

VDS Quick Guide

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ABLOOMY Technologies, Inc.



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1. VDS configuration

1.1. Bind admin account of VDS and CAM/CSP

Login CAM/CSP by **admin** account, Enter WiFi -System - Open API and click add to create a new Open API for bind VDS.

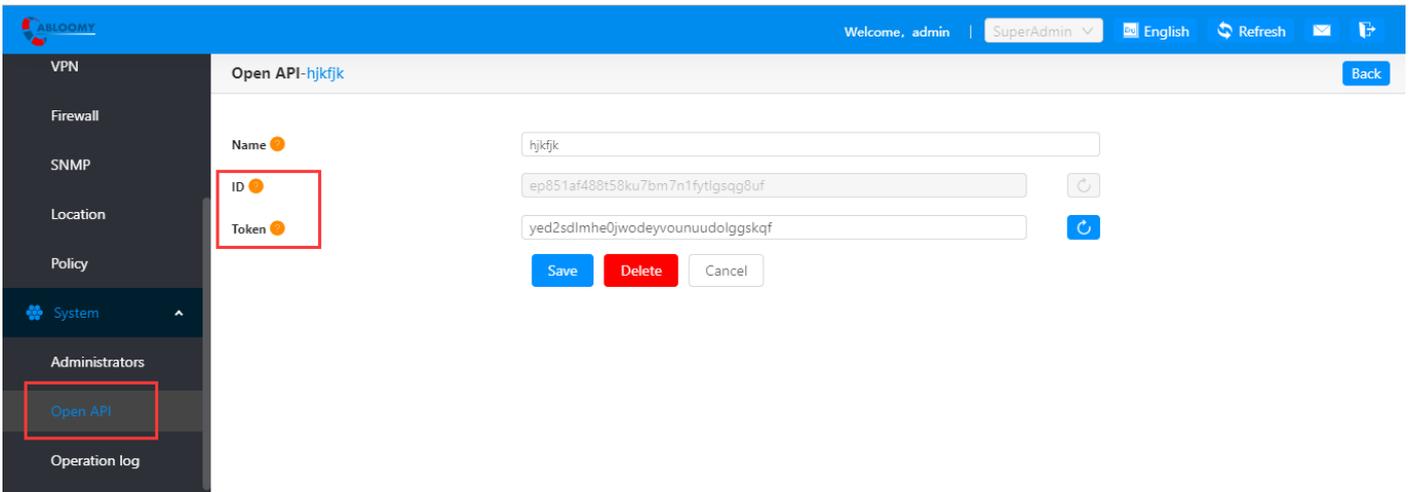
Default admin account username: **admin** ; password: **admin.01**

Note: one VDS can only bind to one CAM or CSP. CSP and VDS can create sub-account which can correspond to each other. (each CSP sub-account must have a VSM when work with VDS).

The image shows two screenshots of the ABLOOMY web interface. The top screenshot is the 'Platform Login' form, which includes fields for username (admin), password (masked with dots), and a CAPTCHA (0426). A blue 'Login' button is at the bottom. The background is a world map with labels for Europe, Russia, Canada, and United States. The bottom screenshot shows the main dashboard with a sidebar on the left containing menu items: VPN, Firewall, SNMP, Location, Policy, System (expanded), Administrators, Open API (highlighted with a red box), and Operation log. The main content area displays a table with one record:

Name	ID	Operation
hjkfjk	ep851af488t58ku7bm7n1fytlgsqg8uf	 

Below the table, it shows 'Total 1 Records', a page selector with '1' selected, '10 / page', and a 'Goto' field. The top navigation bar includes 'Welcome, admin', 'SuperAdmin', 'English', 'Refresh', and an 'Add' button (highlighted with a red box) and a search dropdown.

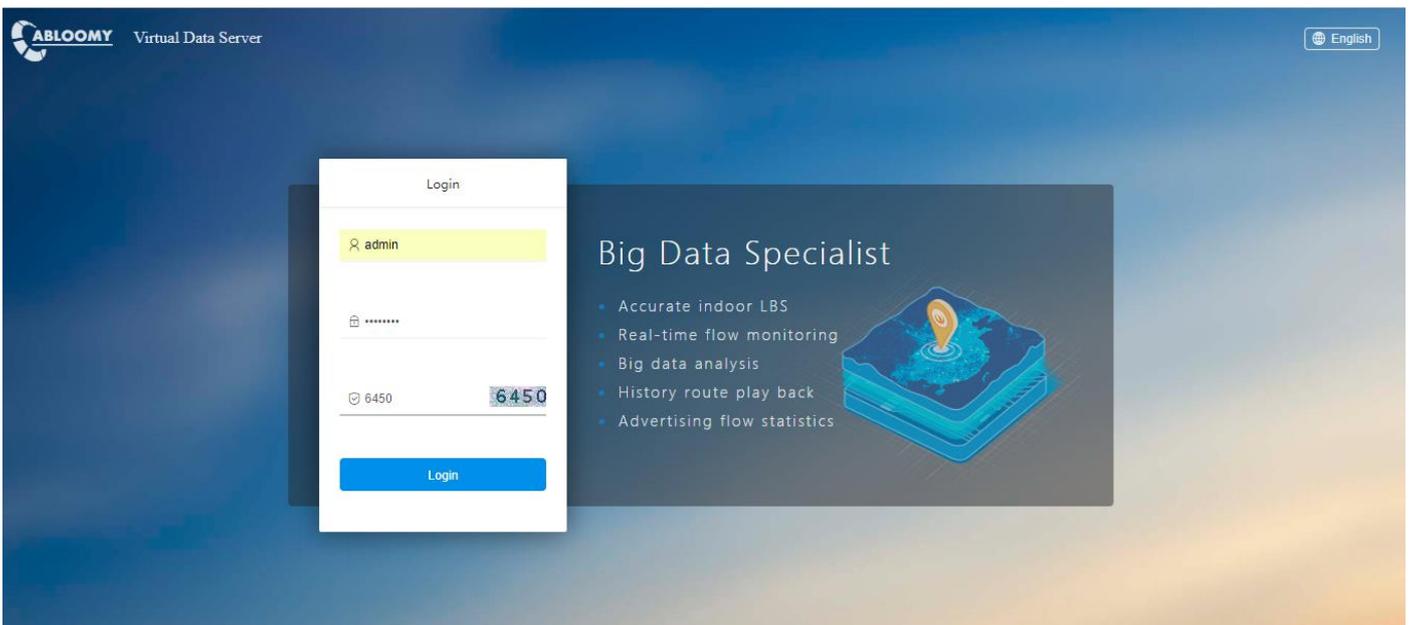


Login VDS by **admin** account, Enter Global Setting – System - Platform Config and click Create New to bind CAM/CSP.

Default IP: <https://192.168.100.167>

Default admin account username: **admin** ; password: **admin.01**.

Fill the CAM/CSP IP address. The OpenId and Token are from admin account of CAM/CSP which we create previous.





Global Setting
Configure accounts, policies,
System Summary



Visitors Data
Heatmap, footpath, duration,
visit frequency, etc.



Data Analytics
Large data for ranking, trend,
comparison analysis.



LBS SETUP
Smart and accurate location base system

https://42.62.11.44/Nav/Account

Welcome, admin

- System
 - Basic Settings
 - Platform Config**
 - Backup & Recovery
 - Upgrade Version
 - Send Config
- Policy Config
 - Report Policy
 - Client Policy
 - Filter Config
 - System Info
- Account Config
 - Account

Home / Platform Config

[Create New](#) **Configuration Synchronization**

VDS Cloud Account	IP	OpenId	Token	Advertising Cloud Account	Operation
admin	192.168.60.48	ep851af488t58ku7bm7n1fytgsg8uf	yed2sdlmhe0jwodeyvounuudolgskqf		

Total 1 Pages 1 Records < 1 > 10 / page Goto

Welcome, admin

- System
 - Basic Settings
 - Platform Config**
 - Backup & Recovery
 - Upgrade Version
 - Send Config
- Policy Config
 - Report Policy
 - Client Policy
 - Filter Config
 - System Info
- Account Config
 - Account

Home / Platform Config / Edit

[Back](#)

Warning: modifying the platform IP may result in a failure to synchronize CSP/ACS platform configuration data, or if data display is out of order, it is recommended to restore factory settings first!

* IP Address: *CAM/CSP IP*

* OpenId: *from CAM/CSP admin account*

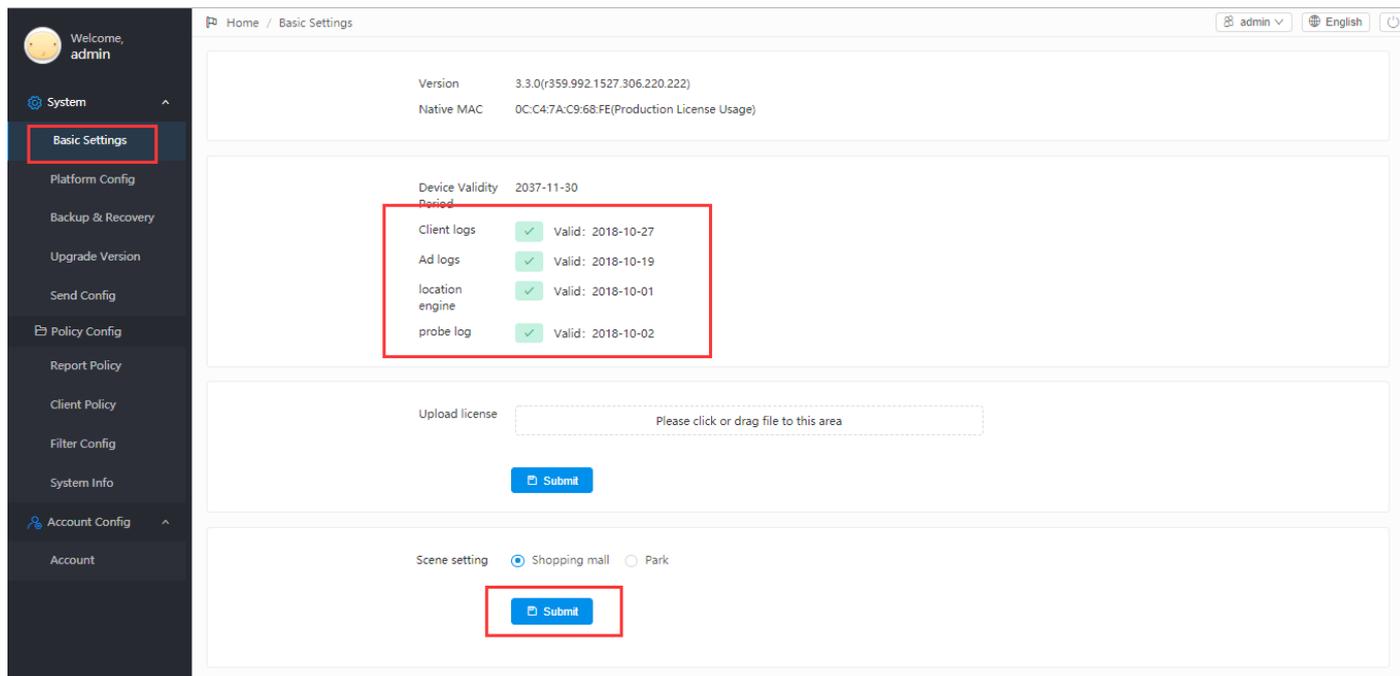
* Token: *from CAM/CSP admin account*

Advertising Cloud Account:

Submit

Enter Global Setting – System – Basic Settings

Set basic system parameter as follow:



Note:

- You can also upload license in this page.
- For work with CSP, the CSP and VDS can create sub-account which can correspond to each other. (each CSP sub-account must have a VSM when you use in this scene). The sub-account binding is the same to admin account binding.

