

CAM & CSP Quick Guide

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AC Type: CAM, CSP

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

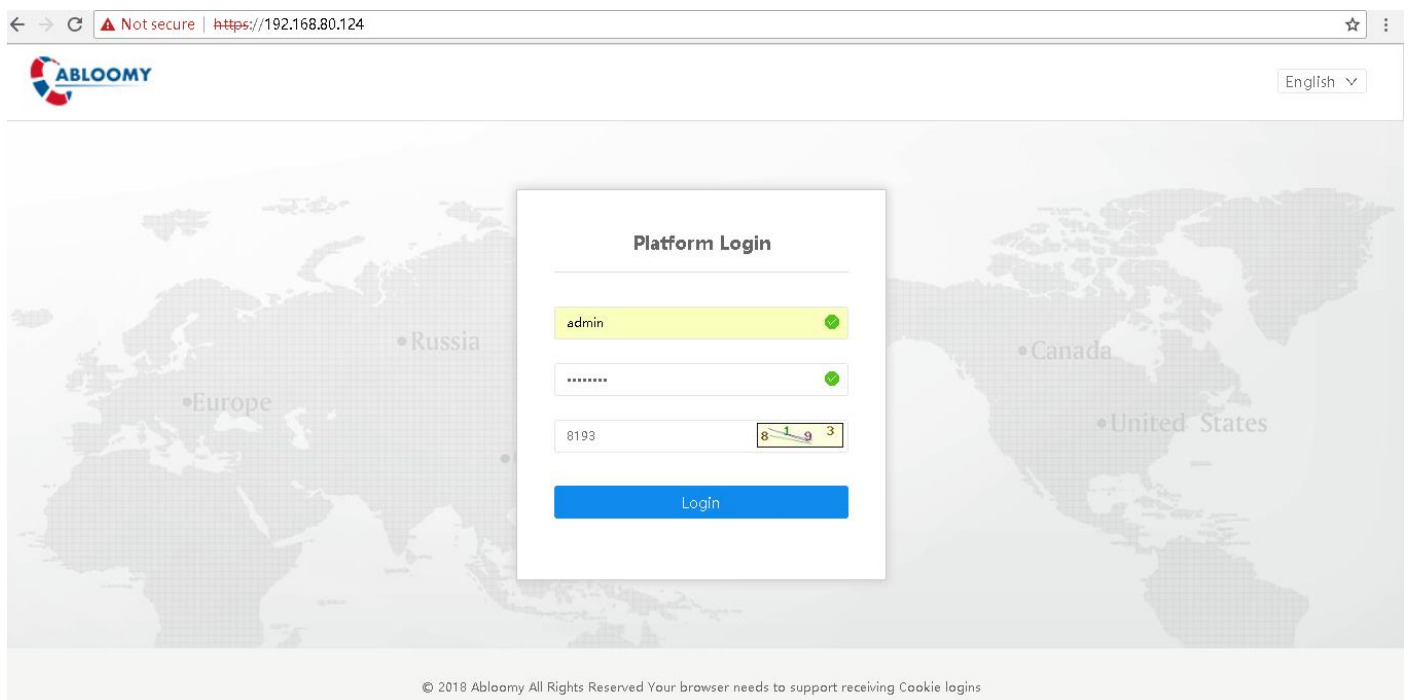
CAM/CSP port 0/1 is WAN default, the rest port is LAN. PC can connect LAN port and get IP address by DHCP.

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:

Optional

Alternative DNS S...

Optional

Vlan ID ?:

Please Enter

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 ?:

Please EnterCarrier's broadband

Password:

Please EnterCarrier's broadb.

Vlan ID ?:

Please Enter

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
▼ ×

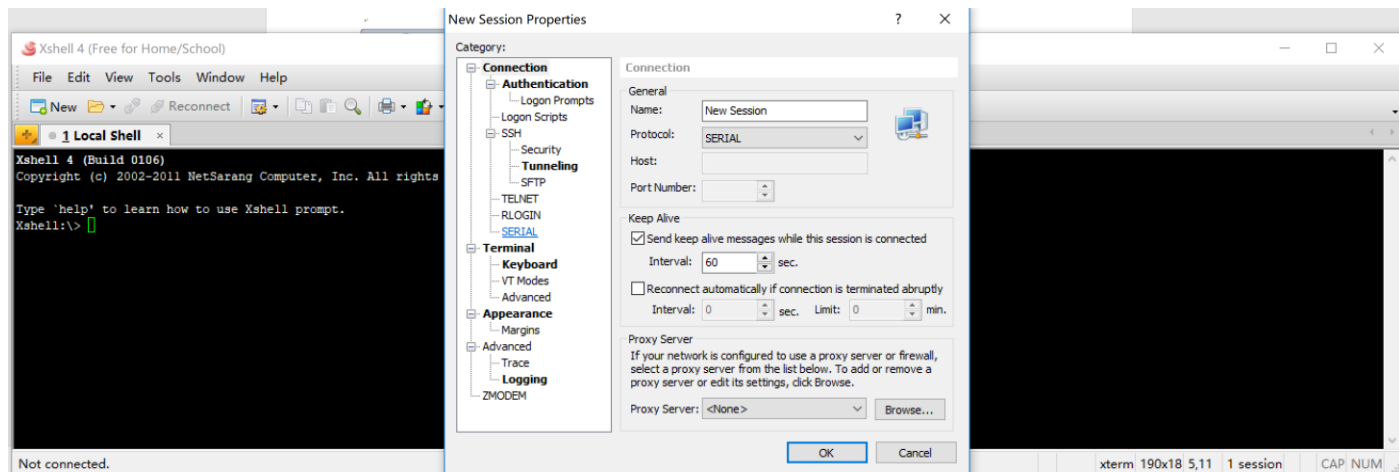
Login in WAN IP address: <https://192.168.106.200> that you set previous.

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

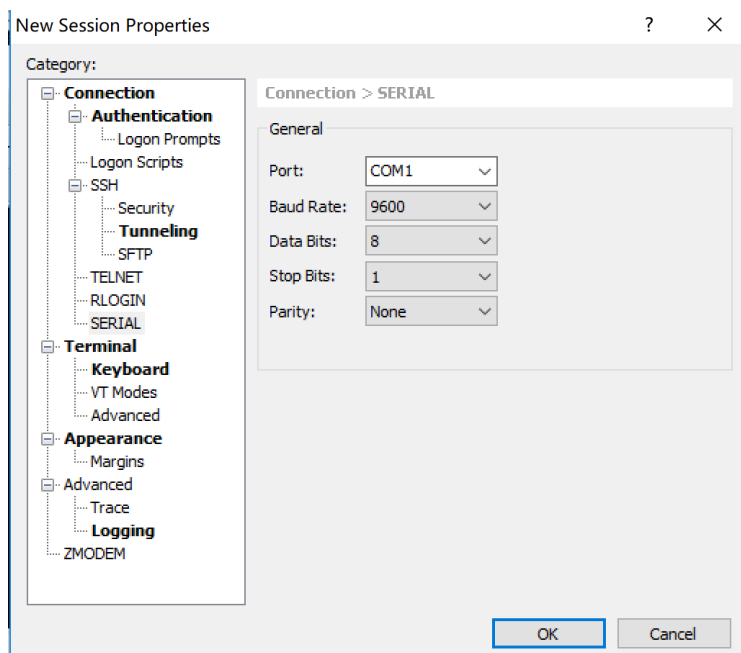
ABLOOMY										
				Welcome, 13311160083 BD ▼			English	Refresh	📧	🏠
Dashboard	AP(22)	AC(11)	GRE devices(0)	Upgrade Add Delete ▼ Search ▼						
☐	Name	MAC	Public IP	Private IP	Status	AP	Users	Hardware Type	Firmware Version	Connection Tim
☐	001631f1b810	00:16:31:F1:B8:10	58.48.77.55	192.168.106.120	Running	-	-	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.

ABLOOMY

Dashboard

Devices

Clients

Welcome, 13311160083

BD

English

Refresh

AP(22)

AC(11)

GRE devices(0)

Upgrade

Add

Delete

Search

☐	Name	MAC	Public IP	Private IP	Status	AP	Users	Hardware Type	Firmware Version	Connection Tim
☐	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

2.3. Modify CAM/CSP username & password

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

ABLOOMY

Welcome, 13311160083

BD

English

Refresh

Dashboard

Devices

Clients

AP(22)

AC(11)

GRE devices(0)

Upgrade

Add

Delete

Search

☐	Name	MAC	Public IP	Private IP	Status	AP	Users	Hardware Type	Firmware Version	Connection Tim
☐	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

