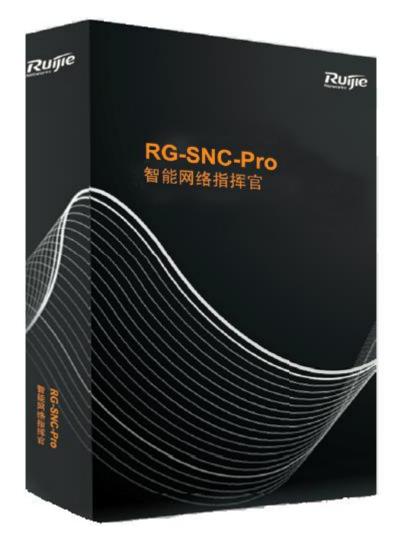


Ruijie Networks - Innovation Beyond Networks



RG-SNC implementation cookbook

V1.0

For SNC En 2.30

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1 Preface

RG-SNC-Pro smart network commander is Ruijie networks designed for accurate network management system. RG-SNC-Pro focused on the Web, device failure and performance monitoring, device configuration change monitoring and configuration management with friendly Web browser interface, remote maintenance and management together. It can be used non-proxy mode to avoid the traditional "Agent" of tedious and repetitive work. It is easy to implement and maintain, and time saving. Administrative tasks can be defined, actively collecting network status and timely backups, so timely response from the state change or failure to recover; provides network topology diagram showing the effect of the tidy overlooking the network status when an exception occurs in the topology map. SNC is mainly used with Ruijie equipment. It supports the standard MIB based manufacturer device monitoring and management. Meanwhile RG-SNC-Pro system has modular management of various network environments, including: Wireless Wlan egress component, EG equipment central management, MPLS VPN components, 3G network management components to include various devices, simple management of complex networks. Thereby greatly reduce administrator maintanance strength and lower degree of difficulty

This cookbook is applicable for RG-SNC version 2.30(p4)_EN_Build20160302 and later version

Audience

- Network Engineers
- Network Administrator

Obtain Technical Assistance

- Ruijie Networks Websites : <u>http://www.ruijienetworks.com</u>
- Ruijie Service Portal : <u>http://case.ruijienetworks.com</u>

Welcome to report error and give advice in any Ruijie manual to Ruijie Service Portal

Related Documents

- RG-SNC Release Note
- RG-SNC Installation Guide
- RG-SNC Database Installation and Maintenance Guide
- RG-SNC Operation Guide

Revision History

| Date | Change contents | Reviser |
|-----------|--------------------------|-------------|
| 2016.6.17 | Initial publication V1.0 | TAC Oversea |

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3 Daily Maintenance

Before getting started, verify that you install MySQL and RG-SNC, then start SNC Service correctly.

For Database and SNC installation, see **RG-SNC Installation Guide** and **RG-SNC Database Installation and** *Maintenance Guide*

3.1 Login Web UI

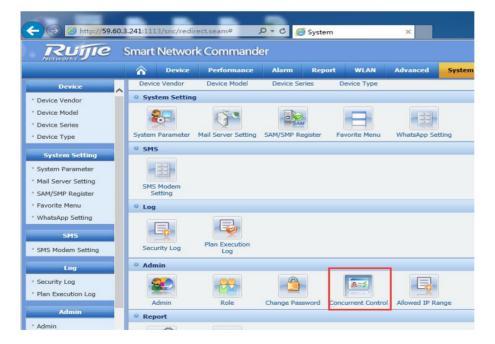
When you complete SNC installation and start SNC service successfully, visit SNC web UI at http://Server IP:8088/snc , the

default Username is "*admin*" and password is "*admin*"

Note: Use IE 8.0 and above version in compatibility mode. Firefox and chrome may have compatible issues.

It is recommended to change log sessions when login. Click **System----→Current Control to** change maximum number of concurrent sessions





In the middle of the window, it is Current Control • Maximum Number of Concurrent Sessions : 10 Save

3.2 Check SNC Version

Click *Help-->About* in the up right corner, you can view version information.

Pop up information as shown.

RG-SNC Smart Network Commander

| 2 , | pe:Trial Version omponents: | | | | |
|---------------------|--------------------------------|--------------|------------|-------------|-----------------|
| | • | 11), WLAN (| OMPONENT | S(1.35)、ACL | COMPONENTS(1 |
| TOPOL | OGY COMPONE | ENTS(1.06_er | i), FOUNDA | TION COMPON | NENTS(1.2(p1)_e |
| CONFI | GURATION COM | PONENTS(1. | 14) | | |
| Trial days: | 90 | | | | |
| Trial days p | assed:76 | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

3.3 Service Manager

In this section, you will learn how to manage service.

Remote access to the SNC server and click the shortcut or you can access from URL : http://SNC IP: 8989/ssm as well. Both username and password are "admin".



View database status, web service status and server information as shown.

| Node 2 (Active) IP | : 172.29.2.5 | | Basics | | |
|--------------------------|---------------------------|------------------------------|---|----|--|
| Database Service | 🕑 Running | Web Service | 🕑 Running | | |
| ©Restart ■ Stop | l Log Collect | ©Restart ■ Stop | la Log Collect | | |
| About Server | | | | | |
| Name: RJ-SNC | | | OS | | |
| SN:085F0F219BF | 302997E2491B24B9 | 93BC7D | | | |
| CPU: 2-core Intel> | (eon @ 3.19GHz , 3 | 3.19GHz | | | |
| Memory: RAM6.0 | G SWAP7.0G | | | | |
| /¶/ | | | | | |
| Tips: Database back | up succeeded. If your bro | owser does not perform auto- | download, click 🖄 <u>here</u> to download | d. | |
| | | Close | | | |
| View Server disk usage(| Need install flash pl | ugin) | | | |
| Oisk (C) : 19.3 | | Oisk (D) : 10.9 | 92G / 19.53G | | |
| View Server NIC (Need i | nstail fiash piug-in) | | | | |

| (curo) |
|------------------------|
| Name : Ethernet0 |
| Bandwidth : 1000Mbps |
| IP: 172.29.2.5 |
| MAC: 00-0C-29-E6-BA-25 |

Click "Web Service Settings" to view web service configuration of HTTP, HTTPS access port. Not recommend to change.

| Web Service Settings | Database Settings | |
|------------------------------|-------------------|------------------------------------|
| erver Type : TOMCAT | | |
| * Server IP : 172.29.2.5 🗸 | | |
| Protocol Settings | | |
| ✔ HTTP * Port: 8088 | | |
| ₩ HTTPS * Port: 8443 | * SSL: TLS | |
| * Certificate Defaul | Custom | Browse Key: |
| JVM Settings | | |
| * Initial Memory Pool : 2048 | m | * Initial PermSize : 128 m |
| * Max Memory Pool: 2560 | m | * Max PermSize : 256 m |
| * Thread Stack Size : 256 | Kbytes (Restore t | ne default value if 0 is entered). |

3.4 Database Management

Click "Integrated tool" to set databases.

1) Database configuration restore

Instant backup, means backup manually

Parameter Settings 🔺 Max Backups: 20 Scheduled Backup: Close

| | File Name | File Size | Backup Time | Status | Operate |
|----------------|---------------------------------------|-----------|---------------------|----------|-------------------------------|
| | emp 20151202134006- 526 custom.zip | 17.479M | 2015-12-02 13:41:44 | ⊘ Normal | Data Recovery Download Delete |
| Backup success | <u>520 custom.zip</u> | | | | |

2) You can download or delete the database.

| File Name | File Size | Backup Time | Status | Operate |
|---------------------------------------|-----------|---------------------|----------|-------------------------------|
| emp 20151202134006- 526 custom.zip | 17.479M | 2015-12-02 13:41:44 | ⊘ Normal | Data Recovery Download Delete |

3) You can upload the database, which is backed up by service manager.

