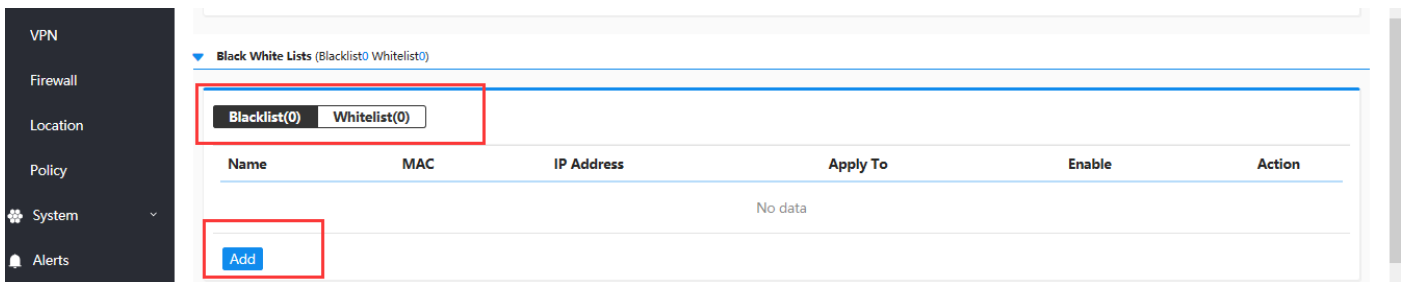
Some gateway AP have several LAN ports, you need to configure a LAN policy to enable the port.



2.1.4. Blacklist and Whitelist configuration

Blacklist: disable client connecting to the SSID.

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



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 (Blacklist Whitelist)

PORTAL & Authentication

MAC Authentication

Portal Policy

Type

Name	URL	Operation
<input checked="" type="radio"/> AB-Guest	http://47.74.172.188/ad-U1wiCebj/KwMEVQ/index.php	<input type="text"/> <input type="text"/> <input type="text"/>
<input type="radio"/> AB-Office	http://47.74.172.188/ad-U1wiCebj/qLs1jV/index.php	<input type="text"/> <input type="text"/> <input type="text"/>