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

AP(22)	AC(11)	GRE devices
Summary	Modify	Back
▼ Summary		
Name	001631f1b810	
MAC	00:16:31:F1:B8:10	
System ID	00:16:31:F1:B8:10	

Admin

SSH

Enable

Technical Support

Admin

Name

EnterName

Password

Confirm Password

Save

Cancel

2.4. Config DNS

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

ABLOOMY

Welcome, 13311160083 | BD | English | Refresh | Home | Logout

Dashboard

Devices

Clients

Settings

System

Alerts

Map topology

AP(22) | AC(11) | GRE devices

Summary | **Modify** | Back

Summary

Ports

VPN

Subnet

Route

DNS Server

Enable

Auto

Manual

DNS Address

Customized domain name:

Please Select

2.5. Config DHCP server

2.5.1 Config subnet IP

Click Network—Subnets—Add.

ABLOOMY

Welcome, howard.he | SuperAdmin | English | Refresh | Home | Logout

Dashboard

Devices

Clients

Settings

Network

Network | NAT | Route | **Subnets** | Domain

Subnet

Network group

Add

Name	IP Version	IP	IP/DHCP Mask	DHCP	Default	Operation
VPN-Server-01	IPv4	192.168.199.1	255.255.255.0 (/24)			
VPN-Server-02-Office	IPv4	192.168.181.1	255.255.255.0 (/24)			

Network
NAT
Route
Subnets
Domain

Subnet
Network group
Back

Name
Please enter name

IP Protocol Version
☒ IPv4
☐ IPv6

IP allocation mode
☒ None
☐ Static

DHCP

DHCP Server
☐

DHCP Relay
☐

Default
☐

description
Please enter the 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
Enter name

IP Version
☒ IPv4
☐ IPv6

IP Mode
☐ None
☒ Static

IP Address/Subnet Mask
0.0.0.0 - 0.0.0.0 (/0)

DHCP

DHCP Server
☒

DHCP

DHCP Server

☒

Default Lease Time

0

days

1

hours

0

minutes

Max Lease Time

1

days

0

hours

0

minutes

Gateway

0.0.0.0

DNS Mode

☒ WAN

☐ Manual

IP Range

0.0.0.0

-

0.0.0.0

Add

Start IP	End IP	Action
No data		

Static IP

Host name

0.0.0.0

00:00:00:00:00:00

Add

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

0

days

1

hours

0

minutes

Max Lease Time

1

days

0

hours

0

minutes

Gateway

0.0.0.0

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 VPN-Server-02-Office IP Version ☒ IPv4 ☐ IPv6 IP Mode ☐ None ☒ Static IP Address/Subnet Mask 192.168.181.1 - 255.255.255.0 (/24)				

2.5.5 Config DHCP Pool DNS

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

DNS Mode ☐ WAN ☒ Manual

Primary DNS 0.0.0.0

Secondary DNS 0.0.0.0

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 0.0.0.0 - 0.0.0.0 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 Host name 0.0.0.0 00:00:00:00:00:00 Add

Host name	IP	MAC	Operation
No data			

Note: this is optional

Advanced

Set Domain name and DHCP Option 43 if you need.