Backup File List (4)

4) You can restore the database. Please note the SNC service will be stopped during the restore process.

| File Name | File Size | Backup Time | Status | Operate |
|---------------------------------------|-----------|---------------------|----------|-------------------------------|
| emp 20151202134006- 526 custom.zip | 17.479M | 2015-12-02 13:41:44 | ⊘ Normal | Data Recovery Download Delete |

5) Setting parameters. Maximum backup times

| Bao | ckup Settings |
|---------|--|
| | * Max Backups: 20 |
| Sch | neduled Backup |
| | ● Off ○ Every day 00 : 00 ○ Every Week Mond ♥ 00 : 00 ○ Every Month Date ♥ 00 : 00 |
| | Backup Mode: Custom Full |
| | Save |
| | |
| ing scl | heduled backup |

| Parameter Settings × |
|--|
| Backup Settings * Max Backups: 20 |
| Scheduled Backup |
| ● Off ○ Every day 00 : 00 ○ Every Week Mond ♥ 00 : 00 ○ Every Month Date ♥ 00 : 00 |
| Backup Mode: Custom O Full |
| Save |

6) Collect log for trouble shooting. Zip file will be created after you click "Search" Button.

| | Database Recovery | Log Collection | JVM Tool | |
|--------|-------------------|----------------|----------|--------------|
| Name : | | Туре: | ~ | Search Reset |

- 7) As to authorization, please refer to the authorization guide for details.
- 8) Backup database with the following operation steps:
 - 1. Log on the SNC server, stop the SNC application service and WEB service;
 - 2. Lon on the SNC server, click "start run services.msc" to open the service management interface, then stop the MySQL-SNC service;
 - 3. After stop service, wait for about 5 minutes for the starting of database backup operation;
 - 4. Backup the "database" directory under SNC installation directory.

Database recovery with the following operation steps:

- 1. Make sure SNC service is stopped.
- 2. Replace the current "database" directory with the whole previous backed up "database" directory.

Supplement:

Regular backups of the database so that you can avoid the problem when the system is unable to recover due to the cause of damage. Database should not be backed up at the SNC server itself. It is recommended to back up the SNC server every two weeks. If there are changes on SNC, it is recommended to backup immediately.

3.5 SNC License Authorization

- 1. RG-SNC software relies on USB encryption dog to activate license authorization. When software startup, the system will check whether there is a USB dongle on the server, if the dongle does not exist, the software will automatically stop. As to file authorization scenario, if the license file not registered successfully, the WEB service will be stopped.
- 2. RG-SNC features need different license authorizations to activate. Or, the corresponding feature will not be visible.
- 3. During RG-SNC dongle grace period, there is no limit on the quantity and features.
- 4. After version 2.28b1p5, the rest of pro license can be shared with AP. But the PC will not be displayed when the total of terminals and AP exceed 1000.
- 5. As to file authorization, please refer to file authorization guide for details.

Click *Help-→About,* in the top right on SNC WEB UI to display version and license information.

RG-SNC Smart Network Commander

Version Info: V2.27(b3)_EN (p3)_Build20150811 Dongle Type: Trial Version Installed Components: QoS COMPONENTS(1.11),WLAN COMPONENTS(1.35),ACL COMPONENTS(1.15),TOPOLOGY COMPONENTS (1.06_en),FOUNDATION COMPONENTS(1.2(p1) _en),CONFIGURATION COMPONENTS(1.14) Trial days: 365 Trial days passed: 179

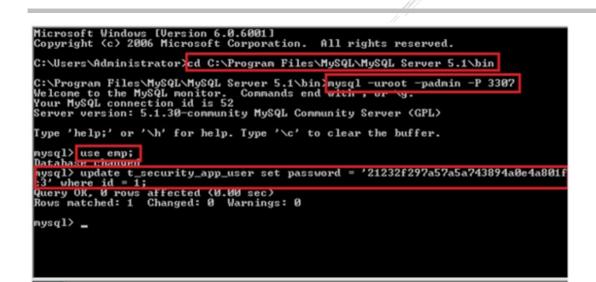


3.6 Administrator and Role Management

Login SNC with admin ID. Click System-->Change password.

| ← → ♦ http://59.60.3 | 241:1113/snc/redirect.seam# D + C 🖉 System x | ×=0> * + fi |
|--|--|--|
| Rujje s | mart Network Commander | 12 0 0 💐 Favorite 🛛 Help 😡 Logout |
| | Device Performance Alarm Report WLAN Advanced System | Topology >>> |
| Device | Device Vendor Device Model Device Series Device Type | |
| * Device Vendor | System Setting | |
| Device Model | 👰 🚱 🚇 | |
| Device Type | System Parameter Mail Server Setting SAM/SMP Register Favorite Menu WhatsApp Setting | |
| System Setting | © SMS | |
| System Parameter | | |
| Mail Server Setting | SMS Modem | |
| SAM/SMP Register | Setting | |
| Favorite Menu | ◎ Log | |
| * WhatsApp Setting SM5 * SMS Modem Setting | Security Log Plan Execution | |
| Log | Admin | |
| Security Log Plan Execution Log | Admin Role Change Password Concurrent Control Allowed IP Range | |
| Admin | Report | |
| Admin | | |
| Role | | |
| Change Password Concurrent Control | Software VLAN Summary Summary Report | |
| tp://59.60.3.241:1113/snc/ | system/systemIndex.seam?_r=16293&_l=frameContent# ne: 4008-111-000(IE7, IE8, IE9 are supported. The defaul | resolution is 1024*768, but 1280*1024 is highly recommended) |
| | | |

You can restore Admin password if forget it. Details as below.



4 Basic Configuration

In this section, you will learn how to make initial configuration for the networking devices monitoring and management. SNC can read and sync with the devices to realize topology map, performance monitoring and notification after you finish the basic configuration.

4.1 Device Configuration

Configure devices with the following two kinds of function so that they can be managed by SNC:

- Devices SNMP configuration
- Device Telnet configuration

4.1.1 Configure SNMP on Devices

SNMP configuration on devices allows SNC can read and sync with the devices to realize topology map, performance monitoring and notification after you finish the basic configuration. There are three key points in devices SNMP configuration

- Set up public community and permission (read or write)
- community string of device must be the same as SNC server's
- Currently, most of devices use SNMP v2 by default.

4.1.1.1 Step 1, set up community and permission

Enable SNMP on devices, set the read & write community string to "ruijie".

Ruijie>enable Ruijie#configure terminal Ruijie(config)#snmp community ruijie rw

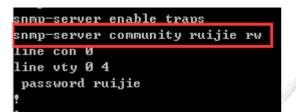
4.1.1.2 Step 2, Save configuration

Ruijie#write

4.1.1.3 Step 3, Verify configuration

Ruije#show run | begin snmp

display SNMP configuration is done.



4.1.2 Configure Telnet on Devices

Devices telnet configuration allows SNC can read and sync with the devices to realize topology map, performance monitoring and notification after you finish the basic configuration. There are three key points in devices telnet configuration:

- Telnet setting can be 4 options.
- You can choose any option you want, but we recommend use "only password" or "username and password"
- Please configure management IP address if it is not be configured before

4.1.2 1 Step 1, set up login way in Line configuration mode.

Ruijie(config)#line vty 0 4 Ruijie(config-line)#login Ruijie(config-line)#password ruijie Ruijie(config-line)#exit Ruijie(config)# enable secret ruijie Ruijie#write

4.1.2.2 Verification

Make sure the connectivity between PC and device. Go to Start>Run, input cmd to open command prompt.

Input telnet 192.168.51.241 (telnet to device management IP)

C:\Users>telnet 192.168.33.233

4.2 Configure Template on Device

SNC network management system is used to discover and manage network devices, you need to make the appropriate SNMP and telnet configuration template.

In this section, you will learn two kinds of template configuration for devices:

- SNMP template configuration
- Telnet template configuration

4.2.1 Configure SNMP Template

There are five components in this template configuration.

- Template name
- Port / retries
- Version
- Timeout
- Read / write community string

Note: This part is the realization of the public technology, please refer to SNMP protocol principal.

4.2.1.1 Step 1, Log on SNC, click "Device" module.

| RUJIE | Smart | Smart Network Commander | | | | | | | |
|-------------------------------|----------|-------------------------|---------|-------|----------|-----------|--------|--|--|
| | â | Device | Perforn | nance | Alarm | Report | WLAN | | |
| Device | Device > | Device List | | | | | | | |
| * Device List * Add Device | • D | evice Group | Tree | • Gr | oup | | | | |
| * Custom Extended Info | | +Add ≯More | | | Group Na | ame All G | Groups | | |
| | 1 40 | All Comme | | | | | | | |

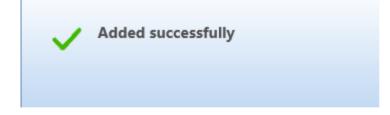
4.2.1.2 Step 2, Configure parameters of SNMP template.

