

CAM & CSP Quick Guide

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ABLOOMY Technologies, Inc.




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1. Ready

Name	Num
PC	1
Console cable	1
COM to USB	1
Cable	1
Xshell/ SecureCRT	1

2. CAM/CSP Configuration

We have two way to config CAM/CSP:

1. Web UI
2. CLI

2.1. Web UI config

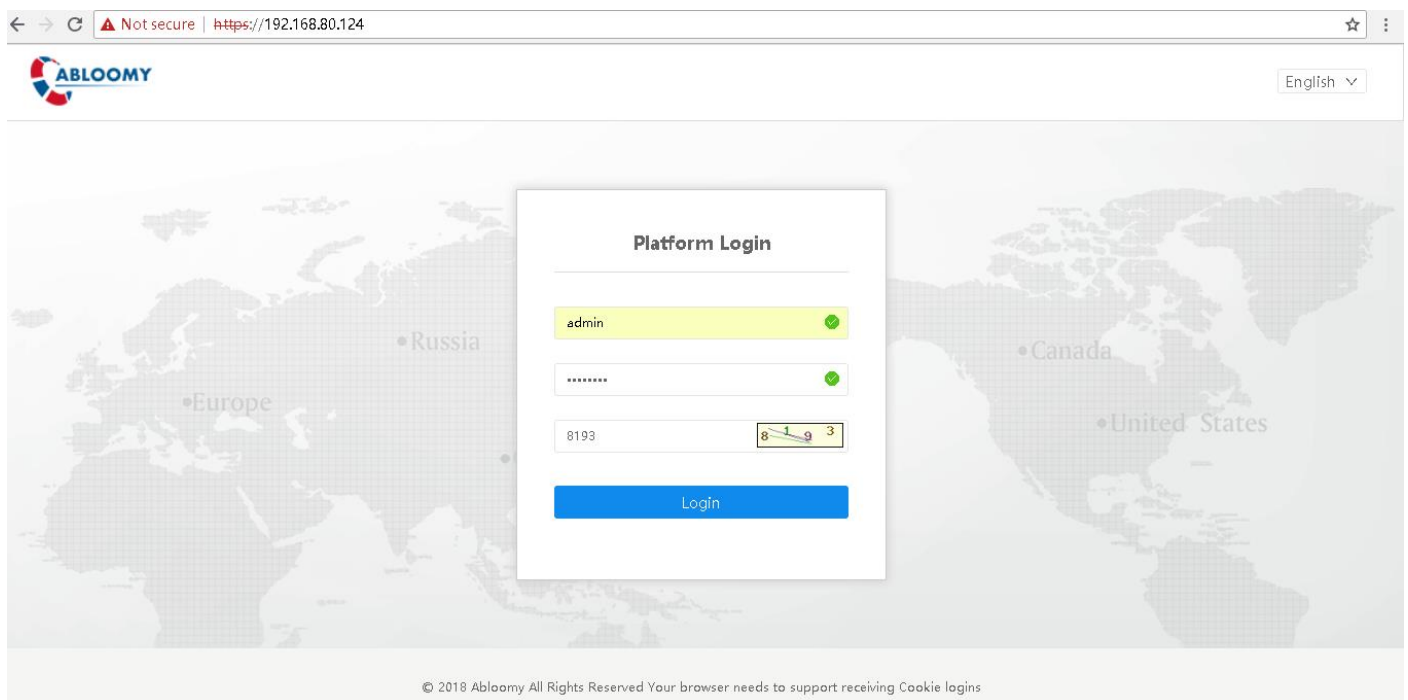
CAM/CSP port 0/1 is WAN default, the rest port is LAN. PC can connect LAN port and get IP address by DHCP.

Login in address: <https://192.168.186.1/wan>

Username: admin

Password: admin.01

Note: We suggest Chrome & Firefox web browser.



Config WAN port:

WAN port can select three kinds of mode: PPPOE, DHCP and Static.

DHCP (default): When WAN port connect to DHCP network, status information will show the detail.

Note: DNS will be obtained automatically from the network or you can config static DNS by yourself.

G0/1 Ports
▼ ×

[PPPOE](#) [DHCP](#) [Static](#)

Click Save, the interface configuration will be changed to automatic access

DNS Server:

Alternative DNS S...

Vlan ID ?:

status information

Connection Ty... *DHCP*

Ip Address: *192.168.106.120*

Subnet Mask: *255.255.255.0*

Gateway: *192.168.106.1*

DNS Server: *202.103.24.68 | 202.103.44.150*

Add Interface ▼

Save

PPPOE: Enter username, password and save. Status information will show the detail if connected successfully.

G0/3 Ports
▼ ×

[PPPOE](#) [DHCP](#) [Static](#)

Account ?:

Password:

Vlan ID ?:

status information

Connection Ty... -

Ip Address: -

Subnet Mask: -

Gateway: -

DNS Server: -

Add Interface ▼

Save

Static: Enter IP, mask, gateway and DNS

G0/1 Ports
▼ ×

PPPOE DHCP Static

Ip Address:

Subnet Mask:

Gateway:

DNS Server:

Alternative DNS S...