Advanced

Authentication Policy

Advanced Configuration

Save Cancel

ABLOOMY

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

Portal Policy

Name

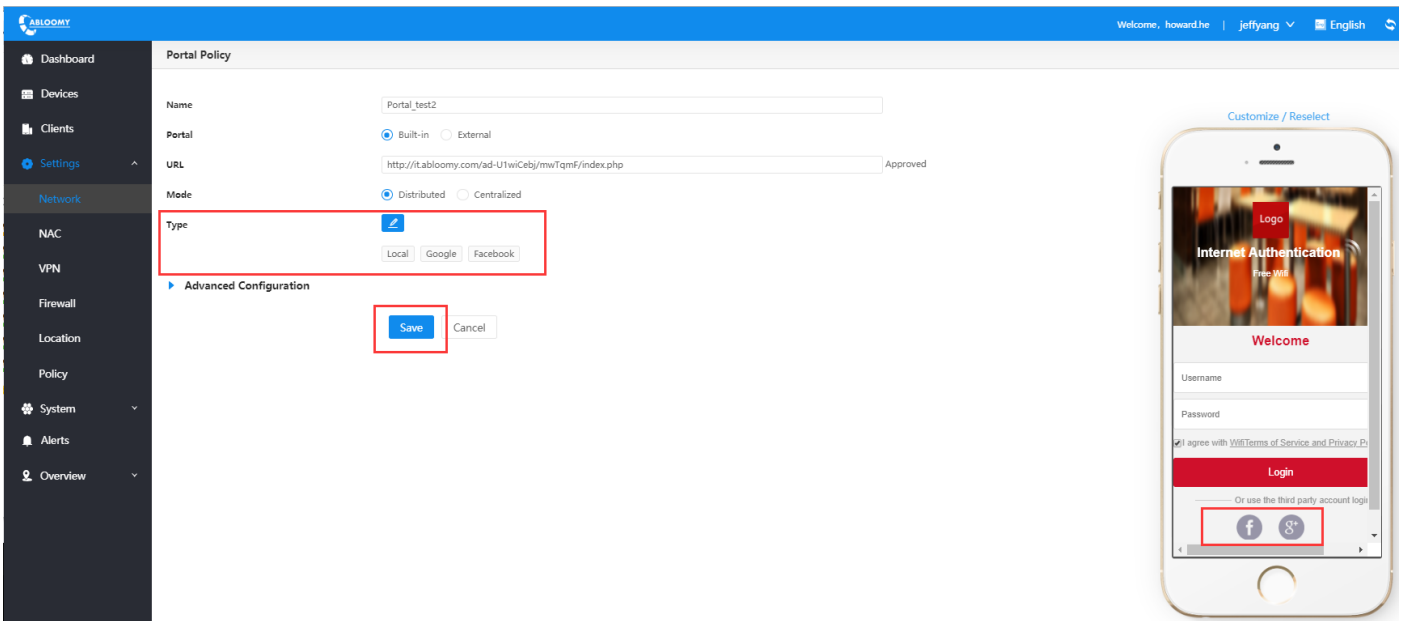
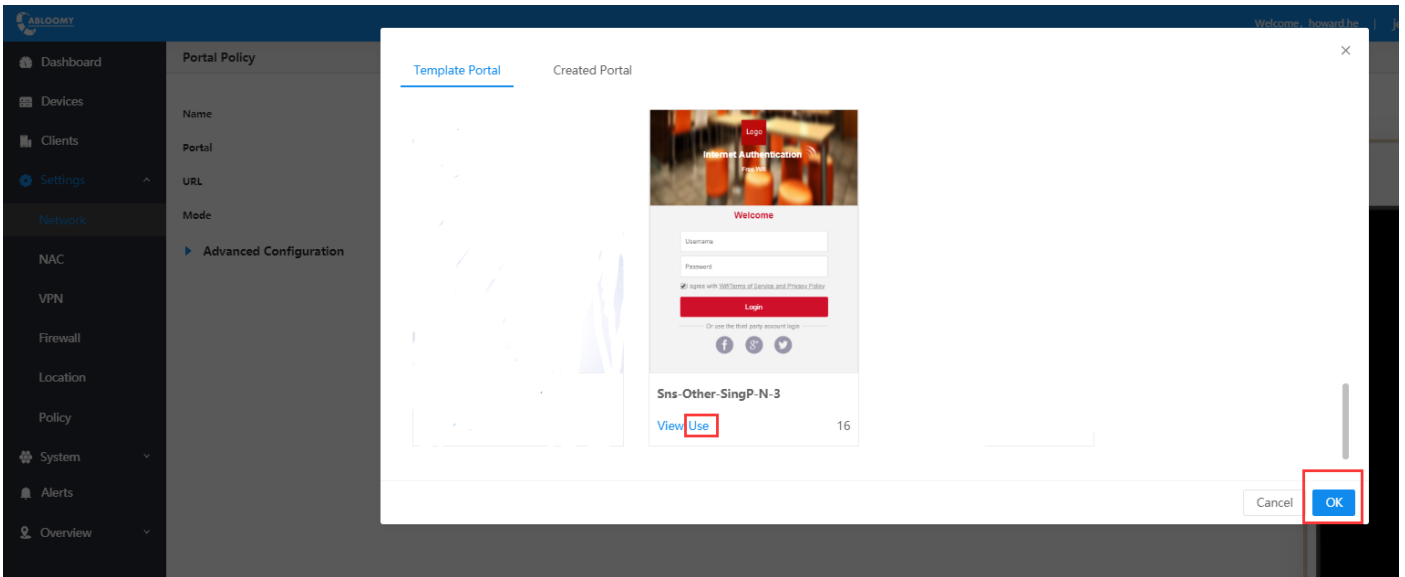
Portal Built-in External