Edit SNMP device template first, go to Device template > SNMP template > Add, set the parameters as below,

| • SNMP Template List +Add | | | | | | | | | | |
|---------------------------|----------------|------|---------|-------------|--------------|----------------|---------------------------------|--|--|--|
| | Template Name | Port | Version | Retry Count | Timeout (ms) | Default or Not | Operation | | | |
| | SNMPV2c | 161 | SNMPV2c | 2 | 3000 | Yes | ✓Update 8 Associate Device | | | |
| | public/private | 161 | SNMPV2c | 2 | 3000 | No | ✓Update 8 Associate Device | | | |
| | RnD_Center | 161 | SNMPV2c | 2 | 3000 | No | | | | |
| | test_template | 161 | SNMP∨2¢ | 2 | 3000 | No | ✓Update 8 Associate Device | | | |
| | | | | K 4 | ▷ ▷ 1 Go | 10 🗸 Item Per | PageTotal Pages:1/1Total4Record | | | |

| | | */ |
|-----|-------------------|----------------|
| Add | SNMP Template | x |
| | * Template Name: | Test × |
| | | 161 |
| | Version : | SNMPV2c V |
| | * Retry Count : | 2 |
| | * Timeout (ms) : | 3000 |
| * | Read Community : | public |
| * | Write Community : | private |
| | | |
| // | | |
| | | |
| | | Confirm Cancel |

Click OK in the pop up menu.



4.2.2 Configure Telnet Template

There are seven components in this template configuration.

- Profile Name
- Whether to support SSH
- Port / timeout
- Prompt
- Authentication Mode

- The need for super password
- The super user prompt

Note: This part is the realization of the public technology, please refer to telnet protocol principal.

4.2.2.1 Step 1, Log on SNC, click Device template.

Go to **Device > Device Template**

| Device |
|--|
| * Device List |
| * Add Device |
| " Custom Extended Info |
| Device Autodiscovery |
| * Network Inspector |
| * Device Template |
| Batch Device Sync |

4.2.2.2 Step 2, Configure Telnet template parameters.

Go to *Device Template > Telnet > Add,* set the parameters as below,

| | - | | | | | | | | |
|---|------|--|-----------------------|----------------|--------------------|----------------------------|--|--|--|
| Device > Device Template | | | | | | | | | |
| | | | | | | | | | |
| Template Name: | 5000 | art SSH ar Not: | Search | | | | | | |
| | | | 3 001 01 | | | | | | |
| ⁰ Telnet Template List | | | | | | ⊕ Add ×Delete | | | |
| Template Name | Port | Authentication Type | Super Password Heeded | Default or Hot | Support SSH or Not | Operation | | | |
| default | 23 | ONLY_PASSWORD | Yes | Yes | No | Jupdate 8 Associate Device | | | |
| | | | | | | | | | |
| Add Telnet Templa | te | | | x | | | | | |
| * Template Name Support SSH or Not * Port * Timeout Time (s) * Prompt Authentication Type Password Super Password Super Password * Super User Prompt | | Test No 23 300 > DNLY_PASSWORD res | | | | | | | |
| | | Add C | ancel | | | | | | |

4.2.2.3 Verification

In this interface you can try to modify, delete, and associated equipment and do other operations.

4.3 Add Device

The network device must be properly added to the SNC server, it can be managed by the system.

In this section, you will learn:

- Automatic discovery
- Added manually

4.3.1 Discover Device Automatically

Automatic discovery of equipment in three ways: ARP mode, routing, network segment. Three methods are required to detect the reachability of SNMP over IP.

There are seven key points in automatic discovery,

- The template of SNC must has consistent information with the device
- Complete ip address and routing table information of network device
- An automatic discovery might not discover all device at a time
- Manually add the device if you are unable to find the device
- If there is a requirement to find a network of selected seeds IP, the start IP and end IP must be included.
- Select only the required SNMP template
- Add the device by importing previous backup

4.3.1.1 Step 1, Configure Automatic Discovery

Enter the device management page first , go to Device Auto discovery, modify Device Auto discovery , set the parameters as below ,

| Device |
|--|
| * Device List |
| * Add Device |
| * Custom Extended Info |
| Device Autodiscovery |
| * Network Inspector |
| * Device Template |
| Batch Device Sync |

Fill in the required topology discovery seed IP address, the start IP address and end IP addresses.

| Oevice Autodiscovery | | | | | | | | |
|-----------------------|----------------------------------|--|--------------|--|--|--|--|--|
| Discovery Mode : | ● Via ARP ○ Via Route ○ Via Netv | | | | | | | |
| * Source IP Address : | 192.168.51.1 | | + Add Multi- | | | | | |
| Start IP Address : | 192.168.51.1 | | | | | | | |
| End IP Address : | 192.168.51.254 | | | | | | | |

Selected for one or more SNMP template to use automatic



Click "Auto discovery" when complete setting.

4.3.1.2 Verification

Automatic discovery is completed, Go to Device> Device List, we can see the list of devices by automatically discover network

| rine ≻ Devine List | | | | | | | 4 0 |
|--|-------------|-------------------------|----------------------------------|------------------|---------------------|--------------------|-----------------|
| Device Group Tree | e Group | | | | | | |
| F Mare | Group N | ame Device Not In Group | | Gro | oup Description | | |
| All Groups LAN Device Not In Group | IP: | Name: | | Type: | ~ | Search | |
| | Device List | | lete X Delete All • Add to | | | | ify Device Tem |
| | Name | IP ÷ | Type Model + | Device Monitored | Connectivity Status | SNMP Template | Telnet Tem |
| | WS180 | 000-1B11 55.55.55 | AC N18000-WS ED(V1.0) | Yesq | Reachable | RnD_Cent er | WIFI_RnD |
| | 192.16 | 8.4.5 192.168.4.5 | Network Uniview IP Cam Camera | No | Reachable | public/priv ate | default |
| | | | | | | 1 Go 10 🗸 Item | Per PageTotal F |

4.3.2 Discover Device Manually

There are five key points in discovering device manually

- The device IP cannot be empty
- The template of SNC must be consistent with the device
- The actual parameters of device match SNMP parameters contained in the template
- You cannot add the device which cannot be ping
- The device can be added by importing the backed-up device information

4.3.2.1 Step 1, Add Devices Manually.

Enter the device management page, go to *Add Device > Add*, create a new device.

| | Device Perfor | rmance Alarm | Report | WLAN Adv | anced System | |
|--|----------------------|--------------|-------------|--------------|--------------------|----------------------|
| Device | Device > Device List | | | | | |
| * Device List * Add Device | Device Group Tree | • Group | | | | |
| * Custom Extended Info | +Add ≯ More | Group Na | me All Grou | ups | | |
| Device Autodiscovery | All Groups | IP: | | Name: | | T |
| Network Inspector | Device Not In Group | Vendor: | | ✓ Model: | | Device Monito |
| Device Template Batch Device Sync | | Device List | | +Add × Delet | e ×Delete All +Ado | l to Group 🗘 Configu |

| Add Device | | |
|------------|--------------------------------|--------------------|
| | | |
| | | |
| | * | IP: 192.168.51.194 |
| | SNMP Templ | ite: SNMPV2c 🗸 🗸 |
| | Telnet Templ | ate : default 🗸 |
| | runde runpi | |
| | | |
| | | |
| | Device Gro | up: |
| | | |
| | | |
| | | |
| | Unreachable Device Also Ado | Is: |
| | AISO AUC | |
| | | |
| | Rema | ks : |
| | | |
| | | |
| | | |



4.3.3 Unknown Device Identification

If there is SNC unsupported devices in the network, it will be identified as an unknown model after adding devices, you need to identify this device properly.

There are three key points in identifying Unknown device,

- The information in device and SNMP template of SNC must be consistent
- By adding custom device models to manage the unknown type of device
- It is recommended to name the device referring to certain norms, such as the name on device panel.

The following configuration do not include basic wireless settings, so ensure your wireless network works properly first before starting. Suggest to create a dedicate wlan-ssid for *Exemption Authentication (BYOD)*.