Vlan ID ?:

status information

Connection Ty...*Static*

Ip Address: *192.168.106.200*

Subnet Mask: *255.255.255.0*

Gateway: *192.168.106.1*

DNS Server: *114.114.114.114 | 8.8.8.8*

Add Interface ▼

Save

WAN Configuration will display “Access to address success” when WAN connect to the network.

WAN Configuration: Access to address success

G0/2 Ports
▼ ×

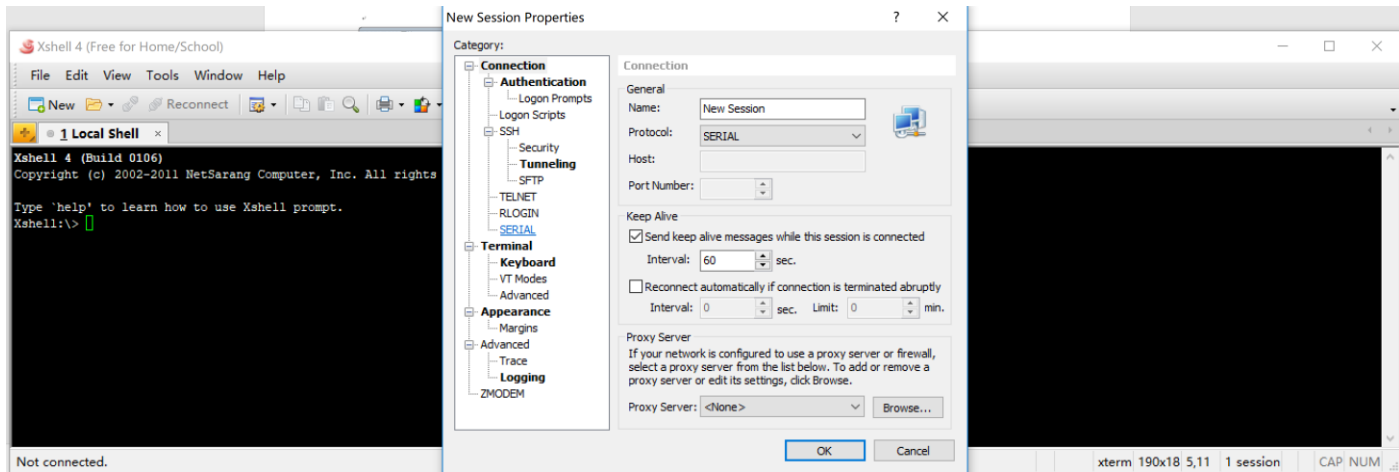
Login in WAN IP address: <https://192.168.106.200> that you set previous.

Enter WiFi module, and we can see CAM/CSP Status is “Running” under AC.

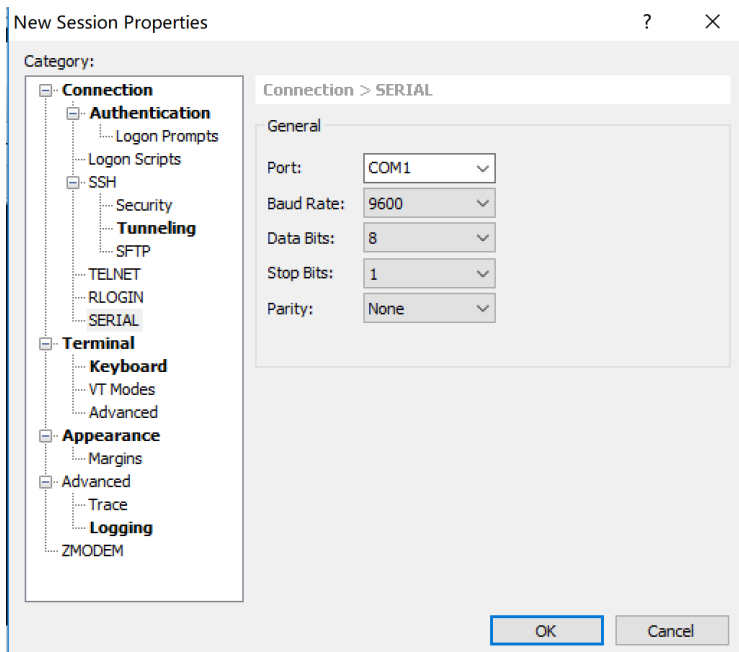
ABLOOMY										
Welcome, 13311160083 BD English Refresh Home Logout										
AP(22) AC(11) GRE devices(0) Upgrade Add Delete Search ▼										
<input type="checkbox"/>	Name	MAC	Public IP	Private IP	Status	AP	Users	Hardware Type	Firmware Version	Connection Tim
<input type="checkbox"/>	001631f1b810	00:16:31:F1:B8:10	58.48.77.55	192.168.106.120	Running	-	-	1200064	8.1.0(r18095)	23 Minute 15 Second

2.2. CLI config

Console cable connect to CAM/CSP console port and PC.
Open Xshell, click new—connection—Protocol—SERIAL.