▼ Advanced

Domain

DHCP Option 43

☐

2.5.8 Default

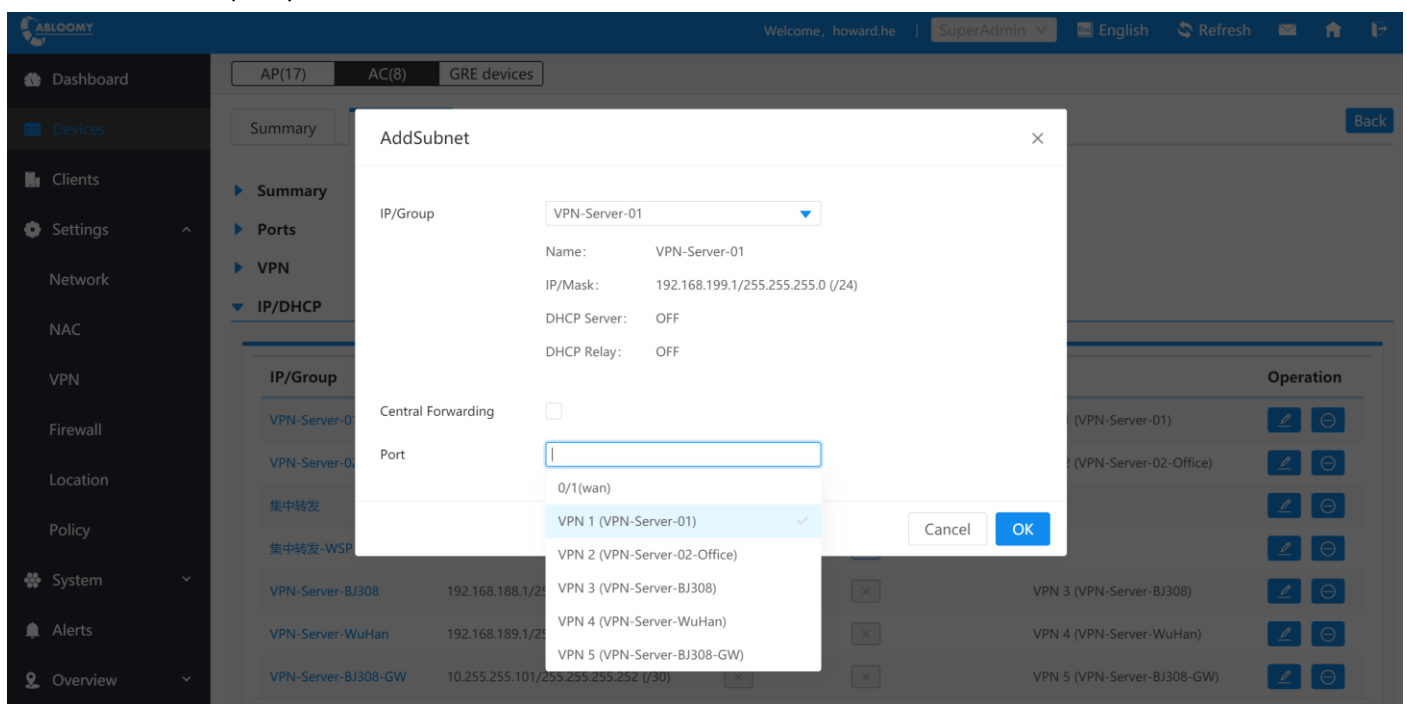
Default 



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

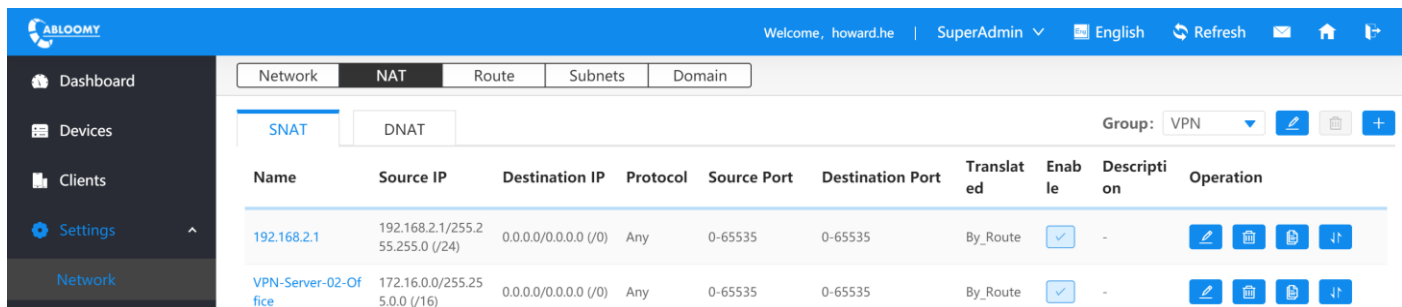
- Click Devices—AC, select your CAM/CSP
- Click Modify—IP/DHCP—Add
- Choose subnet policy under Port.



2.7. Config NAT

Config SNAT:

Click Network—NAT, Create a new Group

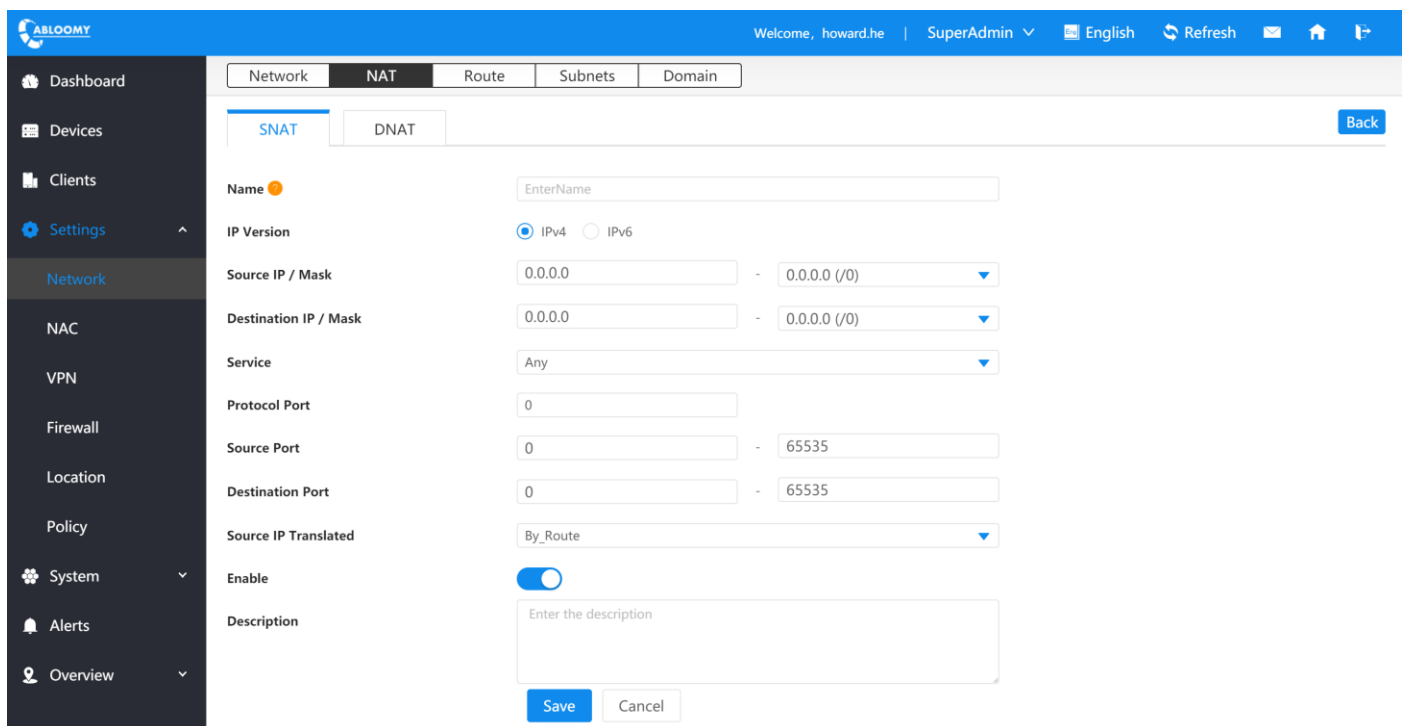


The screenshot shows the ABLOOMY web interface. The top navigation bar includes the logo, user name 'Welcome, howard.he', role 'SuperAdmin', language 'English', and a 'Refresh' button. The left sidebar contains a menu with 'Dashboard', 'Devices', 'Clients', 'Settings', and 'Network' (highlighted). The main content area has tabs for 'Network', 'NAT', 'Route', 'Subnets', and 'Domain'. Under the 'NAT' tab, there are sub-tabs for 'SNAT' and 'DNAT'. A 'Group' dropdown is set to 'VPN'. A table lists SNAT rules with columns: Name, Source IP, Destination IP, Protocol, Source Port, Destination Port, Translated, Enable, Description, and Operation. Two rules are shown: '192.168.2.1' and '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	☒	-	[Edit] [Delete] [Add] [Refresh]
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	☒	-	[Edit] [Delete] [Add] [Refresh]

Click Add--SNAT

Add



The screenshot shows the 'Add SNAT' form in the ABLOOMY web interface. The top navigation bar and left sidebar are the same as in the previous screenshot. The main content area has tabs for 'Network', 'NAT', 'Route', 'Subnets', and 'Domain'. Under the 'NAT' tab, there are sub-tabs for 'SNAT' and 'DNAT'. A 'Back' button is in the top right. The form fields are: Name (text input), IP Version (radio buttons for IPv4 and IPv6), Source IP / Mask (text input and dropdown), Destination IP / Mask (text input and dropdown), Service (dropdown), Protocol Port (text input), Source Port (text input and dropdown), Destination Port (text input and dropdown), Source IP Translated (dropdown), Enable (checkbox), and Description (text area). 'Save' and 'Cancel' buttons are at the bottom.