4.3.3.1 Step 1, Find and Copy sysOID in The Device Basic Info.

Go to *Device > Device List> unknown device model name,* confirm snmp Connected and telnet Connected. Then find and copy sysOID in the device basic info.

| / | Basic Info CPU | Memory Temperature | Alarm | | | | |
|---------------------|-------------------------------------|---------------------------|--|--|--|--|--|
| Name | RG-WALL | IP | 172.29.1.1 | | | | |
| Туре | Router | Model | UNKNOWN | | | | |
| Device Vendor | UNKNOWN | SysOID | 1.3.6.1.4.1.4881.101.1.2006 | | | | |
| Mask | 255.255.255.252 | MAC Address | 58:69:6c:0f:73:43 | | | | |
| Contact Person | | Device Location | RG-WALL | | | | |
| Runtime | 57 days, 7:10:39.26 | Last Synchronization Time | 2016-05-31 15:30:32 O Synchronizing device information | | | | |
| Connectivity Status | Reachable Network Management Status | | SNMPConnected TelnetConnected | | | | |
| Hardware Version | | Software Version | | | | | |
| SystemFan Status | | Power Source Info | | | | | |
| Disk Utilization | | Device Temperature | | | | | |
| Assets Code | 172.29.1.1 | Device Group | FuzhouLab | | | | |
| Serial Number | | Remarks | | | | | |

4.3.3.2 Step 2, Device model management.

Go to *Device > Device Model>Add*, create a new custom device models.

| Device Model List | | | | | | | | +Add X De |
|-------------------------|------------------|-------------|---|----------|------------|-------------|------------|-----------|
| Device Model Name | Vendor | Device Type | System OID | OS | Port Count | SCP Support | Type | Operati |
| 59620 | Ruijie Networks | Switch | 1.3.6.1.4.1.4881.1.1.10.1.46 | rgnos | | No | Predefined | / Updat |
| Add Device Model | | | L | <u>x</u> | | | | |
| * Device Model Name : 🛐 | wal1600SCI | | | | | | | |
| * System OID: | 1.3.6.1.4.1.4881 | .1.3.2 | | | | | | |
| Vendor : F | Ruijie Networks | ~ | Image: A set of the set of the | | | | | |
| * Device Series : | SEC WALL | ~ | _ | | | | | |
| Device Type : S | ecurity | | | | | | | |
| os : | | | | | | | | |
| Product ID : | | | | | | | | |
| Stack Support : | | | | | | | | |
| Module Support : [| | | | | | | | |
| SCP Support : [| | | | | | | | |
| Port Count : | | | | | | | | |
| HTTP Protocol: (| ◉ нттр ⊖ нт | TPS | | | | | | |
| HTTP Port : | 30 | | | | | | | |
| Default Homepage : | | | | | | | | |
| Remarks : | | | $\langle \rangle$ | | | | | |
| | Save | Cancel | | | | | | |

Click "Save" when complete setting.

4.4 Network Topology Configuration

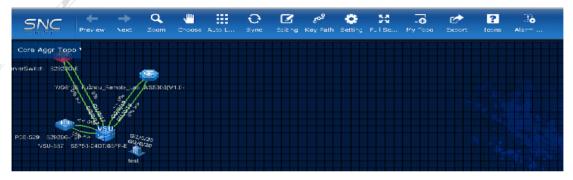
Automatically detect topology after the device is added. Network devices will be showed in the topology diagram. Automatically generated topology should be consistent with the actual topology and lay

4.4.1.1 Step 1, Load data

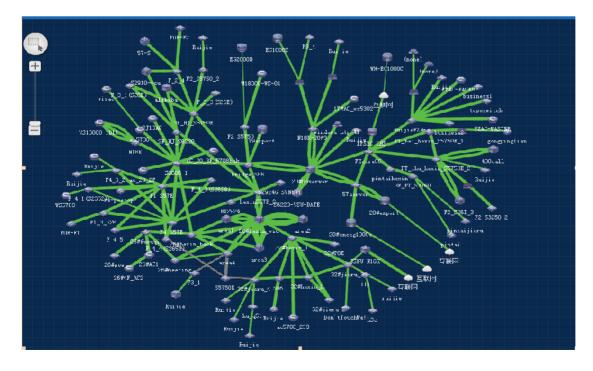
On SNC configuration page, click icon to enter network topology page.



It may take a while to load data into the topology depending on the topology size.



After auto-discovery, SNC will perform topology automatic layout.



4.4.1.2 Step 2, Discover topology manually

Go to *Fully layer 2 switching information before topology discovery> Start Now topology discovery,* discover topology manually.

| | _ | | | | | |
|---|---|--|--|--|--|--|
| L2 Topology Discovery | × | | | | | |
| Last Topology Discovery time: 2016-05-09 15:13:36 | | | | | | |
| Complete L2 switch info. | | | | | | |
| Do Topology Discovery Now | | | | | | |
| Advanced >> ? Check template of snmp and telnet ? | | | | | | |
| Periodical Topology Discovery | | | | | | |

If the device or link does not appear, you need to add them manually.

4.5 Monitoring Device Performance

By monitoring these indicators, you can realize the equipment's status information. Monitoring these indicators can be presented at the last page or device details page, if some indicators have reached a certain threshold, it will produce the corresponding alarm.

Monitoring parameters as below :

- Monitoring equipment indicators: CPU utilization, memory utilization, temperature, disk space utilization.
- Monitoring Interface indicators: the interface rate, interface bandwidth utilization, packet loss rate interfaces, interface data error rate table, the interface Unicast packet rate, the interface broadcast packet rate, the interface CRC error rate.

4.5.1.1 Step 1, Enable device monitoring

Go to Performance > Add> Select Device> Add> Next, use default threshold setting as below,

| ŵ | Device Performanc | e Alarm Re | port WLAN | Advanced System | | Topology >> |
|---------|------------------------------|--------------------|-------------------|------------------|---------------------|-----------------------|
| erforma | nce > Monitored Device > Add | Monitored Device | | | | |
| IP: | Name: | | Vendor: | Model: | * | Search |
| • Sele | ected Device List | | | | +Select Device 2 De | select - Deselect All |
| ✓ | Name | IP ¢ | Model + | Mask | SNMP Template | Telnet Template |
| ✓ | 192.168.4.5 | 192.168.4.5 | Uniview IP Camera | 255.255.255.0 | public/private | default |
| ✓ | WS6108 | 192.168.2.2 | WS5308(V1.0) | 255.255.255.0 | SNMP√2¢ | default |
| ✓ | 192.168.4.6 | 192.168.4.6 | Uniview IP Camera | 255.255.255.0 | test_template | GWRouter |
| ✓ | ServerSwitch | 192.168.2.18 | S2928G-E | 255.255.255.0 | SNMP√2¢ | user/pass |
| | | | | 🖂 1 Go 10 🕻 | Item Per PageTotal | Pages:1/1Total4Record |
| | | | Next | Cancel | | |
| | | | | | | |
| ✓ | Indicator Name | Description | L1 upper limit P | L2 upper limit 🏴 | L3 upper limit 🏲 | Global Threshold |
| ✓ | CPU Utilization (%) | CPU Utilization | 85 | 90 | 95 | Yes |
| ✓ | Memory Utilization(%) | Memory Utilization | 85 | 90 | 95 | Yes |
| ✓ | Temperature(degrees Celsius) | Temperature | 55 | 65 | 75 | Yes |
| ✓ | Disk Utilization(%) | Disk Utilization | 85 | 90 | 95 | Yes |

Click "Save" when complete setting.

4.5.1.2 Step 2, Enable real-time monitoring

Go to *Device> Device List> Configure Device Monitor*, Then you can see the devices already in the real time monitoring list. And the status is enabled.

| Device Group Tree | • Grou | IP | | | | | | | |
|--|--------|-------------|---------------|----------------|---------------------------|------------------|---------------------|--------------------|-------------|
| ♦ Add ▶ More | | Group Name | All Groups | | | Group | Description | | |
| All Groups LAN Device Not In Group | Vend | IP: | Name: | | | Type: | ~ ~ | Search | |
| | Devi | | | | | | • Monitoring | - | |
| | | Name | IP \$ | Туре | Model ¢ | Device Monitored | Connectivity Status | SNMP Template | Telnet Temp |
| | | WS18000-1B1 | 1 55.55.55.51 | AC | N1800D-WS- ED(V1.0) | YesQ | Reachable | RnD_Cent er | WIFI_RnD |
| | | RSR2014E | 192.168.1.1 | Router | RSR20-14E | YesQ | Reachable | SNMPV2c | GWRouter |
| | | VSU-\$57 | 192.168.4.1 | Switch | S5750- 24GT/8SFP- E | YesQ | Reachable | SNMPV2c | default |
| | | POE-S29 | 192.168.2.17 | Switch | S2928G-12P | YesQ | Reachable | SNMPV2c | default |
| | | 192.168.4.5 | 192.168.4.5 | Network Cam | Uniview IP Carnera | Yes Q | Reachable | public/priv ate | default |
| | | WS6108 | 192.168.2.2 | AC | WS5308 (V1.0) | YesQ | Reachable | SNMPV2c | default |
| | | | | Network | Uniview IP | | | test_templ | |

4.5.1.3 Verification

In this interface you try to modify, delete, and associated equipment and do other operations.