1.2. Create a sub-account

If you bind VDS with CSP. You can create sub-account in VDS and bind to CSP sub-account (each CSP sub-account must have a VSM when you use in this scene).

Welcome, admin

Home / Account Config

admin English

Create New Search

Name	FullName	Role	HASH	LastIP	LastTime	Valid	Enable	Operation
admin	superadmin	administrator	gTrUVb88	192.168.60.1	2018-11-05 14:38:47	-	<input checked="" type="checkbox"/>	Edit Delete
jefftest	jefftest	users	O5g7f7nq	-	-	-	<input checked="" type="checkbox"/>	Edit Delete

Total 1 Pages 2 Records 1 10 / page Goto

Welcome, admin

Home / Account Config / Add

admin English

Back

* Role: users

* Name: jefftest

FullName: jefftest

Valid: Select date

* Password:

* Confirm password:

Enable:

Add Reset

Then you can login by sub-account and do the binding to CSP sub-account.

Create a sub-account in CSP.

The screenshot shows the ABLOOMY web interface. The top navigation bar includes the logo, user information 'Welcome, admin', a dropdown menu for 'SuperAdmin', and options for 'English', 'Refresh', and a search icon. The left sidebar contains a menu with categories: Network, NAC, VPN, Firewall, SNMP, Location, Policy, System (expanded), Administrators, Open API, Operation log, and Firmware. The main content area is titled 'Administrators' and features a table with columns: Name, Full Name, Locked, and Operation. The table lists three users: 'admin', 'jeff123', and 'jefftest'. The 'jefftest' user is highlighted with a red box. Below the table, there is a pagination control showing 'Total 3 Records', a page indicator '1', and a 'Goto' field.

Name	Full Name	Locked	Operation
admin	-	Unlock	✎
jeff123	-	Unlock	✎
jefftest	jefftest	Unlock	✎

The screenshot shows the 'Add' form for a new administrator in the ABLOOMY system. The top navigation bar is identical to the previous screenshot. The left sidebar is also the same. The main content area is titled 'Administrators' and includes a 'Back' button. The form fields are: Name (highlighted with a red box), Password, Confirm Password, Email, Phone, Locked (toggle), and Full Name. The 'Name' field contains 'jefftest', the 'Full Name' field contains 'jefftest', and the 'Locked' toggle is turned off. At the bottom of the form are 'Save' and 'Cancel' buttons.

https://192.168.60.48/bos/settings/accesscontrol

Login the CSP by sub-account. Enter WiFi -System - Open API and create an Open API for bind to sub-account of VDS.

The screenshot shows the ABLOOMY dashboard interface. At the top, there is a navigation bar with the logo, user name 'Welcome, admin', a dropdown menu for 'jefftest', and options for 'English', 'Refresh', and a search icon. On the left, a sidebar menu lists various system components: Network, NAC, VPN, Firewall, SNMP, Location, Policy, System (highlighted), Administrators, Open API, Operation log, and Firmware. The main content area displays a table of Open API entries:

Name	ID	Operation
AB-Office	e714cbae166853411ab656af4418b0af	Edit Delete
AB-Guest	f2f05d079e6635cbfbac0e8b5ebb7175	Edit Delete
VDS	9wqssz1zx90osizv7gs4mtjhti20prx2	Edit Delete

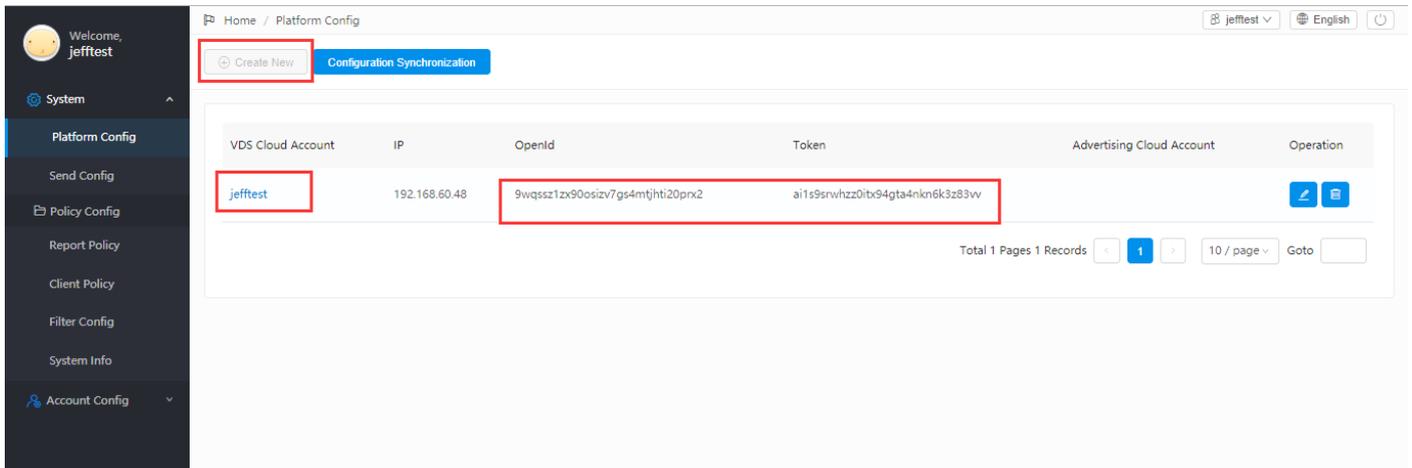
At the bottom right of the table, it indicates 'Total 3 Records' and provides pagination controls for '1' of '10 / page' with a 'Goto' field.

The screenshot shows the 'Open API' configuration form in the ABLOOMY dashboard. The top navigation bar is identical to the previous screenshot. The sidebar menu is also visible, with 'Open API' highlighted. The form contains the following fields:

- Name:** VDS
- ID:** 9wqssz1zx90osizv7gs4mtjhti20prx2
- Token:** ai1s9srwhzz0itx94gta4nkn6k3z83vv

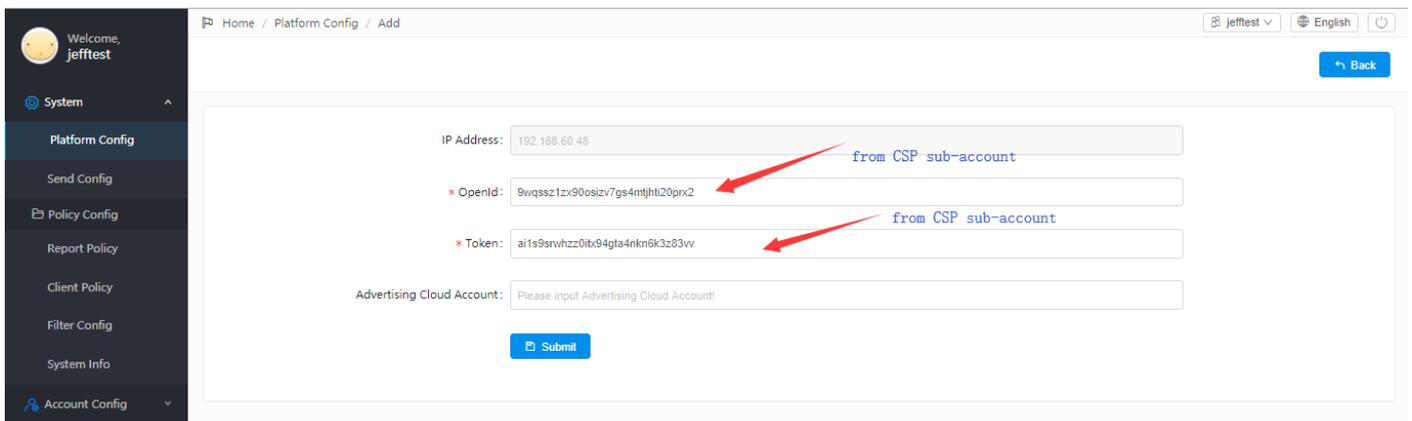
Each field has a refresh icon to its right. Below the fields are 'Save' and 'Cancel' buttons. A 'Back' button is located in the top right corner of the form area.

Login the VDS by sub-account. Enter Global Setting – System - Platform Config and click Create New to bind CSP sub-account



The screenshot shows the 'Platform Config' page in a web application. The breadcrumb navigation is 'Home / Platform Config'. There is a 'Create New' button and a 'Configuration Synchronization' button. A table lists configuration entries with columns: VDS Cloud Account, IP, OpenId, Token, Advertising Cloud Account, and Operation. The first row contains the following data: 'jefftest', '192.168.60.48', '9wqssz1zx90osizv7gs4mtjhtl20prx2', and 'ai1s9srwhzz0ibx94gta4nkn6k3z83vv'. The 'jefftest' value and the 'OpenId' and 'Token' values are highlighted with red boxes. Below the table, there is a pagination control showing 'Total 1 Pages 1 Records' and a 'Goto' field.