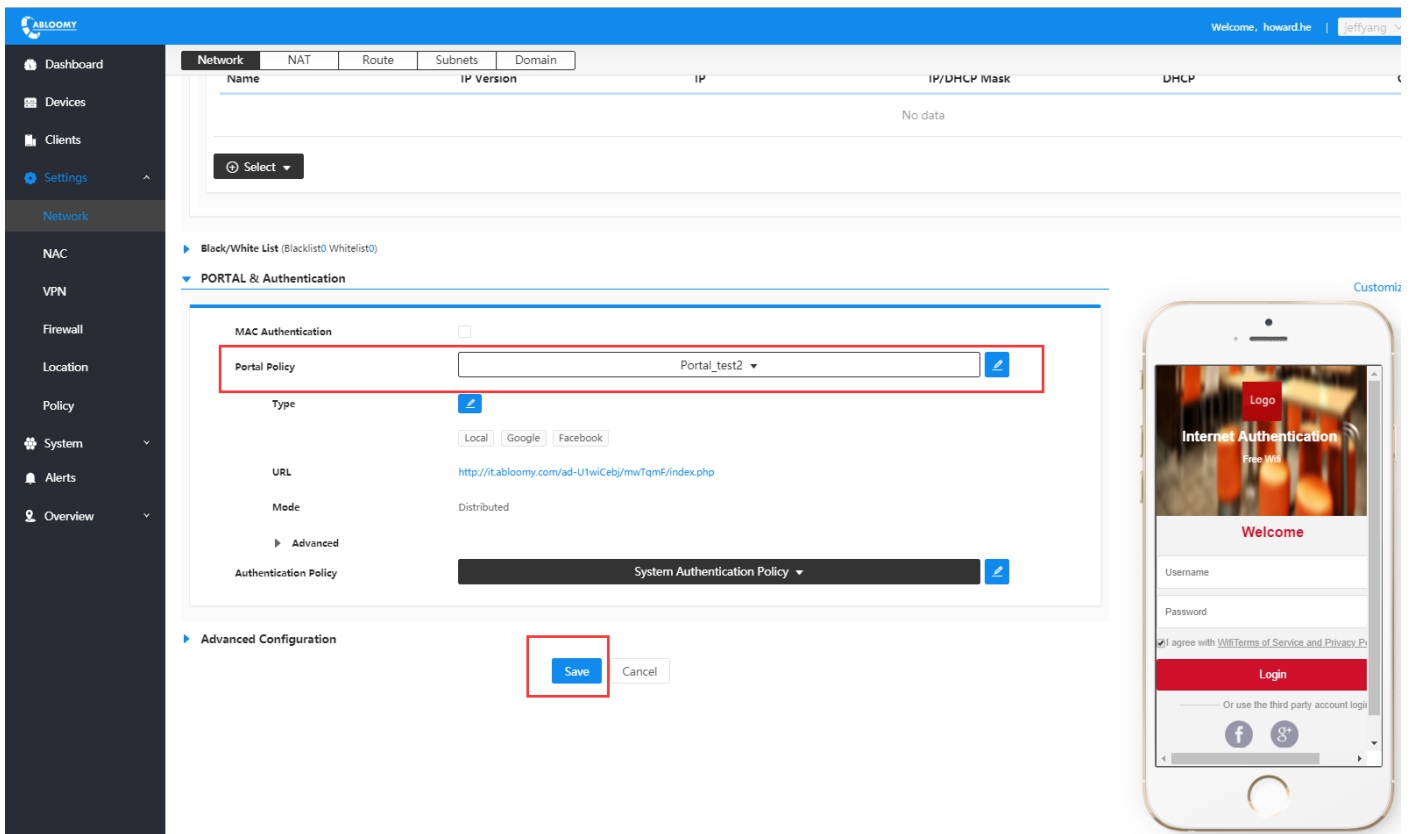
URL

Mode Distributed Centralized

Advanced Configuration

Save Cancel





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

Network | NAT | Route | Subnets | Domain

Black/White List (Blacklist:0 Whitelist:0)

PORTAL & Authentication

MAC Authentication

Portal Policy: Portal_test2

Type: Local | Google | Facebook

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

Mode: Distributed

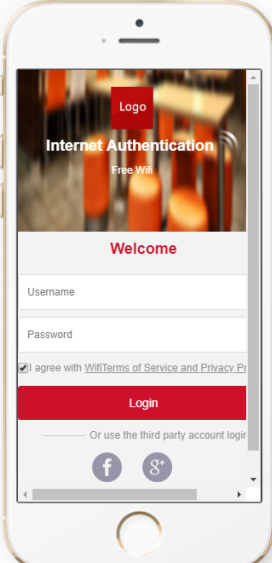
Advanced

Authentication Policy: System Authentication Policy

Add

Name	Type	Server	Operation
System Authentication Policy	Built-in	-	Edit Delete Copy