If there is traffic passing through, the SNC homepage will display the top N devices of CPU utilization in 5 minutes.

| 9. Top N CPU Utilization | | | | | | | | |
|--------------------------|--------------|------------------|-----------------|--------|--|--|--|--|
| Nama | IP Address | Line Card/Device | CPU Utilization | | | | | |
| RSR2014E | 192.168.1.1 | Hæt | | 54.00% | | | | |
| POE-S29 | 192.168.2.17 | Hast | | 4.00% | | | | |
| VSU-857 | 192.168.4.1 | Device 2 | | 2.00% | | | | |
| VSU-557 | 192.168.4.1 | Device 1 | | 1.00% | | | | |

Go to *Device>specific device > drop down the scroll bar*, you can view the device CPU, memory, temperature performance curve

| / 8 | asic Info V Other Info V CPU | Memory Temperat | urc Alarna | | | | |
|---------------------|---|---------------------------|-----------------------------------|--|--|--|--|
| None | RSR2014E | IP | 192.168.1.1 | | | | |
| Туре | Rouber | Model | RSR20-14E | | | | |
| Device Vendor | Ruijie Networks | SysCID | 1.3.6.1.4.1.4881.1.2.1.1.54 | | | | |
| Piande | 255.255.255.0 | PIAC Address | 14:14:4b:31:91:3e | | | | |
| Contact Person | | Device Location | | | | | |
| Runtime | 2 days, 23:56:47.68 | Last Synchronization Time | 2015-09-21 14:55:05 14-5ync | | | | |
| Connectivity Status | Reachable | Hetwork Management Status | SNMPConnected | | | | |
| Hardware Version | 1.01 | Software Version | RGO5 10.4(3b34)p1 Release(185577) | | | | |
| SystemFan Status | | Power Source Info | | | | | |
| Disk Utilization | 53% | Device Temperature | NumberHoctTemperature:42 | | | | |
| Assets Code | | Device Group | LAN | | | | |
| Serial Number | G1FC083002608 | Remarks | GW Router | | | | |
| Device Description | Rutjie Router (RSR20-14E) by Rutjie Netwo | rke | | | | | |
| | Update Return To List | | | | | | |

4.6 Enable Trap and Syslog Notification

When equipment fails or change, the device can take the initiative to send an error message or a log to SNC. Instead of waiting snc timing synchronization detection. SNC needs to immediately response uploaded snmp trap and syslog message information, and form the alarm message on the SNC.

There are three key points in setting trap and syslog notification.

- Enable device trap and syslog notification on SNC is relied on telnet function
- Enable trap and syslog notification feature on SNC is only for ruijie equipment
- Commands to enable trap notifications and syslog notifications

This part of the realization of the principle is public technology, please refer to the SNMP and syslog protocol whitepaper.

4.6.1.1 Step 1, the bulk trap and syslog notifications enable

Go to *Alarm> Trap, Syslog Notification,* Then select all devices needed to start trap and syslog notifications.

| | | / | | | | | | |
|--|---------------------------|---|-------|--|--|--|--|--|
| Narm > Trap,Syslog Notification | | | | | | | | |
| Select Device | | | | | | | | |
| Device: All Devices Select Manually | | | | | | | | |
| • Trap, SysLog Notif | ication Settings | | | | | | | |
| Trap Settings : | Enable Trap on Device 🗸 🗸 |] | | | | | | |
| Syslog Settings : | Enable 🗸 |] | | | | | | |
| | | | Start | | | | | |

Click "Start" when complete setting.

Here you can also not choose all devices, select "*Select manually*", added device which need to start the notification, and then click on the "*Start*".

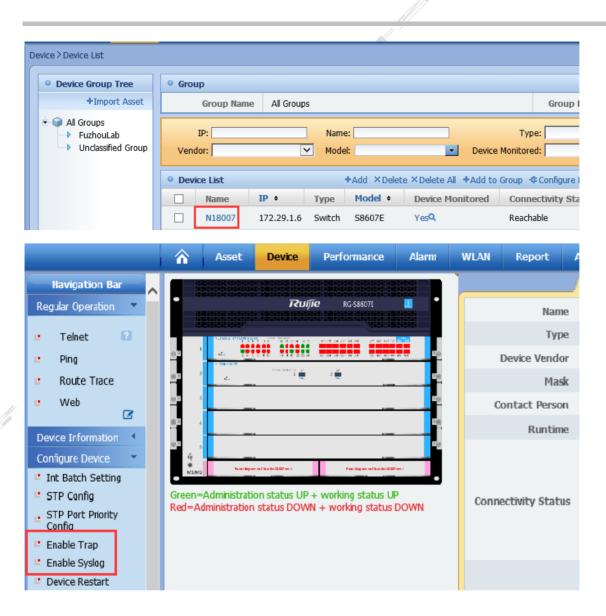
| rice PDe |
|----------|
| MP Temp |
| |
| |
| |
| - |

The device automatically jump to bulk set device log page, where you can see the batch setting details.

| Alarm > Device batch configuration log | | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| • Device batch configu | Device batch configuration log | | | | | | | |
| Device batch configuration [ACCOMPLISHED] 100% | | | | | | | | |
| Total:4 Number of succe | sses:2 Number of failures:2 | | | | | | | |
| Test Time | Message | | | | | | | |
| 2016-05-09 21:59:17 | Device name [N18007] and IP [172.29.1.6] setting Syslog failed, cause: Connecting device failed. The system erro connecting to 172.29.3.254:23 failed.] | | | | | | | |

4.6.1.2 Step 2, Start trap and syslog notifications on a single device

Go to *Device> Device List> Configure Device> Enable Trap*, previous enable button change to disable buttion. That means notification is already enabled.



4.6.1.3 Verification

Test by unplug one cable, there will be immediate warning notification if the device and link enable trap and syslog monitoring function.

| Display | Display: Latest 20 alar V Refresh Interval: 10 seconds V | | | | | | | | |
|---------|--|--------|------------|-----------|---|------------|---------------------|------------------------|----------|
| • Rea | ltime Alarr | n View | | | | | | ✓Ad | knowledg |
| | Level | Name | Device IP | Event | Description | ACK Status | First Alarm Time | Last Alarm Time | Repea |
| | ۲ | N18007 | 172.29.1.6 | Link Down | The interface Gi1/15 of device (N18007 (172.29.1.6)) is down. | UnAcked | 2016-05-09 21:41:15 | 2016-05-09 21:41:15 | 1 |

5 Extension Configuration

5.1 Assets

In this section, we will learn how to manage assert.