VDS Cloud Account	IP	OpenId	Token	Advertising Cloud Account	Operation
jefftest	192.168.60.48	9wqssz1zx90osizv7gs4mtjhtl20prx2	ai1s9srwhzz0ibx94gta4nkn6k3z83vv		 



The screenshot shows the 'Add' form for 'Platform Config'. The breadcrumb navigation is 'Home / Platform Config / Add'. There is a 'Back' button. The form contains the following fields: 'IP Address' (192.168.60.48), 'OpenId' (9wqssz1zx90osizv7gs4mtjhtl20prx2), 'Token' (ai1s9srwhzz0ibx94gta4nkn6k3z83vv), and 'Advertising Cloud Account' (Please input Advertising Cloud Account!). Red arrows point from the text 'from CSP sub-account' to the 'OpenId' and 'Token' fields. A 'Submit' button is at the bottom.

1.3. LBS Setup

Login the VDS. Enter LBS Setup – Configuration - Picture, upload your picture and fill the name, length and Width (Unit: m).

The screenshot shows the 'Picture' configuration page. The left sidebar contains 'Configuration' with sub-items: Picture, Probe, Setup, Map, Input, and Output. The main content area has a breadcrumb 'Home / Picture / Edit' and a 'Back' button. The form includes fields for Name (108), Length (23), and Width (7), all highlighted with a red box. Below is an 'Image' upload area with a dashed border and a 'Submit' button.

Below the form is a table listing the created picture:

Name	Image ID	Image	Operation
108	887b19b1		

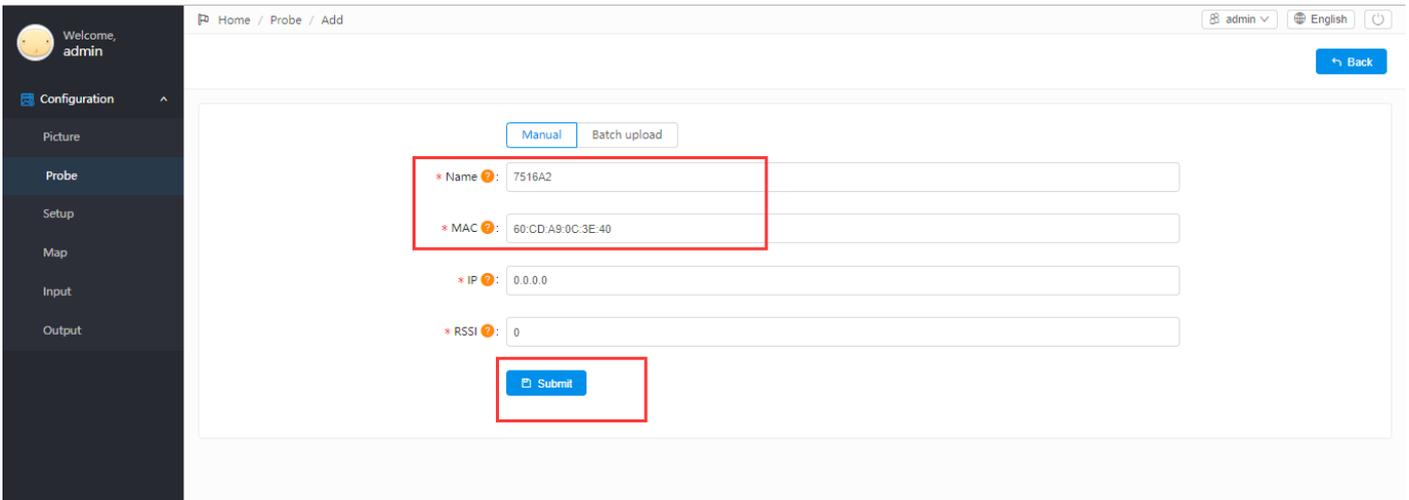
Page navigation: Total 1 Pages 1 Records, 10 / page, Goto

LBS Setup - Configuration - Probe, add probe AP.

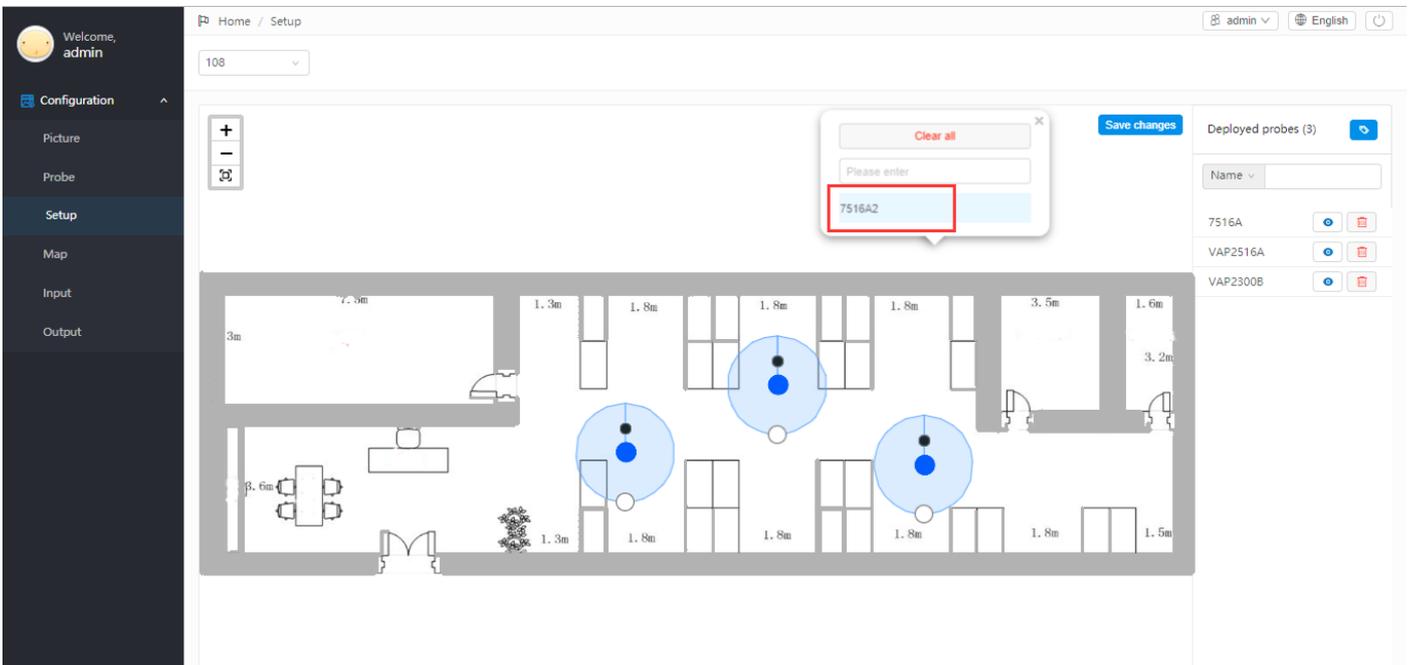
The screenshot shows the 'Probe' configuration page. The left sidebar contains 'Configuration' with sub-items: Picture, Probe, Setup, Map, Input, and Output. The main content area has a breadcrumb 'Home / Probe' and a 'Create New' button highlighted with a red box. The table lists the added probes:

Name	MAC	Located Image	Operation
7516A	60.cd.a9:03:5e:46	108	
VAP2300B	60.cd.a9:0c:09:09	108	
VAP2516A	60.cd.a9:03:1a:06	108	
7516A2	60.cd.a9:0c:3e:40		

Page navigation: Total 1 Pages 4 Records, 10 / page, Goto



LBS Setup – Configuration - Setup, Click the top blank area, choose the AP and deploy on your map.



How to deploy AP for probe and data collection?

Scenario 1: Independent probe AP deployment

Access AP and probe AP staggered deployment.

As shown below, the white cycle is “Access AP” and the purple cycle is “probe AP”.