Advanced Configuration



ABLOOMY | Welcome

Authentication Policy

Service: RADIUS

Name: Built-in

Server: RADIUS

Password: *****

Confirm Password: *****

RADIUS Billing: Port: 1813

Advanced Configuration

Save | Cancel

ABLOOMY | Welcome, howard.he | jeffyang | English | Refresh | Home

Network | NAT | Route | Subnets | Domain

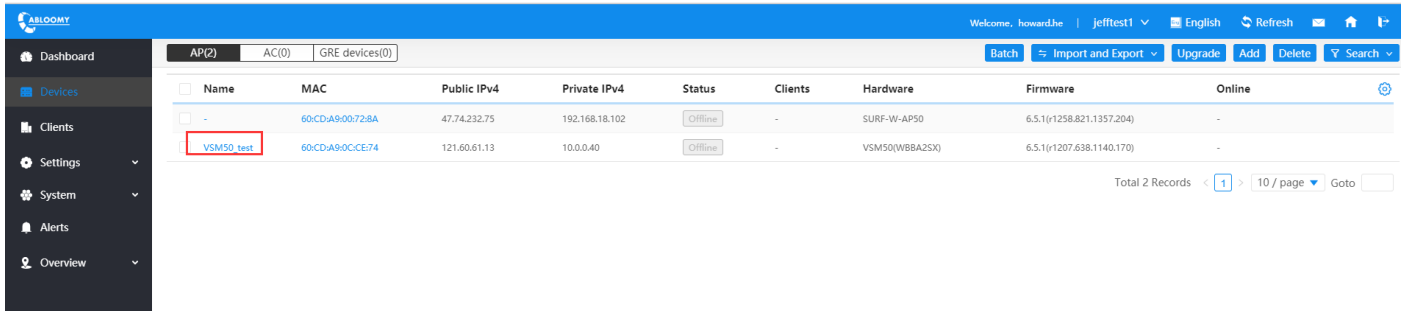
Name	ID	WLAN/LAN	Black/White List	Portal	Authentication	Operation
name_EKWv920180712134441	3	Abloomy_Lan LAN	-	Portal_test2 Q	System Authentication Policy	Edit Delete Copy
Office	1	AB-Office 2.4G AB-Office5g 5G Office LAN	AB-WHITELIST WHITELIST	AB-Office Q	System Authentication Policy	Edit Delete Copy
Guest	2	AB-Guest-Jeff 2.4G AB-Guest5g 5G	Laptop WHITELIST	AB-Guest Q	System Authentication Policy	Edit Delete Copy