Select the right COM port and click ok.



Enter CAM/CSP username and password to login.

Username: admin

Password: admin.01

Config WAN port:

1. WAN get IP by DHCP

set wan 0/1 dhcp weight 1

```
Abloomy@[192.168.106.158]: set wan 0/1 dhcp weight 1
```

2. WAN get IP by PPPOE

set wan 0/1 pppoe abloomy 123456 weight 1

Note: abloomy 123456 is the username password for pppoe.

```
Abloomy@[192.168.106.158]: set wan 0/1 pppoe abloomy 123456 weight 1
```


3. WAN get IP by Static

set wan 0/1 192.168.106.200/24 gateway 192.168.106.1 weight 1 114.114.114.114 8.8.8.8

```
Abloomy@[192.168.106.158]: set wan 0/1 192.168.106.200/24 gateway 192.168.106.1 weight 1 114.114.114.114 8.8.8.8
```

Login in WAN IP address: <https://192.168.106.200> that you set previous.

Enter WiFi module, and we can see CAM/CSP Status is “Running” under AC.

Name	MAC	Public IP	Private IP	Status	AP	Users	Hardware Type	Firmware Version	Connection Time
001631f1b810	00:16:31:F1:B8:10	58.48.77.55	192.168.106.12	Running	-	-	1200064	8.1.0(r18095)	23 Minute 15 Second

2.3. Modify CAM/CSP username & password

➤ Enter WiFi Module, Click Devices—AC, select your CAM/CSP.

Name	MAC	Public IP	Private IP	Status	AP	Users	Hardware Type	Firmware Version	Connection Time
001631f1b810	00:16:31:F1:B8:10	58.48.77.55	192.168.106.12	Running	-	-	1200064	8.1.0(r18095)	23 Minute 15 Second

Click Modify—Admin to modify CAM/CSP username & password

Summary **Modify** Back

▼ Summary

Name

MAC 00:16:31:F1:B8:10

System ID 00:16:31:F1:B8:10

Admin

SSH Enable Technical Support

Admin

Name

Password

Confirm Password

2.4. Config DNS

➤ Click Modify—DNS Server, set DNS Address manually.

The screenshot shows the 'DNS Server' configuration page in the ABLOOMY interface. The 'Enable' toggle is turned on. Under 'DNS Address', the 'Manual' radio button is selected and highlighted with a red box. Below it is an empty text input field. The 'Customized domain name' dropdown is set to 'Please Select'.

2.5. Config DHCP server

2.5.1 Config subnet IP

Click Network—Subnets—Add.

The screenshot shows the 'Subnets' configuration page in the ABLOOMY interface. The 'Add' button is highlighted with a red box. Below it is a table with the following data:

Name	IP Version	IP	IP/DHCP Mask	DHCP	Default	Operation
VPN-Server-01	IPv4	192.168.199.1	255.255.255.0 (/24)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
VPN-Server-02-Office	IPv4	192.168.181.1	255.255.255.0 (/24)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Network	NAT	Route	Subnets	Domain
---------	-----	-------	----------------	--------

Subnet | Network group Back

Name ●

IP Protocol Version IPv4 IPv6

IP allocation mode None Static

DHCP

DHCP Server

DHCP Relay

Default ●

description

▶ **Advanced**

Save Cancel

2.5.2 Config DHCP pool

Click IP Mode to Static and you can set DHCP pool

Network	NAT	Route	Subnets	Domain
---------	-----	-------	----------------	--------

Subnet | Network group Back

Name ●

IP Version IPv4 IPv6

IP Mode None Static

IP Address/Subnet Mask -

DHCP

DHCP Server

DHCP

DHCP Server

Default Lease Time days hours minutes

Max Lease Time days hours minutes

Gateway

DNS Mode WAN Manual

IP Range -

Start IP	End IP	Action
No data		

Static IP

Host name

Host name	IP	MAC	Operation
No data			

Advanced

DHCP Relay

Default

2.5.3 Config DHCP lease time

Default lease time is 1 hours and max lease time is 1day. You can modify by yourself.

DHCP

DHCP Server

Default Lease Time days hours minutes

Max Lease Time days hours minutes

Gateway

DNS Mode WAN Manual

2.5.4 DHCP pool gateway

Set subnet IP address/mask as a DHCP pool gateway address

Network	NAT	Route	Subnets	Domain
---------	-----	-------	----------------	--------

[Subnet](#) | [Network group](#) [Back](#)

Name ●

IP Version IPv4 IPv6

IP Mode None Static

IP Address/Subnet Mask - ▼

2.5.5 Config DHCP Pool DNS

You can get DHCP pool DNS IP by WAN or Manual.

DNS Mode WAN Manual

Primary DNS

Secondary DNS

2.5.6 DHCP Pool IP range

Set IP Range and click Add. For example: 192.168.1.1~192.168.1.200.