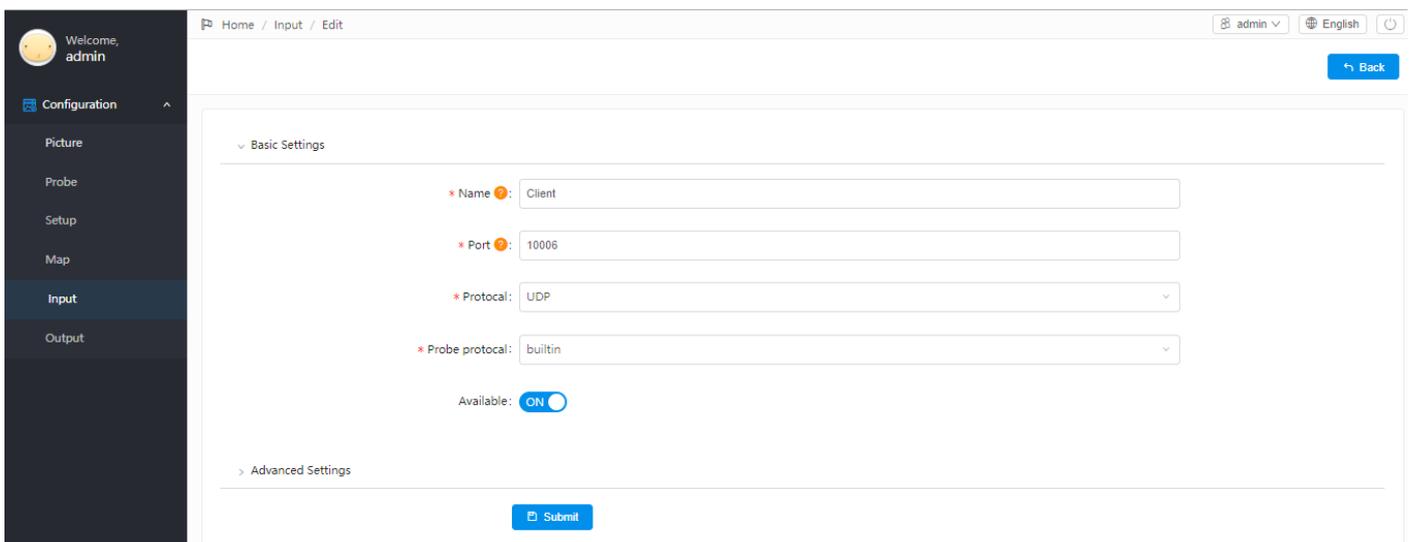
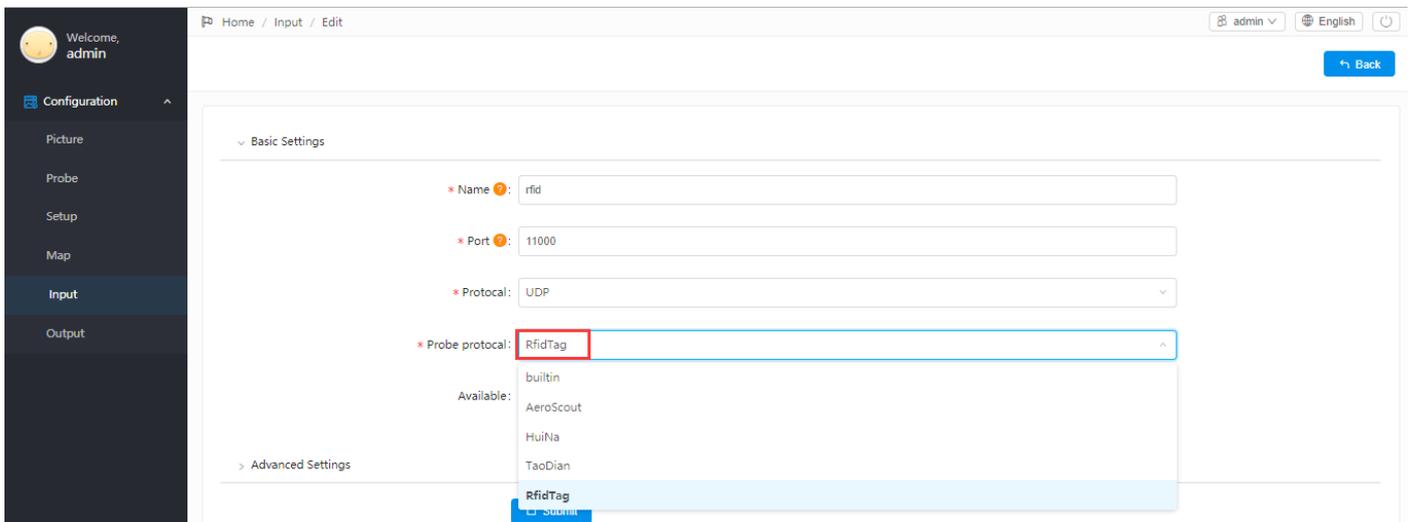
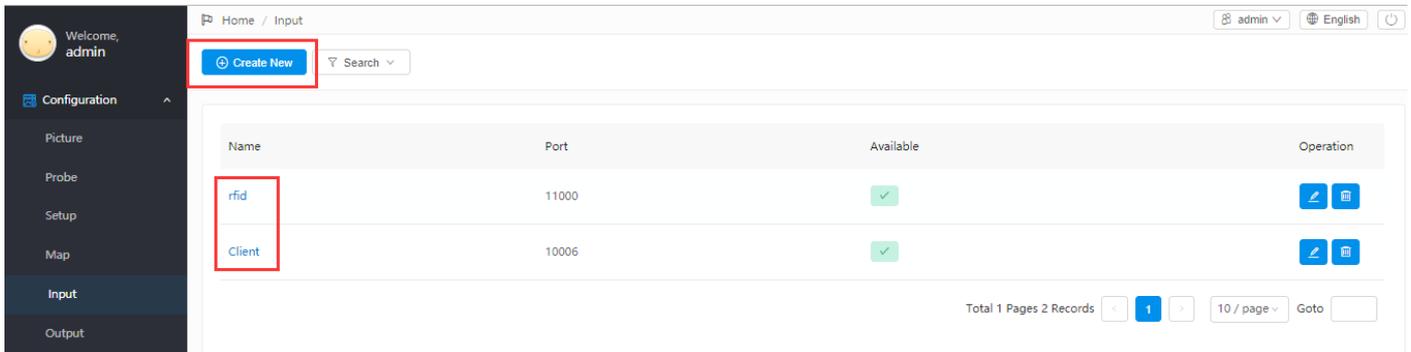
We suggest the AP coverage radius is less than 15 meters.

Enter LBS Setup – Configuration – Input. Click Create New to add input policy.

Probe protocol:

- 1.BuiltIn: wireless device mac collection.
- 2.RFIDTag: RFID card mac collection.

We suggest use UDP protocol and the port range is from 10000 to 11000. (**write down the port number**)



Enter LBS Setup – Configuration – Output. Click Create New to add output policy.

IP must be 127.0.0.1. Port suggest 9999. Protocol suggest UDP.

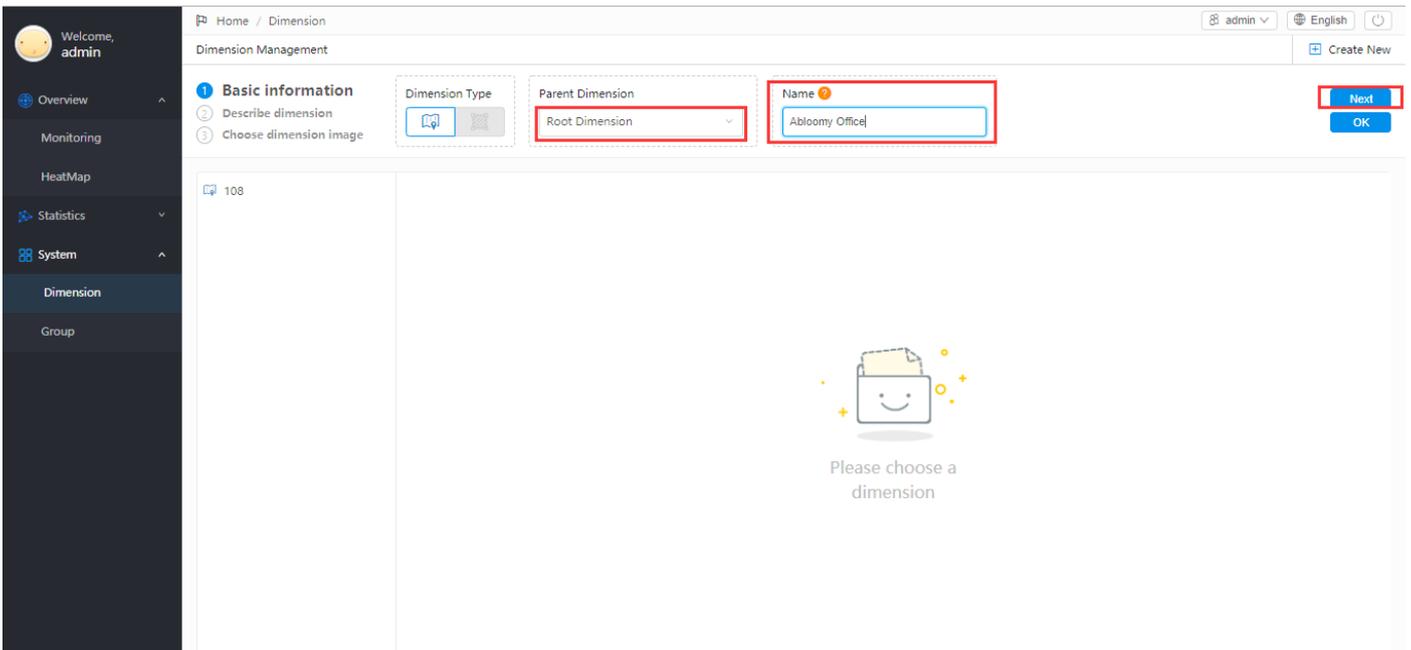
The screenshot shows the 'Output' configuration page in a web application. The top navigation bar includes 'Home / Output', user 'admin', and language 'English'. A 'Create New' button is highlighted with a red box. Below is a table with the following data:

Name	IP	Port	Available	Operation
1	127.0.0.1	9999	<input checked="" type="checkbox"/>	Edit Delete

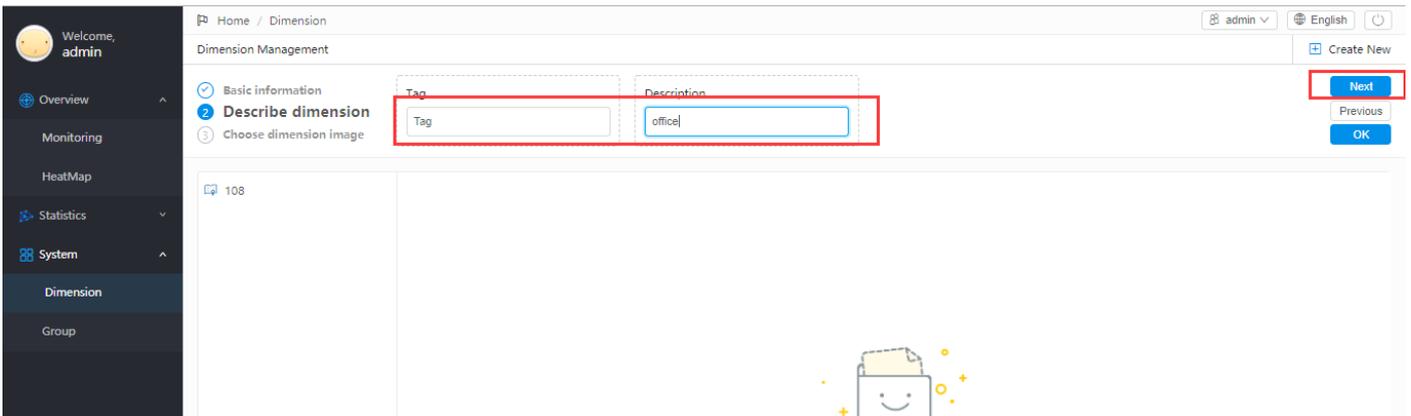
Below the table, it shows 'Total 1 Pages 1 Records' and pagination controls. The second part of the screenshot shows the 'Edit' form for the record. The fields are: Name (1), IP (127.0.0.1), Port (9999), and Protocol (UDP). Red boxes highlight the IP, Port, and Protocol fields, with red arrows pointing to the labels 'Default', 'Suggest', and 'Default' respectively. The 'Available' toggle is set to 'ON'. A 'Submit' button is at the bottom.