Total 3 Records < 1 > 10 / page Goto

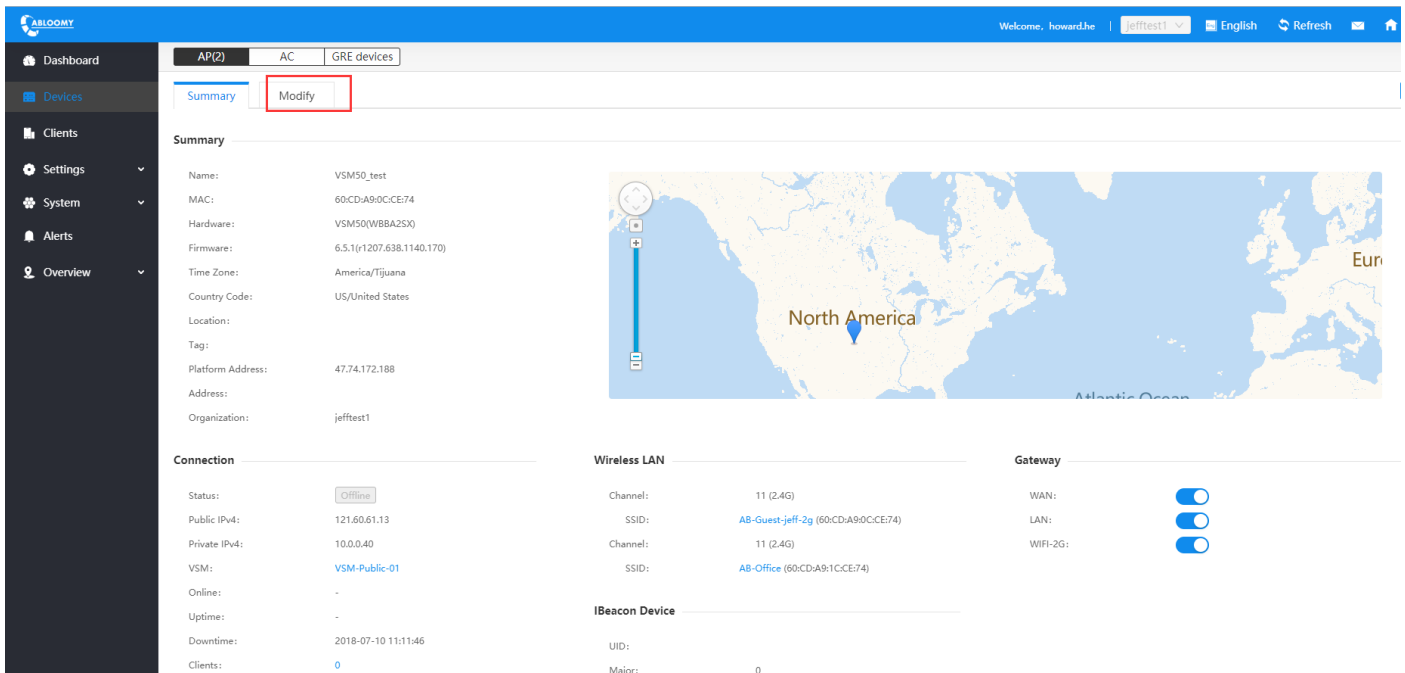
2.2. Assign policy to AP

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

Enter WiFi—Devices—AP



Click Modify



2.2.1. Radio policy

Click Add:

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 for configuring a device. The left sidebar contains navigation options: Dashboard, Devices, Clients, Settings, Network, NAC, VPN, Firewall, SNMP, Location, Policy, System, Alerts, and Overview. The main content area is titled 'AP(1)' and shows 'Radio Policy' settings. Under 'Radio Policy', the 'WLAN/LAN' dropdown is selected. Below it, a table lists available policies:

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	✎ ⊖
AB-Guest5g-Jeff	AB-Guest-Jeff	5G	OPEN	Local NAT	64		More	✎ ⊖
AB-Office	AB-Office	2.4G	WPA-PSK/WPA2-PSK	Local NAT	64		More	✎ ⊖
AB-Office5g	AB-Office	5G	WPA-PSK/WPA2-PSK	Local NAT	64		More	✎ ⊖
LAN_1	-	LAN	-	Local Transparency	-		More	✎ ⊖

A 'Select' dialog is open, showing the same table with checkboxes next to the 'Name' column. The checkboxes for 'AB-Guest-Jeff' and 'AB-Guest5g-Jeff' are checked, and these rows are highlighted with a red box.

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 for configuring a device. The left sidebar contains navigation options: Dashboard, Devices, Clients, Settings, Network, NAC, VPN, Firewall, SNMP, Location, Policy, System, Alerts, and Overview. The main content area is titled 'AP(1)' and shows 'Radio Policy' settings. Under 'Radio Policy', the 'WLAN/LAN' dropdown is selected. Below it, a table lists available policies:

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	✎ ⊖
AB-Guest5g-Jeff	AB-Guest-Jeff	5G	OPEN	Local NAT	64		More	✎ ⊖
LAN_1	-	LAN	-	Local Transparency	-		More	✎ ⊖

A 'Select' dialog is open, showing the same table with checkboxes next to the 'Name' column. The checkbox for 'LAN_1' is checked, and this row is highlighted with a red box.