IP Range - [Add](#)

Start IP	End IP	Action
No data		

2.5.7 Static IP and MAC binding

Set static IP and mac to binding

Static IP [Add](#)

Host name	IP	MAC	Operation
No data			

Note: this is optional

Advanced

Set Domain name and DHCP Option 43 if you need.

Advanced

The screenshot shows a configuration panel with two main sections. The first section is labeled 'Domain' and contains a text input field with the placeholder text 'Enter Domain'. The second section is labeled 'DHCP Option 43' and contains a toggle switch that is currently turned off.

2.5.8 Default

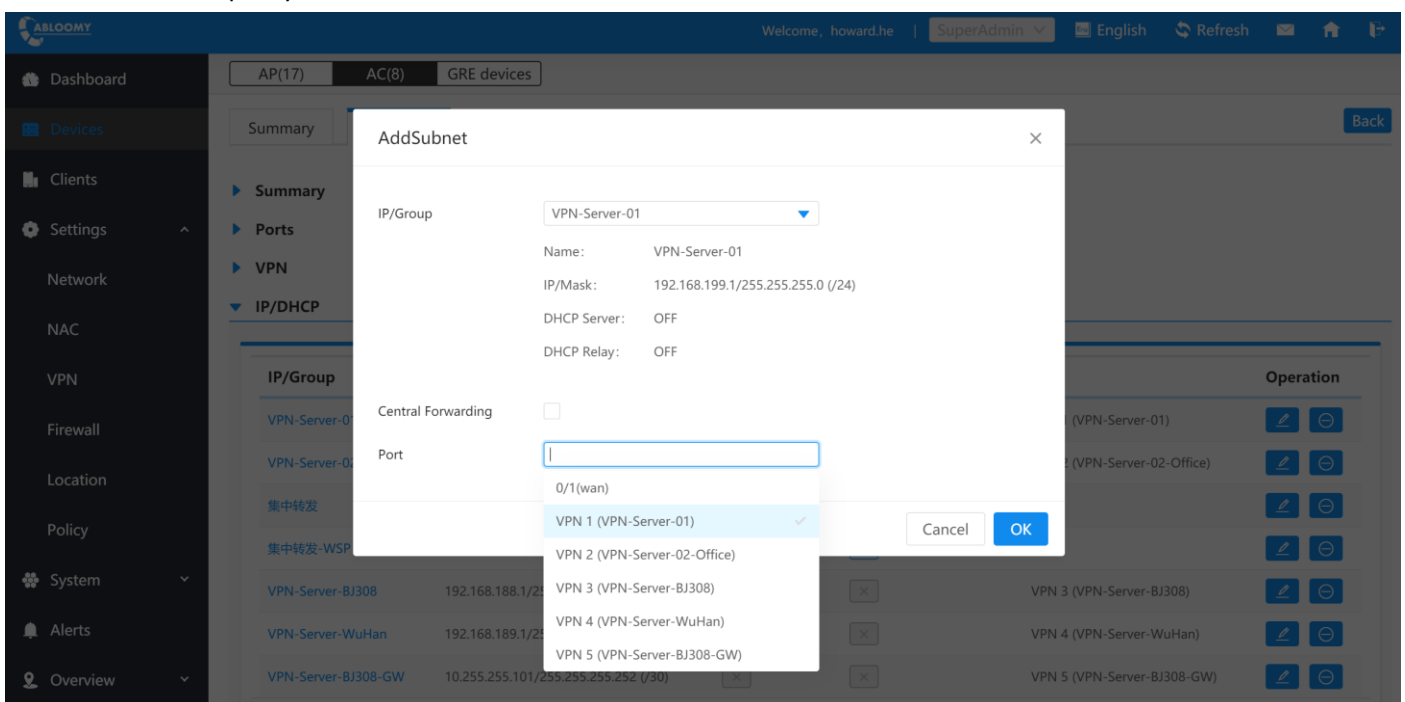
Default 



Except of CAM/CSP WAN port (0/1), the rest ports will follow the subnet DHCP default policy.

2.6. Assign policy to the port

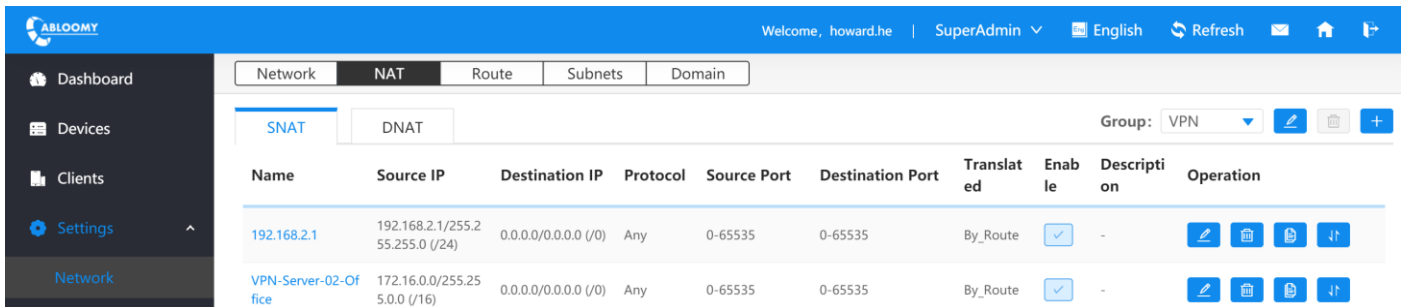
- Click Devices—AC, select your CAM/CSP
- Click Modify—IP/DHCP—Add
- Choose subnet policy under Port.