1.4. Dimension Configuration

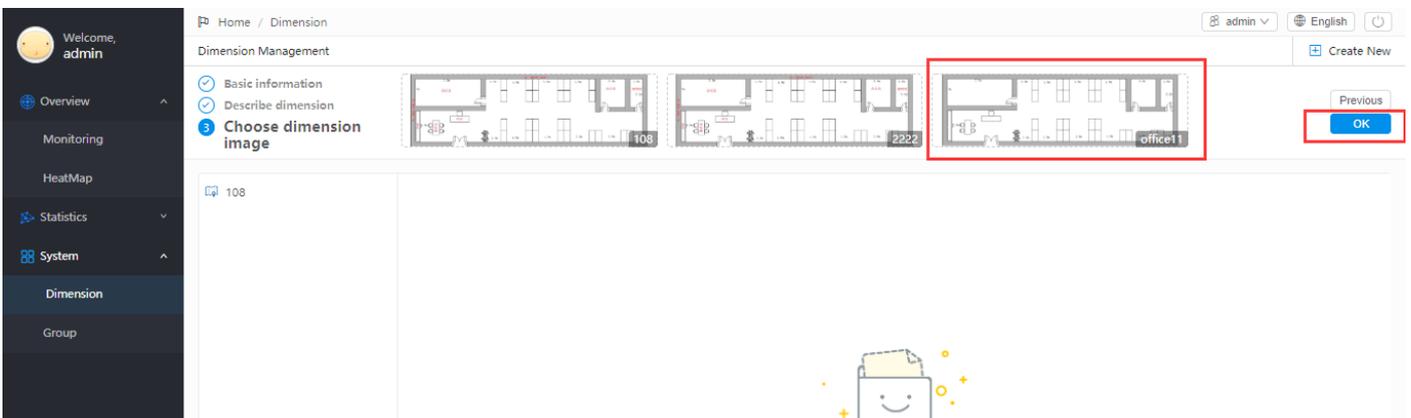
Enter Visitors Data – System – Dimension. Choose the Parent Dimension, fill the name and click next..

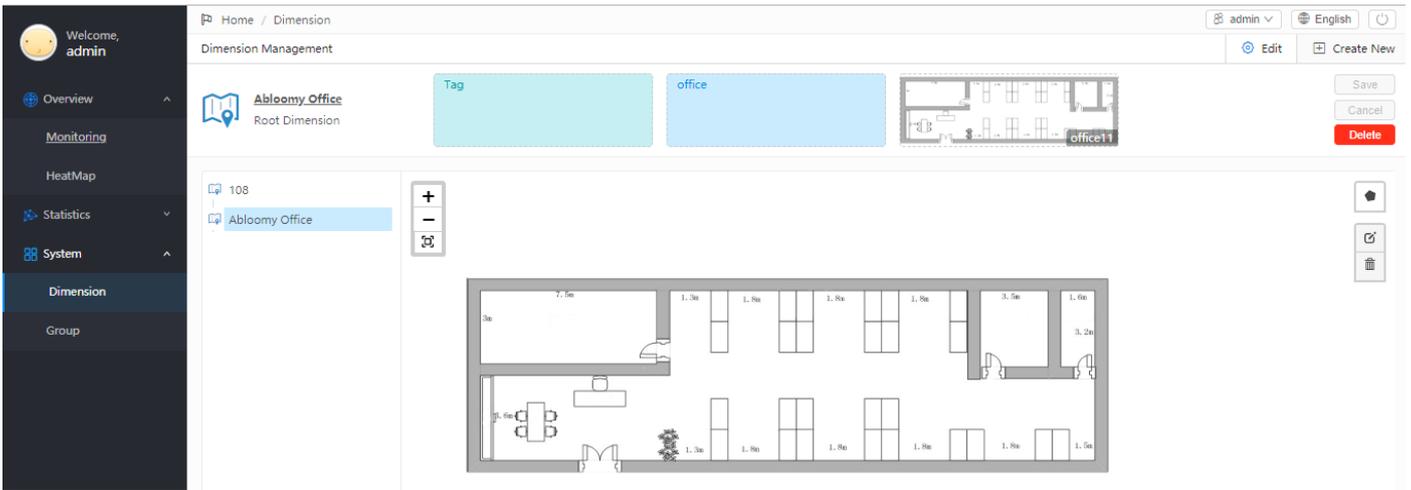


Fill the tag name and description.



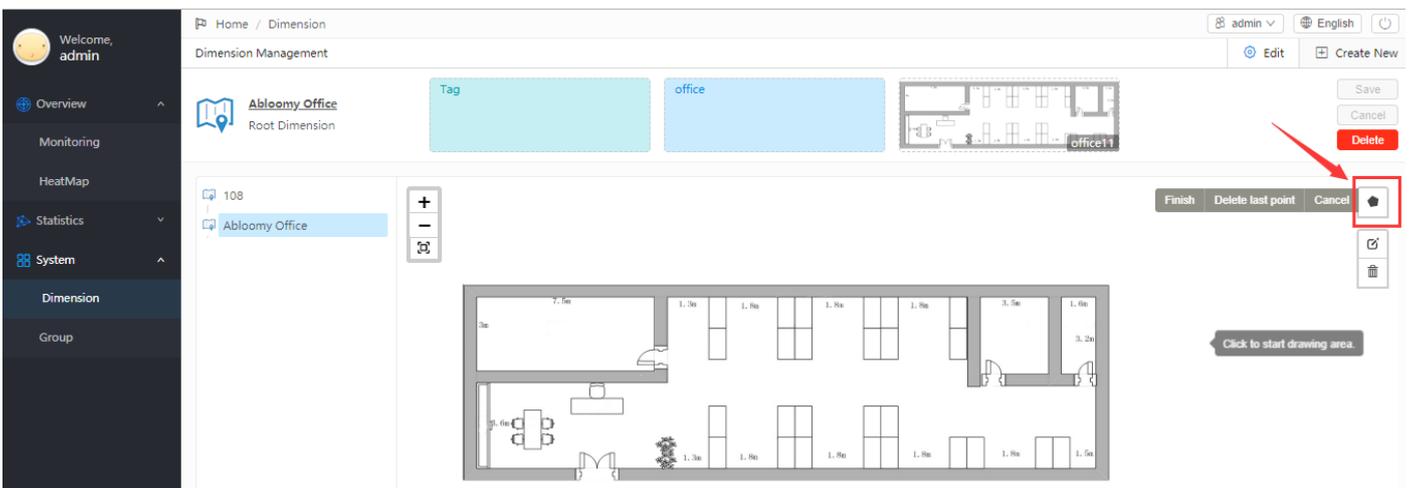
Choose the picture which you upload. After click ok, top dimension was created.





You can draw a boundary in the picture. After you draw the boundary, AP will not count the probe data out of the boundary.

Click  to draw boundary .





What's more, you can create more sub-dimension under the top dimension for specified area statistics if you need.



Welcome, admin

Home / Dimension

admin English

Dimension Management

Edit Create New

Basic information

2 Describe dimension

Tag: Tag

Description: Area1

Previous **OK**

108

Abloomy Office

Welcome, admin

Home / Dimension

admin English

Dimension Management

Edit Create New

Basic information

2 Describe dimension

Tag: Tag

Description: Area1

Previous **OK**

108

Abloomy Office

Welcome, admin

Home / Dimension

admin English

Dimension Management

Edit Create New

1 Basic information

Describe dimension

Dimension Type:

Parent Dimension: Area1

Name:

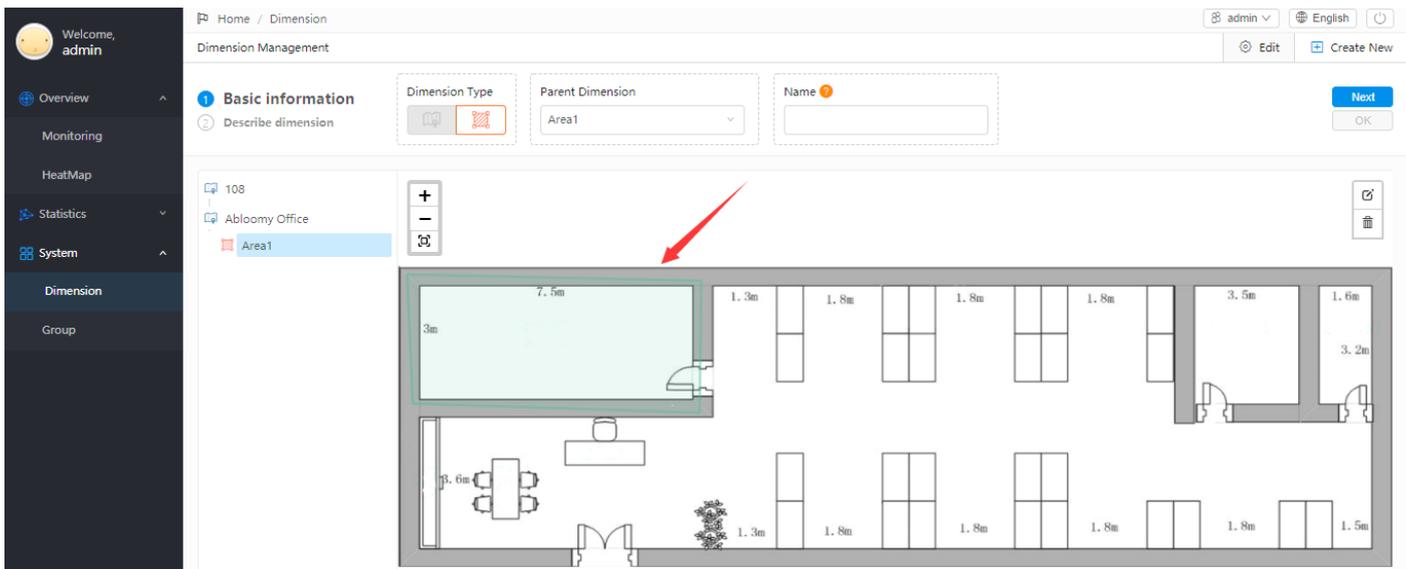
Next **OK**

108

Abloomy Office

Area1

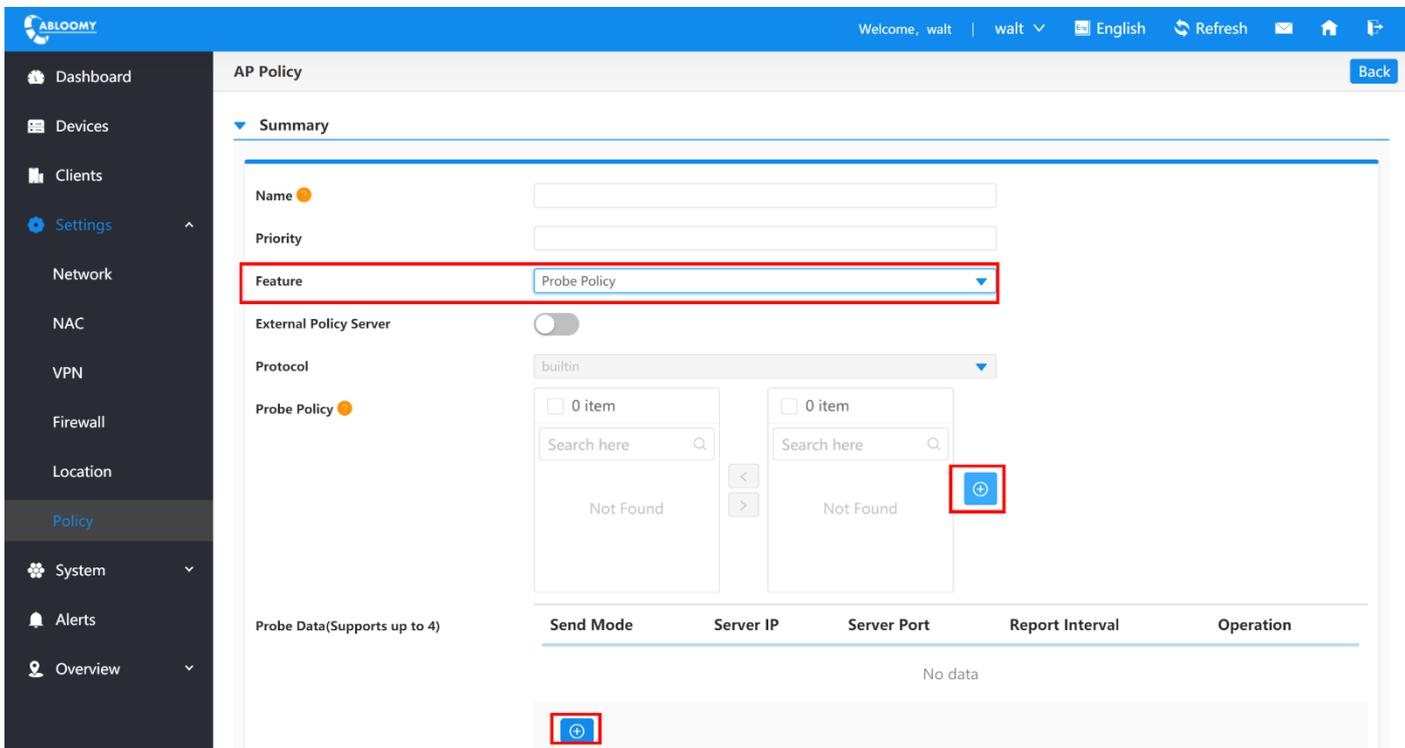
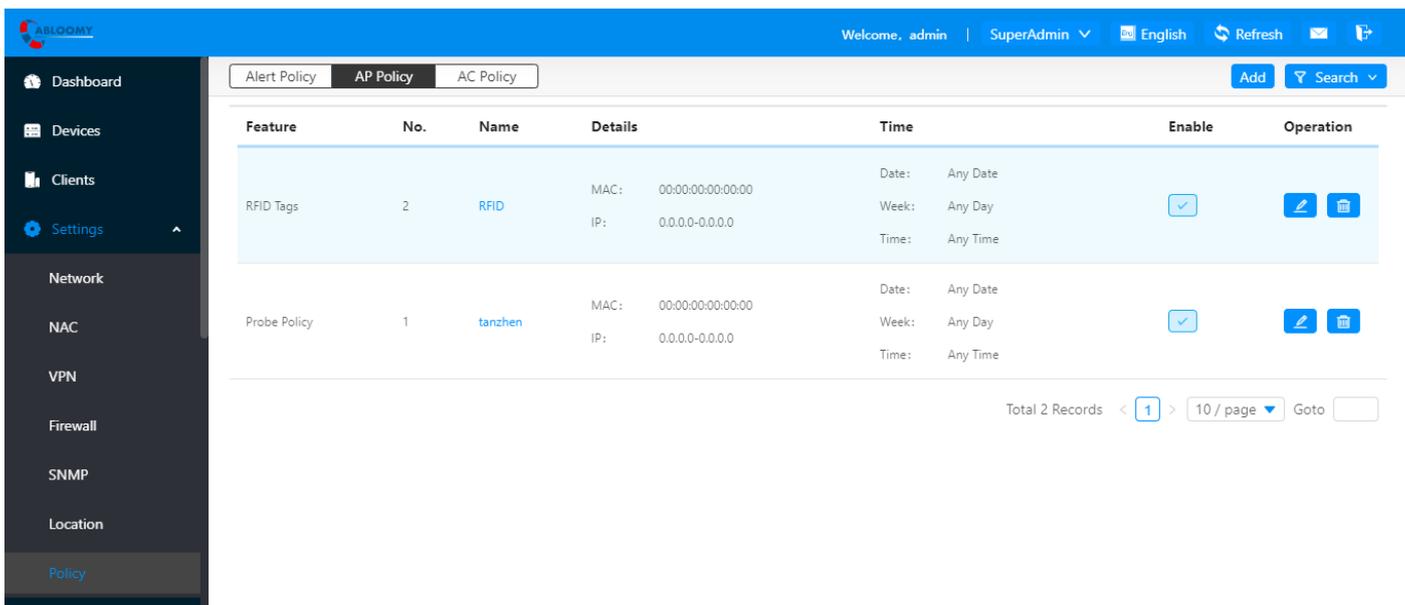
Finish Delete last point Cancel



2. AP probe policy configuration

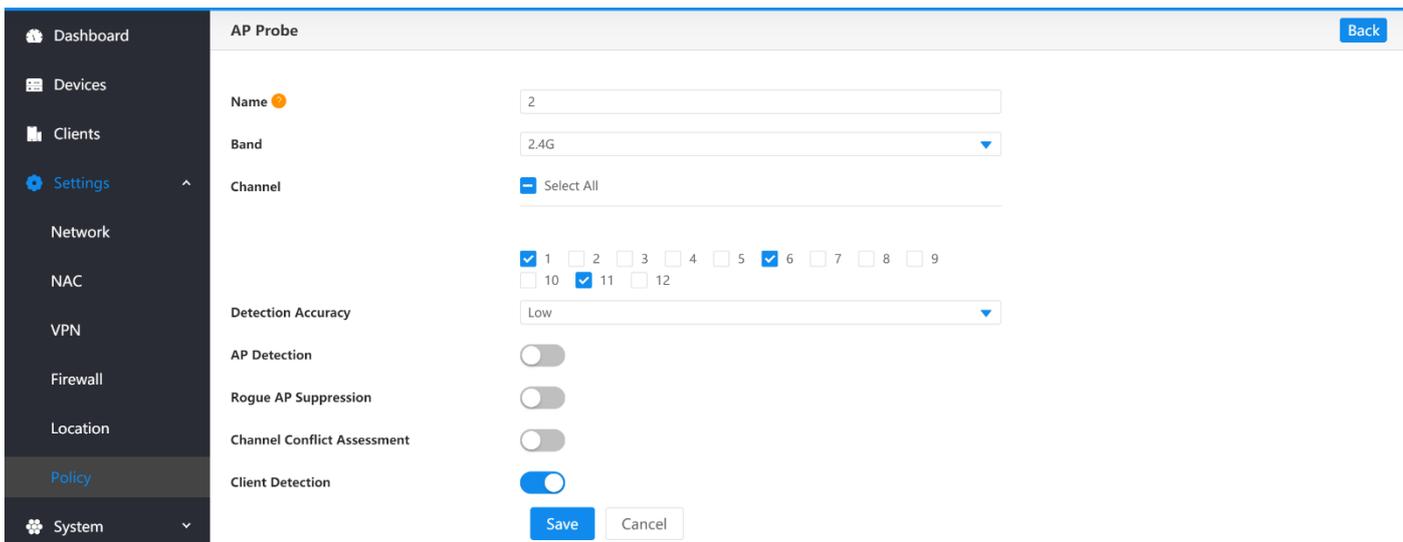
Enter Wi-Fi - Settings – Policy - AP policy and click add to create Probe policy.

Feature select “Probe Policy”.

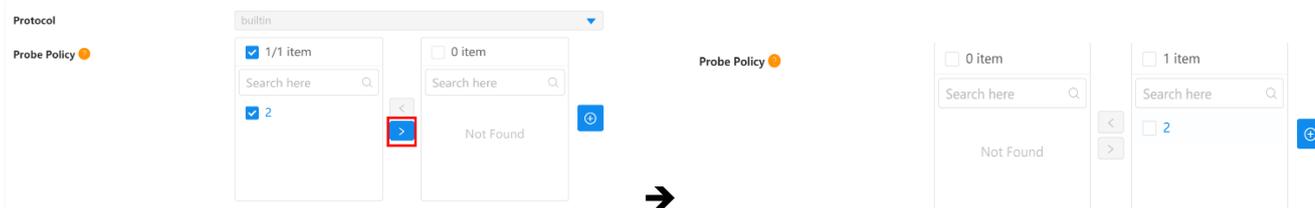


Probe Policy click “+”

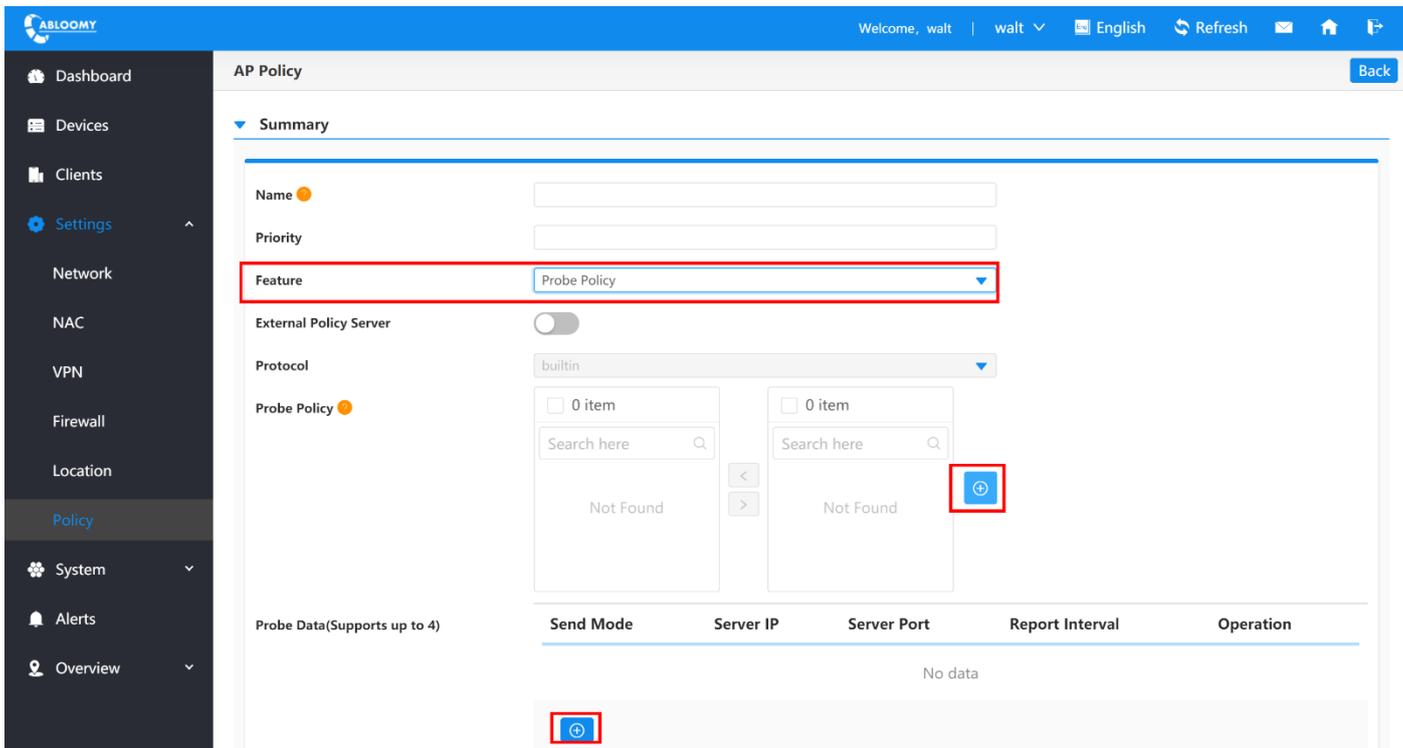
Create AP probe, select Band, Channel, Detection Accuracy, click “Client Detection” and save.