5.1.1 Assets category

When you want to add an assert, go to Assert>Group >Add, Input category information and, click Add,

| Asset Device Performan | ce Alarm Wi | LAN Report | Advanced | System | |
|--|---|-----------------|-------------|---------------|-------------------------|
| Group Status Vendor +Import △Export →Add ✓Update | Router(6) Switch | | | | |
| | Vendor: | N | Туре | : | Asset Status: |
| All Groups 20 FuzhouLab 12 Unclassified Group 8 | Asset Tan Add Subgroup Parent Group Nam | an : All Groups | Device Name | | IP: |
| | * Group Nam | | | ~ | ntract No. Warranty End |
| | Group Descriptio | on : | | \rightarrow | |
| | | Add | Cancel | | |
| | 1/2.27.1. | - Netwo | orks 14E | 0150211-00 | 01502 |

When you want to delete a new assert, go to Assert>Group >Delete, if you had confirmed, click yes,

| | | А | sset | Device | Performan |
|-------------------------------------|-------|--------|-----------|--------------|-----------------------|
| Asset | Gro | up | Statu | is Vendor | |
| " Asset List | | å Exp | ort +A | vdd 🖋 Update | • × Delete +Import |
| Custom Property | | | | | |
| | 🗄 🌍 A | ll Gro | oups 20 | | |
| | | Fu | zhouLab | 0 12 | |
| | | sw | itch 0 | | |
| | | Un | classifie | d Group 8 | |

When you want to add asset into category group, go to *all groups, select* device and device type, click *Add to group* and then check the group you want the device to join and click *OK*.

| Asset Device Performance Alarm WLAN Report Advanced System Group Status Vendor + Import * AC(1) AP(4) Monitor(2) Show All + Import * All Groups 20 • FuzhouLab 12 Vendor: Vendor: Type: Asset Tag: Device Name Device Name 0 Device Name 172.29.3.4 Rulijie RUlijie Networks RCMS Vendor: I72.29.3.4 Rulijie RCMS 172.29.3.9 Rulijie RCMS Vendor: I72.29.3.9 Rulijie RCMS I IVELVORIAS RCMS Vendor: I72.29.3.9 Rulijie RCMS IVELVORIAS | | | | |
|--|-----------------|--------------------------|-------------------------|--------------|
| +Import 2 Export +Add Update +Import 2 Export +Add Update All Groups 20 FuzhouLab 12 Unclassified Group 8 • Asset Tag: • Asset List(Router) • Device Name (IP) Vendor Type: Asset List(Router) • I72.29.3.4 Ruijie Networks RCMS V 172.29.3.9 Ruijie Networks RCMS | Asset Device Pe | rformance Alarm WLAN | Report Advanced | System |
| Asset Tag: Device Name: Purchause 12 Unclassified Group 8 Asset List(Router) Pevice Name (IP) Vendor Type SN Pevice Name (IP) Vendor Type SN 172.29.3.4 Ruijie 172.29.3.8 Ruijie 172.29.3.8 Ruijie 172.29.3.9 Ruijie RCMS Networks RCMS Networks RCMS All Groups FuzhouLab | | date Router(6) Switch(5) |) AC(1) AP(4) Monitor | (2) Show All |
| ● Asset List(Router) ● Perice Name (IP) Vendor Type SN ● 172.29.3.4 Ruijie Networks RCMS I ● 172.29.3.8 Ruijie Networks RCMS I ● 172.29.3.9 Ruijie Networks RCMS I Select Group I I I I I ● All Groups I I I I I I | → FuzhouLab 12 | | | |
| Image: Select Group Image: Select Group Select Gro | | • Asset List(Router) |) | |
| Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group Image: Select Group | | | | SN |
| Select Group X Image: Construction of the second | | ✓ 172.29.3.4 | Networks RCMS | |
| Select Group | | ✓ 172.29.3.8 | Networks RCMS | |
| All Groups | | ☑ 172.29.3.9 | Ruijie RCMS Networks | |
| - EuchouLab | Select Group | | x | |
| | - FuzhouLab | | | |

After finish adding, you can view the device in the group.

| $\hat{\mathbf{n}}$ | А | sset | Device | Perform |
|--|----|--------|-----------|---------|
| Gro | up | Statu | is vendor | |
| ria Export +Add ♥Update ×Delete +Import | | | | |
| A 📦 🔸 | Fu | zhouLa | | |

5.1.2 Assets import and export

Add a device by importing device information files. Export device grouping files can be imported into the device grouping tree operations back into the system.

There are two key points in assets import and export

- Group import will delete all existing system grouping and devices configuration.
- Can only import XLS (ie Excel) file format

Note: If you check the "Clear Imported group and Assert", the device group will be deleted. When incremental import check is not required.

When you want to import asserts, go to Assert >Import or go to Device >Import Assert >Select File

| Asset > Import Group Tree |
|--------------------------------|
| • Import Group Tree |
| + Select File |
| |
| |
| Clear Imported Group and Asset |
| |
| |
| sset > Import Group |
| |
| • Group Import Log |
| |

After finishing importing, you can view the result.

| Asset > Import Group | | | |
|-----------------------|------------------|-----------------|--|
| • Group Import Log | | | |
| Import succeeded. | 100% | | |
| Total Import Count:20 | Success Count:20 | Failure Count:0 | |

When you want to export asserts, go to Assert >Export

| â | А | sset | De | vice | Perform |
|--------------------------------|----|--------------------------------|----|--------|---------|
| Grou | • | Statu | | /endor | |
| +Import 🗳 Export +Add 🖉 Update | | | | | |
| H C AI | Fu | ups 20 zhouLab classifie | | 8 qı. | |

5.1.3 Customize extension information

To define extension information for assets, go to Assert >Custom Property >Add Field, Add the field Name and description.

| A | ld Field | × |
|---|----------------------|-----------|
| | * Field Name : | test |
| | * Field Description: | test × |
| | Field Type : | INTEGER 🔽 |
| | Asset Type : | Device 🔽 |
| | | Cancel |
| | | Cancer |

| Configuration verification, go to Assert >Details, then you can see the | Asset Status | Action |
|---|--------------|-------------------|
| new added "Test" field. | Idle | 🗏 Detail 🖉 Update |
| | | |

5.2 Device Management

5.2.1 Modify Device Information

By viewing device details, we can know the running status of devices so as to achieve the purpose of the managing device.

Go to *Device*, and click *relative device* to view the detailed information.

| Device > Device-ServerSwitch(192.168.2.18)detail |
|---|
| Oevice Information |
| Diversion 1 5 2 0 11 16 17 17 17 17 18 17 17 17 18 17 17 17 18 17 17 17 20 20 21 22 23 22 23 <th2< td=""></th2<> |
| Green=Administration status UP + working status UP Orange=Administration status UP + working status DOWN Red=Administration status DOWN + working status DOWN |

| Modify Device Informa | tion | × |
|--------------------------|--------------|---|
| Basic Info Other Info | | |
| * Name: | ServerSwitch | |
| *Ib: | 192.168.2.18 | |
| *Mgmt IP Address : | 192.168.2.18 | |
| SNMP Template : | SNMPV2c 💙 | |
| Telnet Template : | user/pass 🗸 | |
| Contact Person : | ? | |

| altime CPU Utili | ation Curve | |
|------------------|-------------|-------------|
| | 01.00 | |
| | 02.88 | |
| | 80.00 | |
| | 75.00 | |
| | 70.00 | |
| 2 | 00.00 | |
| CPU utilization | 02.88 | |
| 5 | 0.00 | |
| 3 | 45.00 | |
| 8 | 36.00 | |
| | 90.00 | |
| | 25.00 | |
| | 20.00 | |
| | 15.00 | |
| | 0.0 | |
| | 5.00 | |

Click "Update" button to modify the basic information.

Device CPU, memory and real-time curve chart.

Click on the top right corner of the "7" and "30" to see the CPU utilization curves for the last week or month, and you can export data to Excel and PDF.

Check the routing table, interface table, MAC address table, ARP table, IP table, etc.. In the navigation bar, in the device information bar, you can view other information about the device, as shown in the

following diagram.

| | Device > Device detail > Historical Perf. Data | | | | | | | |
|---|--|---|--------------------|--|--|--|--|--|
| | Query Setting - 192.168.2.18(52928G-E) | | | | | | | |
| / | Γ | Port: Ag1 🗸 Indicator: Cl | PU Utilization 🗸 🗸 | | | | | |
| | Pe | riod : Latest 7 days 🗸 From 20 | 15-09-14 15:17 | | | | | |
| | | | | | | | | |
| | r | Device Information | | | | | | |
| | | IP Table | | | | | | |
| | | ARP Table | | | | | | |
| | | Route Table | | | | | | |
| | | Interface Table | | | | | | |
| | | MAC Fwd Table | | | | | | |
| | | Downlink Online User List | | | | | | |
| | | Historical Perf. Data | | | | | | |
| | | VLAN Configuration | | | | | | |

Int Mapping Relation Int Binding Sync List

5.2.2 Sync up Device Information

Sync can help to get real-time information of the device, so that the information displayed on the SNC is the latest.