2.7. Config NAT

Config SNAT:

Click Network—NAT, Create a new Group

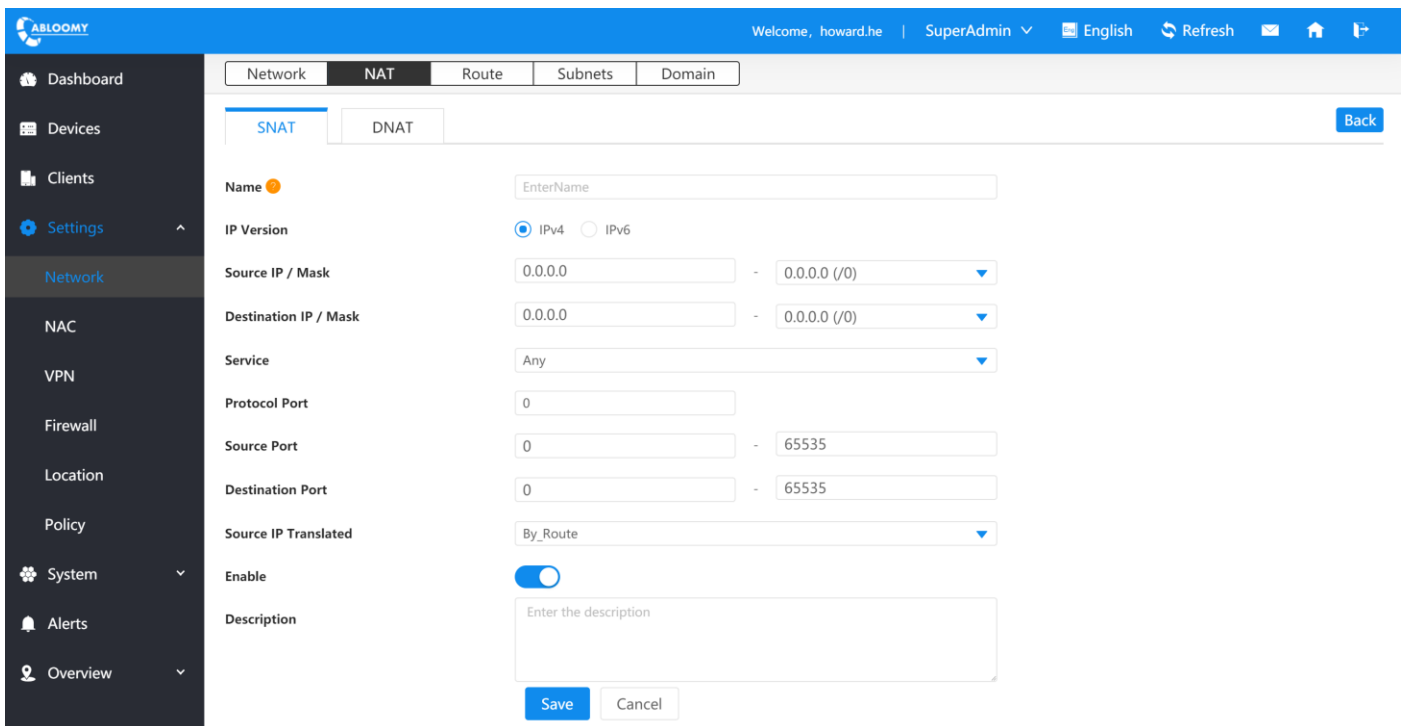


The screenshot shows the ABLOOMY interface with the NAT configuration page. The 'SNAT' tab is selected, and a table lists existing SNAT rules. The table has columns for Name, Source IP, Destination IP, Protocol, Source Port, Destination Port, Translated, Enable, Description, and Operation. Two rules are visible: one for 192.168.2.1 and another for VPN-Server-02-Office.

Name	Source IP	Destination IP	Protocol	Source Port	Destination Port	Translated	Enable	Description	Operation
192.168.2.1	192.168.2.1/255.255.0 (/24)	0.0.0.0/0.0.0.0 (/0)	Any	0-65535	0-65535	By_Route	<input checked="" type="checkbox"/>	-	Edit Delete Copy Down
VPN-Server-02-Office	172.16.0.0/255.255.0 (/16)	0.0.0.0/0.0.0.0 (/0)	Any	0-65535	0-65535	By_Route	<input checked="" type="checkbox"/>	-	Edit Delete Copy Down

Click Add--SNAT

Add



The screenshot shows the 'Add SNAT' form in the ABLOOMY interface. The form includes fields for Name, IP Version (IPv4 selected), Source IP / Mask, Destination IP / Mask, Service, Protocol Port, Source Port, Destination Port, Source IP Translated, Enable (checked), and Description. There are 'Save' and 'Cancel' buttons at the bottom.