Back to AP Policy, click your Probe Policy from left to right.



Probe Data, click “+”



Send Mode select “Designated Server” (AP upload probe log to VDS directly)

Server IP is VDS IP

Server Port is VDS “Input Port” (**write down the port number**)

Report Interval default enter “2”

Add Target Server ✕

Send Mode For Controller **Designated Server**

Server IP

Server Port

Report Interval

Click OK

Back to AP Policy page and save.

3. AP RFID tag policy configuration

This function is used to collect RFID card information and send to VDS. In VDS you need create corresponding input policy.

Enter Wi-Fi - Settings – Policy - AP policy and click add to create Probe policy.

Feature select ‘RFID Tags’ .

Login VDS, enter LBS Setup – Configuration – Input. Click Create New to add input policy.

VDS Input RFID port 11000, VDS IP 192.168.60.70.

The screenshot shows a web browser window with the URL <https://192.168.60.70/Nav/Lbs/LbsConfig/LbsInput>. The page title is "Home / Input". The user is logged in as "admin". The interface includes a sidebar with navigation options: Configuration, Picture, Probe, Setup, Map, Input (selected), and Output. The main content area displays a table of input policies:

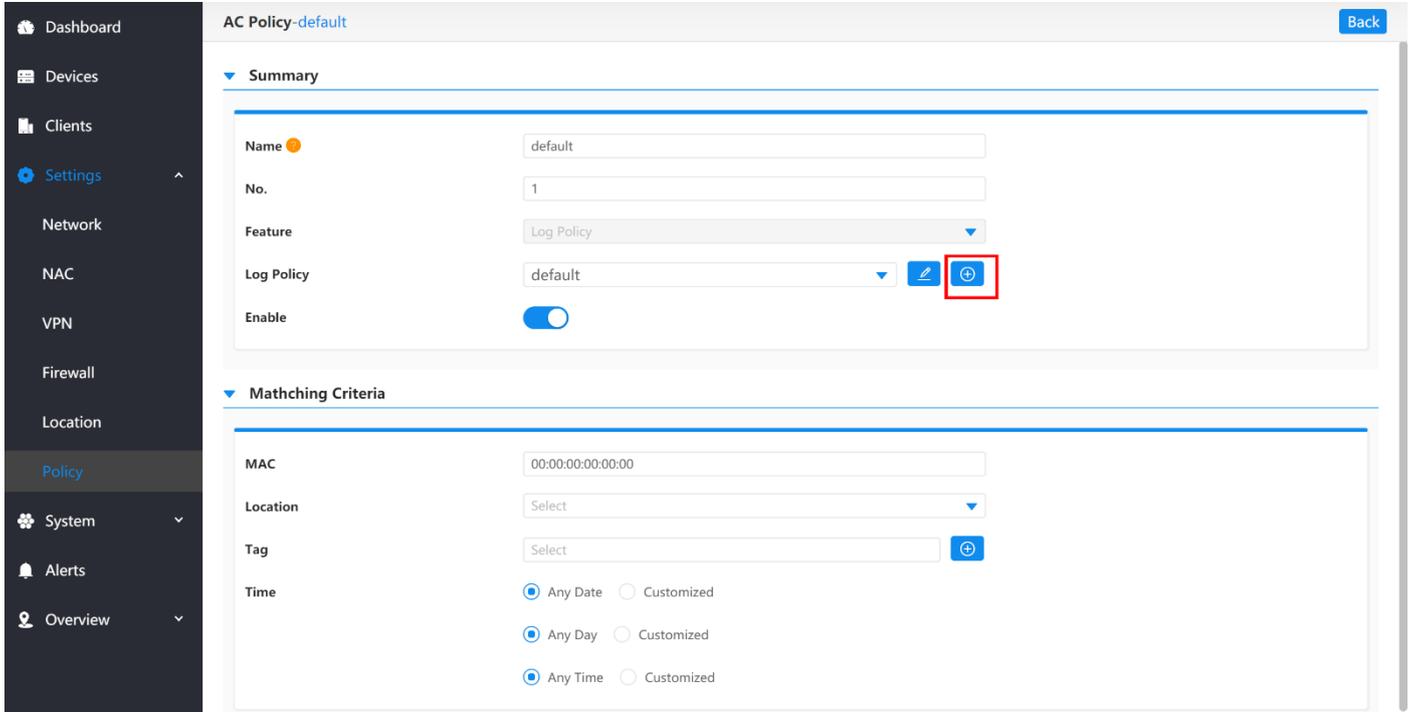
Name	Port	Available	Operation
rfid	11000	✓	↗ 📄
Client	10006	✓	↗ 📄

At the bottom of the table, there is a pagination control showing "Total 1 Pages 2 Records", a page number "1", and a "10 / page" dropdown menu. A "Goto" input field is also present.

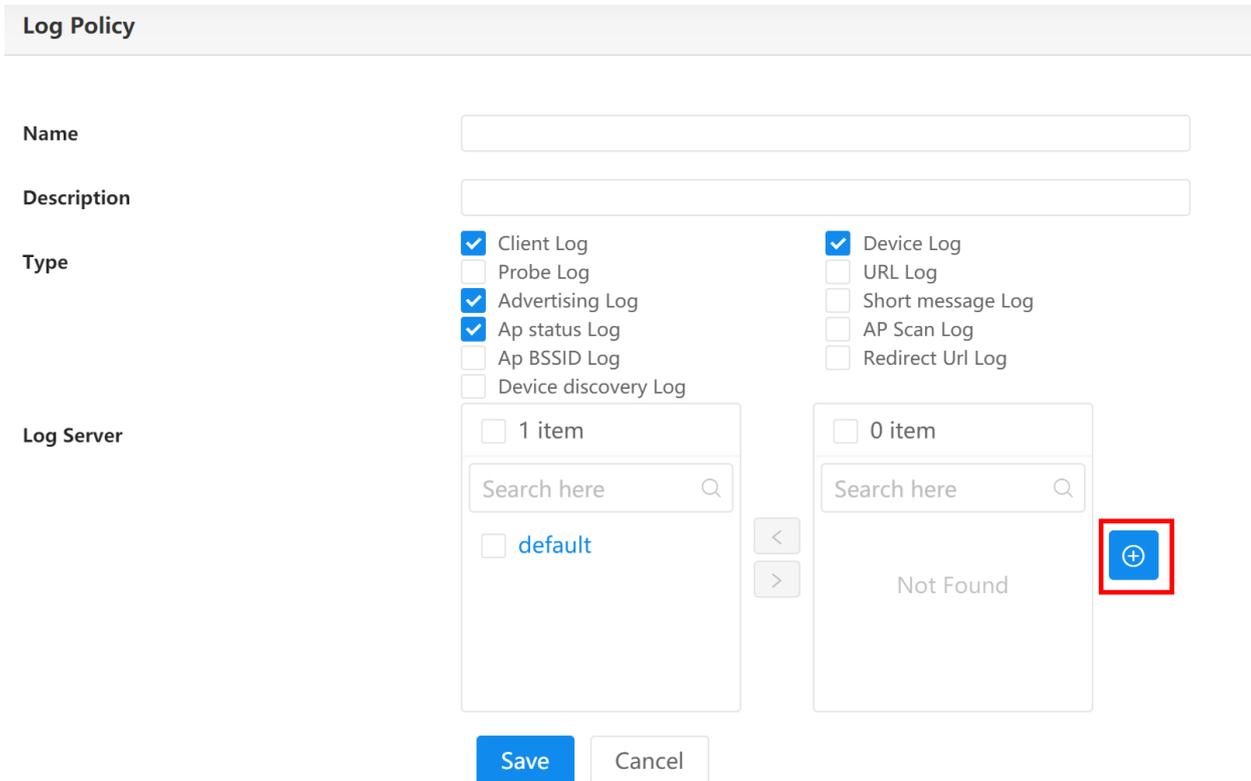
4. Log policy configuration

Log policy is used to send user information to VDS who connect the WiFi.

Enter WiFi – Settings – Policy - AC Policy, click add to create an AC policy



Log Policy click “+”, Select the log type you need.



Log Server, Click “+”

Log Server-default

Name	<input type="text" value="default"/>
Domain/IP	<input type="text" value="192.168.89.2"/>
Port 	<input type="text" value="514"/>
Protocol	<input type="text" value="UDP"/>
Description	<input type="text" value="default log server"/>
Enable	<input checked="" type="checkbox"/>
	<input type="button" value="Save"/> <input type="button" value="Delete"/> <input type="button" value="Cancel"/>

Domain/IP enter your VDS IP

Port default 514

Protocol default UDP

Click save.