Sync up on single device, go to **Device >Device List**, When entering the device details page, you can see the device information automatically synchronized. And you can click "sync" to manually synchronize information.

| Basic Info Other Info CPU Memory Temperature Alarm | | | | | | | |
|--|--------------------|---------------------------|--|--|--|--|--|
| Name | RSR2014E | IP | 192.168.1.1 | | | | |
| Туре | Router | Model | RSR20-14E | | | | |
| Device Vendor | Ruijie Networks | 5ys0ID | 1.3.6.1.4.1.4881.1.2.1.1.54 | | | | |
| Mask | 255.255.255.0 | MAC Address | 14:14:4b:31:91:3a | | | | |
| Contact Person | | Device Location | | | | | |
| Runtime | 3 days, 0:27:00.04 | Last Synchronization Time | 2015-09-21 15:25:17 ¹⁰ Sync | | | | |
| Connectivity Status | Reachable | Network Management Status | SNMPConnected | | | | |

Bulk devices sync up, go to *Device >Batch device sync >Real-time Device Sync >select Device >Start sync,* When entering the device details page, you can see the device information automatically synchronized. And you can click "sync" to manually synchronize information.

Schedule sync up, go to *Device >Batch device sync >Create Plan >select Device >Finish,* the next step is to start plan to activate the program.

| Device > Batch Device Sync > Realtime Device Sync | | | | | |
|---|--|--|--|--|--|
| Select Device | | | | | |
| Device: All Devices Select Manually | | | | | |
| Select non-primary version alarm type | | | | | |
| Alarm Version Check : 🗌 Software Version 🗌 Hardware Version | | | | | |
| Start Sync | | | | | |

| | Device > Bat | tch Device Sync > | Create Plan | | | | | | |
|-----------|--------------|-------------------|-------------|-------------|---------------------|------------------|---------------|------------------------|-------------------------|
| | IP: | | Name: | Vendor: | Model: | Search | | | |
| | • Select | ed Device List | | | | | | +Select Device -De | select 🖌 Deselect All |
| | | Name | ID ¢ | Model • | Mask | | SNMP Template | Telnet Template | CWMP Template |
| | | N18007 | 172.29.1.6 | S8607E | 255.255.255.252 | 2 | SNMPV2c | no_pass | test |
| | | POEswitch | 172.29.3.2 | S2928G-12P | 255.255.255.0 | | SNMPV2c | default | default |
| | | WS6008 | 172.29.3.1 | WS6008 | 255.255.255.0 | | SNMPV2c | default | default |
| | | | | | | | 1 Go 10 | 🗸 Item Per PageTotal F | ages: 1/1 Total3Records |
| | | | | Pri | vious | Cancel | | | |
| 1 | | | | | | | | | |
| Plan List | | | | | | | +R: | altime Device Sync 👎 | |
| | Plan Na | ame | Plan Status | Task Status | Last Run Time | Next Due Time | Ope | ration | |
| | planC | | valid | not running | | 2016-05-11 00:00 | :28 🖉 M | odify ♦Start Plan 🖯 | nsabled |
| | PlanB | | expired | not running | 2015-12-31 00:00:12 | | <i>₹</i> M | odify ×Delete Plan 🕨 | Start Plan VActivate |
| | | | | | | 0. | 44001 | Go 10 🗸 Item | Per PageTotal Pages: |

Go to System >Plan Execution Log >Create Plan to see if the schedule is executed properly

| System > Plan Execution Log | | | | | | | |
|-----------------------------|---------------------|---------------------|---------------------|--|--|--|--|
| Plan Name: | Start Time: | End Time: | Search Rese | | | | |
| Log List | | | | | | | |
| Plan Name | Agreed Start Time | Actual Start Time | Execution End Time | | | | |
| planC | 2016-05-10 15:30:48 | 2016-05-10 15:30:55 | 2016-05-10 15:31:08 | | | | |
| Topo-LinkTest | 2016-05-10 15:30:00 | 2016-05-10 15:30:04 | 2016-05-10 15:30:04 | | | | |

Go to *Device >Plan List > Plan Name* to see if the schedule is executed properly

| Plan Name: p | blanC | | | | |
|---------------------|---------------------|-----------|-----------|-------|----------------|
| Plan Status : v | valid | | | | |
| Task Status : r | not running | | | | |
| Last Run Time: 2 | 2016-05-10 15:30:55 | | | | |
| Description : | | | | | |
| | | | | | |
| Run Log | | | | | |
| Start Time | End Time | Status | Exit Code | Total | Success Number |
| 2016-05-10 15:30:55 | 2016-05-10 15:31:08 | COMPLETED | COMPLETED | 6 | 6 |
| | | | | | |
| | | | | | |
| | | | Return | | |
| | | | | | |

5.2.3 Log in Setting

Telnet to device for configuration from SNC. Go to *Device >Device List* enter the device details, click "*Telnet*" button on the left navigation bar.



5.2.4 Test the Connectivity of Device

Ping test, go to *Device >Device List* on the device details page, click "*Ping*" on the left navigation bar.

Traceroute test, go to *Device >Device on the device details page,* click "*route tracking*" on the left navigation bar.



Network inspector, go to Device >Device List >Network Inspector >Real-time Test >Select Device >Start Test

| evice > Ne | etwork Inspecto | r | | | | | | |
|------------|------------------------------------|---------------------|------------------------|------------------------|-------------|---------------|---------------------------|-----------------|
| Test T | ype: | ✓ Start | Time: | | End Time: [| | Search | |
| • Conn | ectivity Test F | leport List | | | | | +Realtime Test +Period | ic Test ×Delete |
| | Test Type | Plan Name | Start Time | End Time | Total | Count Of Fail | lure Count Of Success | B Operation |
| | Realtime test | | 2015-06-16 08:36:27 | 2015-06-16 08:36:49 | 11 | 2 | 9 | - |
| | Realtime test | | 2014-11-07 13:47:01 | 2014-11-07 13:50:15 | 11 | 1 | 10 | - |
| | | | | 84 < | | 1 Go 10 | ✓ Item Per PageTotal Page | s:1/1Total2Reco |
| | etwork Inspecto t Device | r > Connectivity To | est | | | | | |
| | Device : | All Devices | Select Manually | / | | | | |
| • Pleas | e select test t | уре | | | | | | |
| | *Tes | t Mode : 🔽 PIN | IG 🗹 SNMP 🗹 T | elnet | | | | |
| | | | | Start Te | st | | | |

Go to *Device >Network Inspector >Periodic Test* and then select the device and test method that needs to be tested, and then click "*start testing*" to create plan.

| Device > Periodic Conne | ectivity Test Plan > Cre | ate Plan | | | | |
|-------------------------|--------------------------|-------------|----------------------|---------------|----------------|----------------------------|
| Step 1 Basic info | ormation | | | | | |
| | | * Plan N | lame : PeriodicA | / × | | |
| | | * Start | Time: 2015-09-2 | 21 17:25 🕅 | | |
| | | * End | Time: 2015-09- | 22 17:25 | | |
| | | Set Plan So | hedule: * Every n | minutes:30 | | |
| | | Descri | ption : | | | $\hat{}$ |
| | | Next | Car | ncel | | |
| Device > Periodic Conne | ctivity Test Plan > Cre | ate Plan | | | | |
| IP: | Name: | Vendor: | | ✓ Model: | | Search |
| • Selected Device | List | | | | +Select Device | Deselect Deselect All |
| Name | IP ¢ | Model \$ | Mask | SNMP Template | Telr | net Template |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Click "finish" when complete setting. click on "active", the plan will take effect.

| Device > Network Inspector > Periodic Connectivity Test Plan | | | | | | | | | | | |
|--|-------------|-------------|------------------------|---------------|---|--|--|--|--|--|--|
| Plan Name: | Searc | 1 | | | | | | | | | |
| Plan List | | | | | +Add | | | | | | |
| Plan Name | Plan Status | Task Status | Last Run Time | Next Due Time | Operation | | | | | | |
| PeriodicA | invalid | not running | | | ✓ Modify × Delete Plan I Start Plan Activate | | | | | | |
| periodic | expired | not running | 2014-11-08 09:12:04 | | ✓Modify ×Delete Plan IN Start Plan ✓Activate | | | | | | |
| | | | 10 0 D DI | 1 Go 10 🗸 | Item Per PageTotal Pages:1/1Total2Record | | | | | | |

After a period of time to see the running time of the program has been changed, that means the plan has already been executed.

| • Plan List | | | | | +Add |
|-------------|-------------|-------------|---------------|------------------------|------------------------------------|
| Plan Name | Plan Status | Task Status | Last Run Time | Next Due Time | Operation |
| PeriodicA | valid | not running | | 2015-09-21 17:32:20 | Modify Start Plan ODisabled |
| | | | 2011 11 00 | | Assisted Vibrate bird. A bird bird |

5.2.5 Management of Device Interface

Checking device interface, Go to **Device >Device List**, on device details page, the system will automatically display the device's interface panel on the page, and the color to represent the current status of the device interface.