Name: EnterName

IP Version: IPv4 IPv6

Source IP / Mask: 0.0.0.0 - 0.0.0.0 (/0)

Destination IP / Mask: 0.0.0.0 - 0.0.0.0 (/0)

Service: Any

Protocol Port: 0

Source Port: 0 - 65535

Destination Port: 0 - 65535

Source IP Translated: By_Route

Enable:

Description: Enter the description

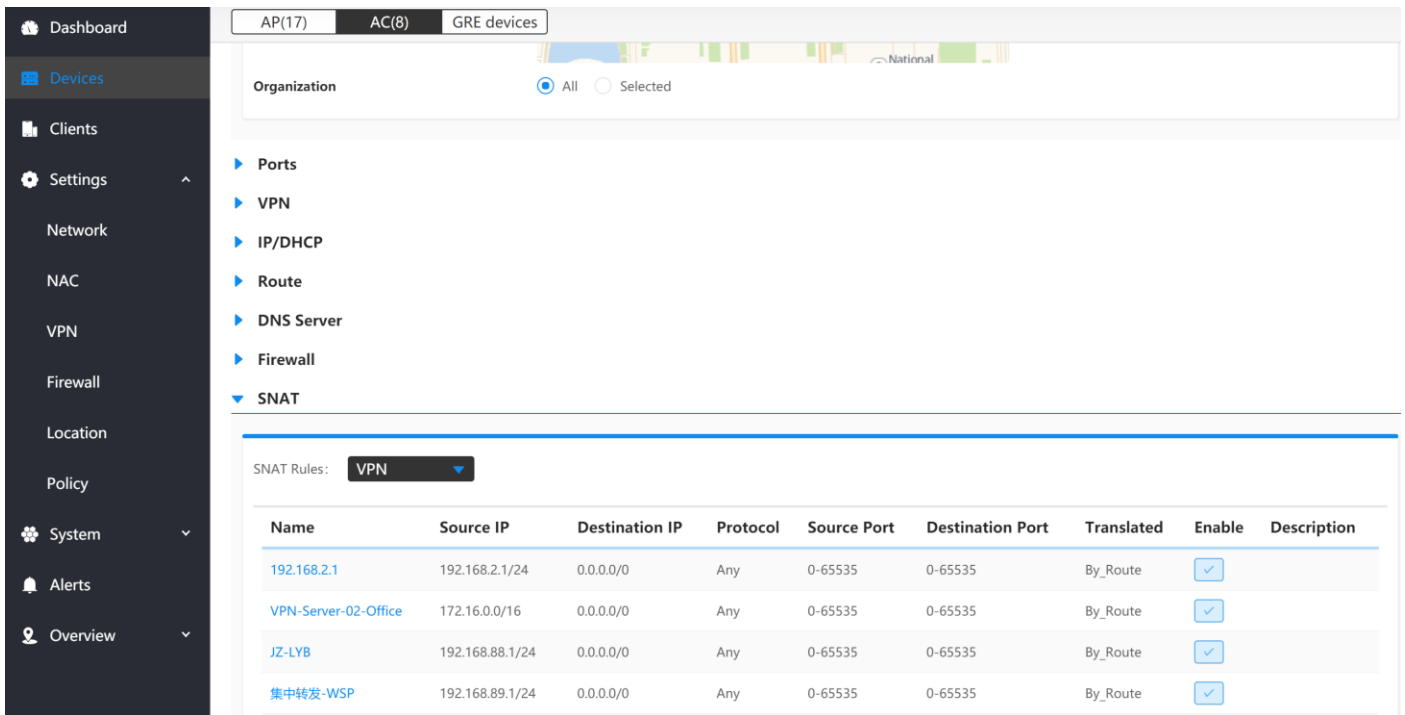
Buttons: Save, Cancel

Enter Name

All default is ok, click save.

The system can do SNAT by route.