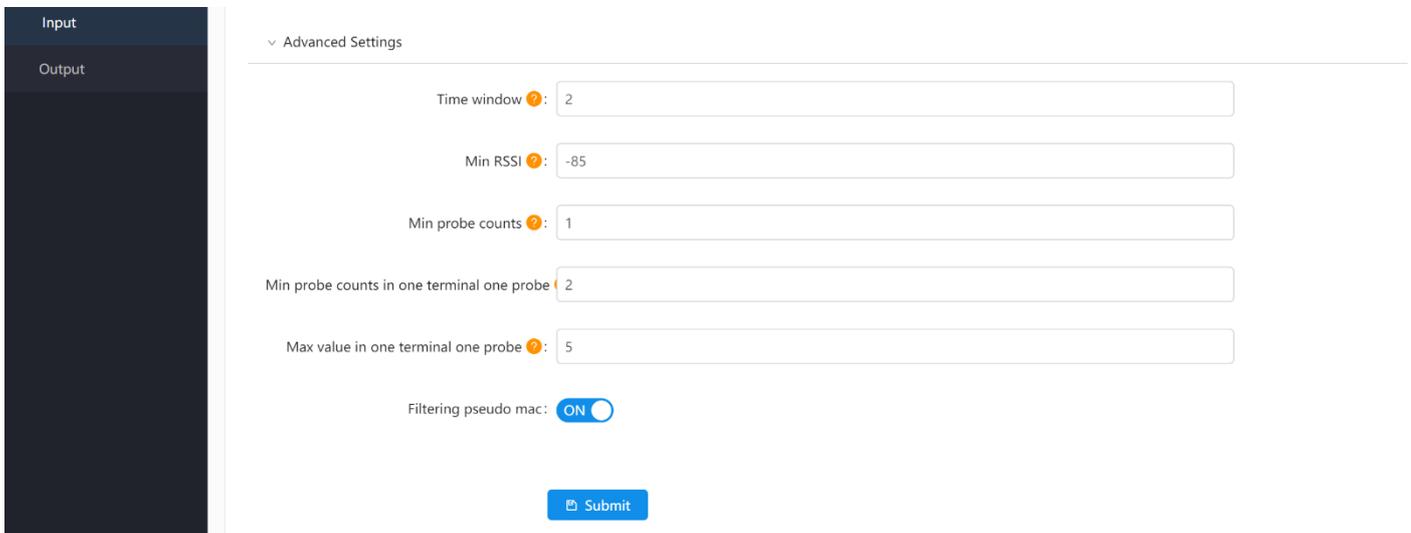
Back to Log Policy page, select your Log Server policy, click save.

Back to AC Policy page, click save.

Now all the config is done. You can see data on VDS.

5. FAQ

5.1 What is LBS Setup Input “Advanced Settings” used for?



The screenshot shows a web interface for configuring LBS settings. On the left, there is a dark sidebar with 'Input' and 'Output' tabs. The main area is titled 'Advanced Settings' and contains several input fields and a toggle switch. The fields are: 'Time window' with a value of 2, 'Min RSSI' with a value of -85, 'Min probe counts' with a value of 1, 'Min probe counts in one terminal one probe' with a value of 2, and 'Max value in one terminal one probe' with a value of 5. Below these fields is a toggle switch for 'Filtering pseudo mac' which is currently turned ON. At the bottom of the form is a blue 'Submit' button.

Time window: Located clients time, the more time long, the more data collect and accurate, but ineffective.

Suggest use default value 4.

Min RSSI: If the probe AP catch the device RSSI value is lower than setting value, the VDS will not count the data. Suggest use default value -85dB.

Min probe counts: This is used for device location. If you have deployed more 3 probe AP, use the default value 3. If less than 3, fill in the probe AP number. This function means VDS must receive one device mac from how many probe AP. If lower than setting value, the system will not count the data.

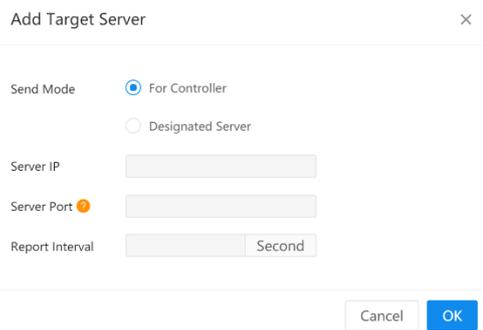
Min probe counts in one terminal one probe: It is means how many times a device mac be sent to VDS by the same probe AP. If lower than setting value, the system will not count the data. Suggest use default value 5. For RFID suggest set 1.

Max value in one terminal one probe: One probe AP catch two probe data from one device at the same time. If the RSSI value difference between the probe data less than setting, the system will not count the data. Suggest use default value 5.

Filtering pseudo mac: IOS have a special mechanism, if IOS system do not access the wireless network, it will send out many pseudo mac for safely. Turn on filtering pseudo mac, it will filter most of the pseudo mac and make data more clearly and accurately.

Of course, if you want your VDS work easily, default just fine.

5.2 What is the “send mode for controller ” used for?



Add Target Server

Send Mode

For Controller

Designated Server

Server IP

Server Port

Report Interval

Second

Cancel OK

A: Send Mode for controller mean AP will send probe data to VSM(CAM).

If so, the probe data will keep some information on controller.

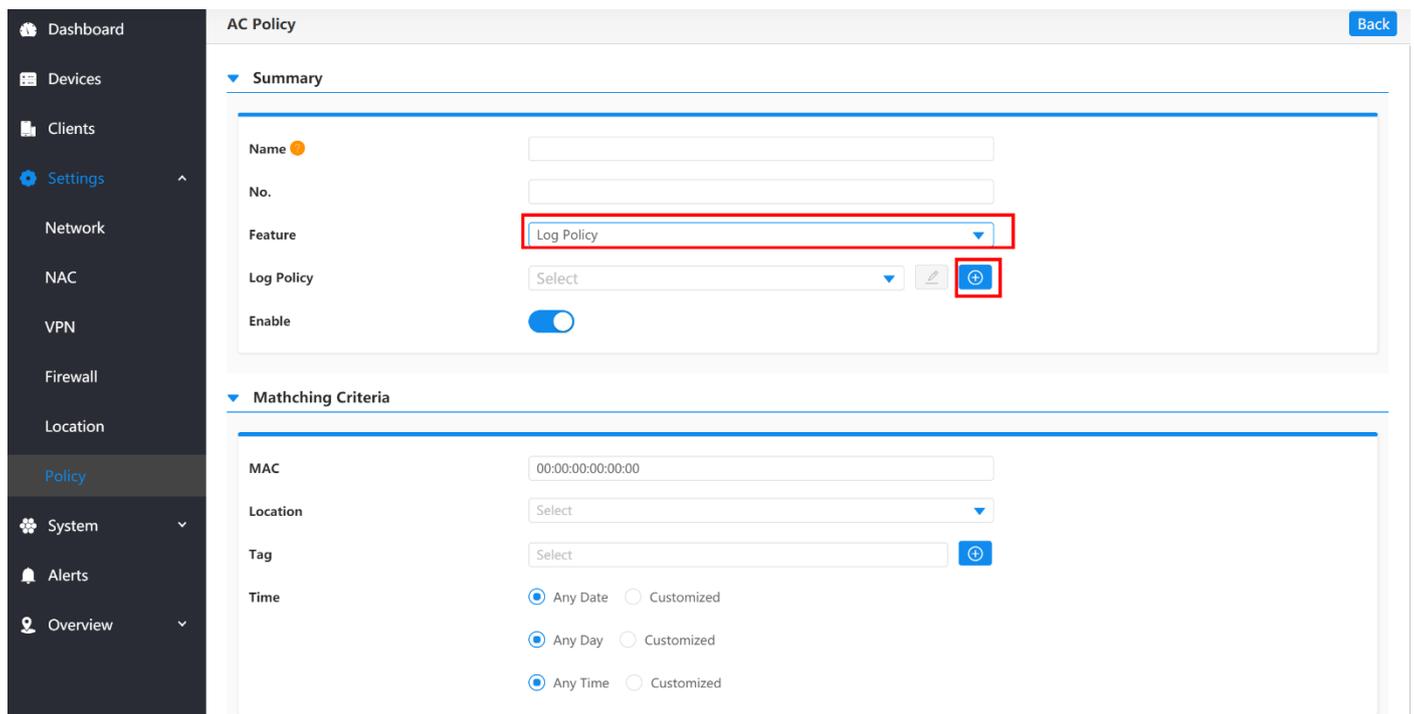
How to connect this mode with VDS?

On step “3”: Select send mode For controller and save.

Forget step “4”

WiFi – Settings – Policy - AC Policy, Choose Log Policy in the feature column.

Log Policy click “+”



AC Policy

Back

Summary

Name

No.

Feature

Log Policy

Log Policy

Select

+

Enable

Mathching Criteria

MAC

00:00:00:00:00:00

Location

Select

Tag

Select

+

Time

Any Date Customized

Any Day Customized

Any Time Customized

Remember click “Probe Log” on Type.

Log Policy

Name

Description

Type

- Client Log
- Probe Log**
- Advertising Log
- Ap status Log
- Ap BSSID Log
- Device discovery Log
- Device Log
- URL Log
- Short message Log
- AP Scan Log
- Redirect Url Log

Log Server

1 item

Search here

default

0 item

Search here

Not Found

Log Server click “+”

Log Server-default

Name

Domain/IP

Port

Protocol

Description

Enable

Domain/IP enter your VDS IP

Port default 514

Protocol default UDP

Click save.

Back to Log Policy page, select your Log Server policy, click save.

Back to AC Policy page, click save.

5.3 How can I send the probe data to other server?

If you want send probe data to VDS or third-party server, you can choose Designated Server and fill in the information.

The screenshot shows a dialog box titled "Add Target Server". It has a close button (X) in the top right corner. Under "Send Mode", there are two radio buttons: "For Controller" (unselected) and "Designated Server" (selected). Below this, there are three input fields: "Server IP" with the value "192.168.102.3", "Server Port" with a help icon and the value "10000", and "Report Interval" with the value "2" and a unit dropdown set to "Second". At the bottom right, there are "Cancel" and "OK" buttons.

Just enter your Server IP, Server Port is fine. (e.g. AP to your system)

5.4 How to select “Detection Accuracy” ?

The screenshot shows a configuration panel with several settings. On the left, there are labels for "Detection Accuracy", "AP Detection", "Rogue AP Suppression", "Channel Conflict Assessment", and "Client Detection". On the right, there is a dropdown menu for "Detection Accuracy" currently showing "Low". Below the dropdown, the options "Low", "Medium", "High", and "Pure" are listed. At the bottom, there is a toggle switch for "Client Detection" which is currently turned off.

The probe working principle as below:

Each channel will scan 300ms, the switching interval between different channel is 50ms.

Low: 10s interval between two times scanning.

Medium: 5s interval between two times scanning.

High: 1s interval between two times scanning.

Pure: 0s interval between two times scanning.