Name

IP Version ☒ IPv4 ☐ IPv6

Source IP / Mask -

Destination IP / Mask -

Service

Protocol Port

Source Port -

Destination Port -

Source IP Translated

Enable ☒

Description

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

Name	Source IP	Destination IP	Protocol	Source Port	Destination Port	Translated	Enable	Description
192.168.2.1	192.168.2.1/24	0.0.0.0/0	Any	0-65535	0-65535	By_Route	☒	
VPN-Server-02-Office	172.16.0.0/16	0.0.0.0/0	Any	0-65535	0-65535	By_Route	☒	
JZ-LYB	192.168.88.1/24	0.0.0.0/0	Any	0-65535	0-65535	By_Route	☒	
集中转发-WSP	192.168.89.1/24	0.0.0.0/0	Any	0-65535	0-65535	By_Route	☒	

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.

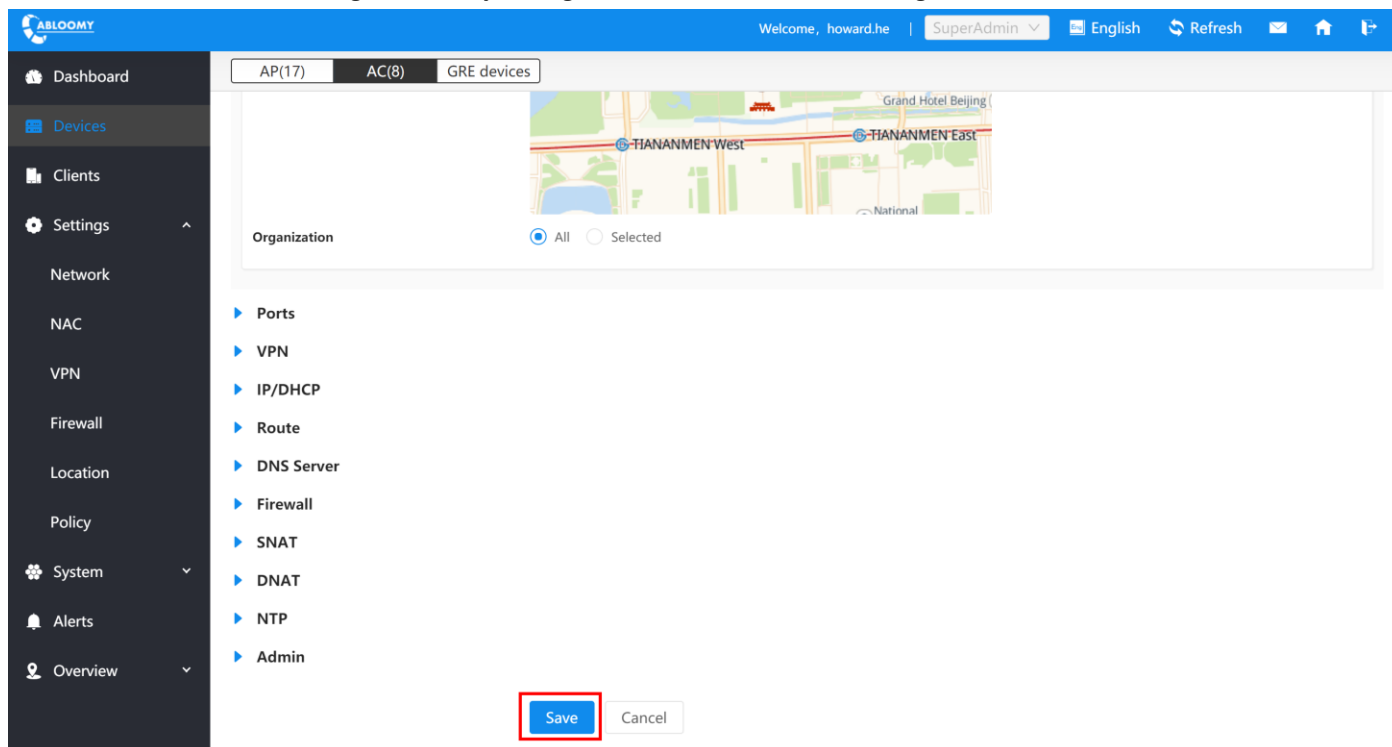
Source IP Translated: Transform Source IP network segment to specified IP. Default route will select automatically.

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]? ☐
```