- Click Devices—AC, select your CAM/CSP
- Click Modify—SNAT, select your SNAT rule



If you customize by yourself, you should understand the following:

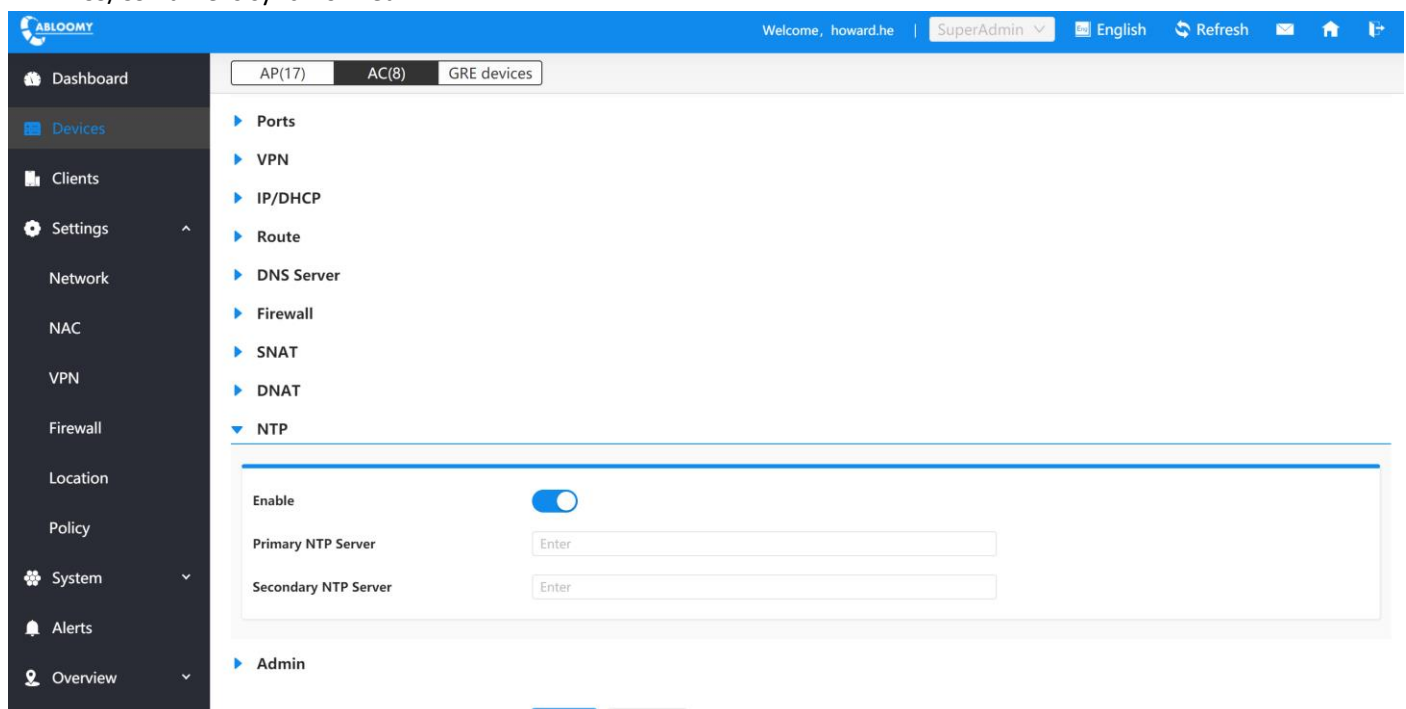
Source IP/ Mask: IP network segment which need to network address transform as a source

Destination IP/ Mask: IP network segment which you want to access, 0.0.0.0 mean all.

Source IP Translated: Transform Source IP network segment to specified IP. Default route will select automatically.

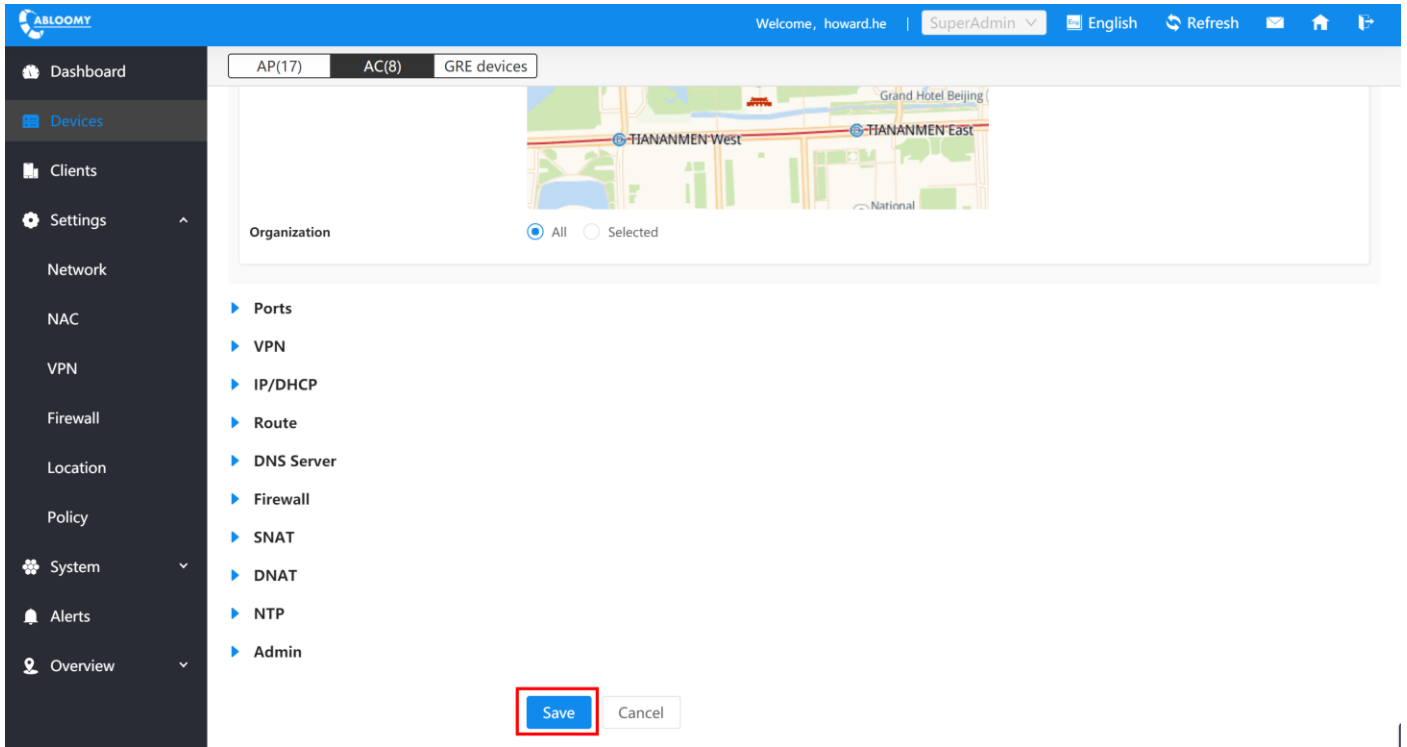
2.8. Modify CAM/CSP time

- Click Devices—AC, select your CAM/CSP
- Click NTP—Enable, enter Primary NTP server and Secondary NTP server address, make sure CAM/CSP and ACS/CSP time is synchronized.



2.9. Save

Click Save button after all config is done. If you forget to click Save button, all configuration will be lost.



3. CLI command

- show ip (show ip configuration)

```
Abloomy@[192.168.100.122]: show ip
Interface          IP/Netmask          CS_Control  TYPE      Admin
Slot/Port 0/1      192.168.100.122/255.255.255.0  on          STATIC    on
VSLAN 1           1.1.1.1/128.0.0.0  off         STATIC    off
```

- show ports (show ports configuration)

```
Abloomy@[192.168.100.122]: show ports
Slot 0: 4 ports
Slot/Port  MAC          Type  Mtu  Mode  Br      Trunk  Speed  VSLAN  ByIP  Status  PseudoMac  PPPoE_user
-----
0/1        00:16:31:f1:65:ac  Uplink 1500 Route -      Off    Auto   1      Off  Enable  00:00:00:00:00:00
0/2        00:16:31:f1:65:ad  Uplink 1500 Route -      Off    Auto   1      Off  Enable  00:00:00:00:00:00
0/3        00:16:31:f1:65:ae  Downlink 1500 Route -      Off    Auto   1      Off  Enable  00:00:00:00:00:00
0/4        00:16:31:f1:65:af  Downlink 1500 Route -      Off    Auto   1      Off  Enable  00:00:00:00:00:00
```

- show route (show route configuration)

```
Abloomy@[192.168.100.122]: show route
DestIP/Netmask    Gateway      Metric
0.0.0.0/0.0.0.0  192.168.100.1  0
```

- show controlserver (show ACS/CSP address)

```
Abloomy@[192.168.100.122]: show controlserver
Control Server: 192.168.100.166
```

- show vlanif (show vlan ports configuration)

```
-----
Slot/Port          MAC          Mtu  Mode  Br      VSLAN  ByIP  Status
Slot/Port 0/2.100      00:16:31:f1:65:ad  1500  Switch  VSLAN 1      1      off  Enable
Abloomy@[192.168.100.122]: Write failed: Broken pipe
```

- show time

```
Abloomy@[192.168.100.122]: show time
Timezone:      Asia/Shanghai
NTP Service:   Enabled
NTP Servers:   ntp.nasa.gov
Time:          2014/11/26 13:31:18
```

- show dhcpserver

```
Abloomy@[192.168.100.122]: show dhcpserver ?
```

```
show dhcpserver ;
show dhcpserver status;
show dhcpserver default_lease_time;
show dhcpserver max_lease_time;
show dhcpserver if;
show dhcpserver subnet ...;
show dhcpserver fixaddress ...;
show dhcpserver client
show dhcpserver ?
```

- show ambit ip (show DNS configuration)

```
Abloomy@[192.168.100.122]: show ambit_ip
  Hostname:
  Domain Name:
  IP address:      192.168.100.122/24
  DHCP enabled:   No
  Default gateway: None configured
  DNS servers:    202.106.0.20 8.8.8.8
  Management VLAN: Not_tagged
```

- save main

```
Abloomy@[192.168.100.122]: save main
  saving configuration...
  save configuration success _
```

- factoryreset

```
Abloomy@[192.168.100.122]: factoryreset
```

```
This operation will erase all configuration information and
return this system to factory default settings.
```

```
Are you sure you want to perform a factory reset [n]? 
```