Enable and disable Interface, go to *Device >Device List* enter the device details page, right click on the interface of the device panel, select "*disable interface*"/or "*enable the interface*"



Create interface switching plan, go to Advanced >Interface > Int Control Plan >Create Plan >Select Device then select the interface need to enable or disable

| Asset | Device | Perform | ance | Alarm | WLAN | Report | Advanced | Systen | | | | | Topology >>> |
|------------------------|---------------|--------------|----------|-------|------|--------------|--------------------------------|-------------|-----------|--------|---------------|--|--------------------------|
| Advanced > Interface > | Int Control | Plan > Creat | te Plan | | | | | | | | | | |
| • Step 1 Basic infe | ormation | | | | | | | | | | | | |
| | | | | | | * Plan Nam | | × | | | | | |
| | | | | | | | e: Preschedul e: 2016-05-10 | | | | | | |
| | | | | | | | e: 2016-05-10 | | | | | | |
| | | | | | Set | Plan Schedul | e every inter | | | | | | |
| | | | | | | | * Every n | hours: 10 | | | | | |
| | | | | | | Descriptio | n : | | | ^ | | | |
| | | | | | | | | | | \sim | | | |
| | | | | | | | Next | | | | | | |
| | | | | | | | Next | Cance | <u>el</u> | | | | |
| | | | -1 | | | | | _ | | | | | |
| Advanced > Interface 3 | > Int Control | Plan > Creat | te Plan | | | | | | | | | | |
| IP: | Nar | ne: | | Vende | or: | ~ | Model: | | - | Search | | | |
| • Selected Device | List | | | | | | | | | | | +Select Device 2De | eselect 🥔 Deselect All |
| ✓ Name | | IP | ¢ | | Mod | lel + | М | ask | | | SNMP Template | Telnet Template | CWMP Template |
| ✓ N18007 | | 17 | 2.29.1.6 | | S860 |)7E | 2 | 55.255.255. | 252 | | SNMPV2c | no_pass | test |
| POEswitc | h | 17. | 2.29.3.2 | | S292 | 28G-12P | 2 | 55.255.255. |) | | SNMPV2c | default | default |
| ✓ WS6008 | | 17 | 2.29.3.1 | | WS6 | 008 | 2 | 55.255.255. |) | | SNMPV2c | default | default |
| | | | | | | | | | | | 1 G0 10 | Item Per PageTotal | Pages: 1/1 Total3Records |
| | | | | | | Previous | Ne | ext | Cancel | | | | |
| POEswitch | | | | | | | | | | | | | |
| 172.29.3.2 | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | | 7 8 | 9 | 10 | 11 12 | | | |
| On Off Null | | | | | | | | | | | | | |
| | 13 | 14 | 15 | 16 | 17 | | 9 20 | 21 | 22 | 23 24 | | | |
| | | | | | | | | | | | | | |
| | 25 | 26 | 27 | 28 | | | | | | | | | |
| 14/66000 | | | | | | | | | | | | | |
| WS6008 172.29.3.1 | | | | | | | | | | | | | |
| 172.27.3.1 | | 2 | 3 | 4 | 5 | | | 9 | 10 | 11 | | | |
| On Off Null | | 2 | 5 | 7 | 5 | 5 | | 3 | 10 | | | | |
| | | | | | | | | | | | | | |
| | | | | | | Previous | Fini | sh | Cancel | | | | |

Automatically back to the port switch program page, at this time you need to click on the "active", then the plan will take effect.

| Advanced > Interface > Int Co | ontrol Plan | | | | | | |
|-------------------------------|-------------------|-------------|-------------|---------------|---------------|--|---------------------------|
| Plan Name: | Search | | | | | | |
| • Plan List | | | | | | | +Add |
| Plan Name | Plan Type | Plan Status | Task Status | Last Run Time | Next Due Time | Operation | |
| planA | Prescheduled plan | invalid | not running | | | Modify ×Delete Plan → Start Plan ✓Activate | |
| | | | | | | 1 Go 10 🔽 Item Per PageTotal Pages:1/1Tot | al <mark>1</mark> Records |
| | | | | 11111 | | | |

After a period of time, back to the port switch plan page, you can see the running time of the program has changed, there is an executed plan. Click the project name to view the details of the plan.

| dvanced > Interface > Int Control Plan | | | | | | | | | |
|--|-------------------|-------------|-------------|---------------------|---------------------|--|--|--|--|
| Plan Name: | Search | | | | | | | | |
| • Plan List | | | | | | +Add | | | |
| Plan Name | Plan Type | Plan Status | Task Status | Last Run Time | Next Due Time | Operation | | | |
| planA | Prescheduled plan | valid | not running | 2016-05-10 16:36:05 | 2016-05-11 02:35:49 | Modify Istart Plan ⊖Disabled | | | |
| | | | | (| 🖂 🗢 🖂 🚺 😡 🚺 | Item Per PageTotal Pages: 1/1 Total1 Records | | | |
| | | | | | | | | | |

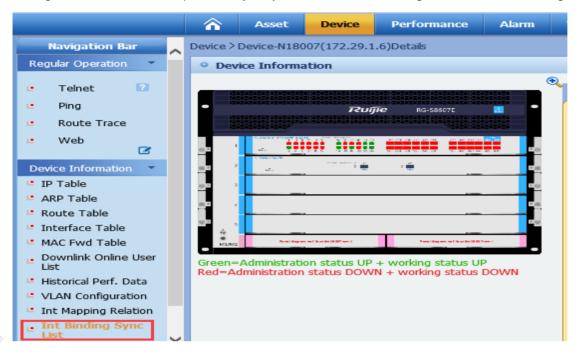
Interface parameter setting, go to *Device >Device List* enter the device details page, then click the interface icon, enter the detailed interface information page, then click on the upper right corner of the device "*Set Interface Parameters*"

| evice > Device-N18007(172.29.1.6)Details > Detailed Interface Information | | | | | | | | | |
|---|----------------------|----------------|-------------|--|--|--|--|--|--|
| Basic Interface Information +Close Port | | | | | | | | | |
| Int Index | 18 | Int Name | Gi1/18 | | | | | | |
| Int Description | GigabitEthernet 1/18 | Int Type | ethernetC: | | | | | | |
| Rate | 1000Mb | Int Alias | link-to-MSC | | | | | | |
| MAC Address | 58:69:6c:5e:c0:e5 | Monitor Status | Monitored | | | | | | |

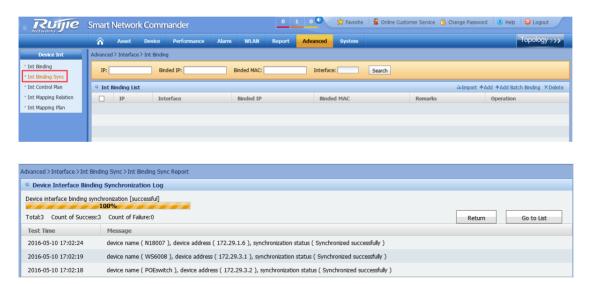
| Set Interface Paramete | ers X |
|---|--|
| Duplex Mode : | Auto-Negotiation 💙 |
| Rate Setting : | Auto-Negotiation 🔽 |
| Flow Control Mode : | DISABLED |
| Int Alias : | link-to-MSC-MGMT por |
| мти: | 1500 |
| Int Remarks : | 0 |
| Certain devices do not se interface alias with reada underline, number" | not support flow control parameter settings upport Chinese alias. In case of an error prompt, set an able ASCII characters such as "English character, hyphen, upport MTU. If you do not enter an MTU value, MTU is not |
| | |
| | Modify Cancel |

Click "Modify" when complete setting.

Interface binding management, go to *Device >Device List >Int Binding Sync*, on this page you can see the interface binding on the device that is the port security entry, while the interface binding information can be managed and synchronized.



Device interface binding synchronization, go to *Advanced >Interface >Int Binding Sync >Select Device, t*hen start synchronization.



Device interface binding, go to *Advanced >Interface >Int Binding Sync >Add*, then fill in the appropriate information, or click the wizard to select the device to bind the device, and then click "*add*".

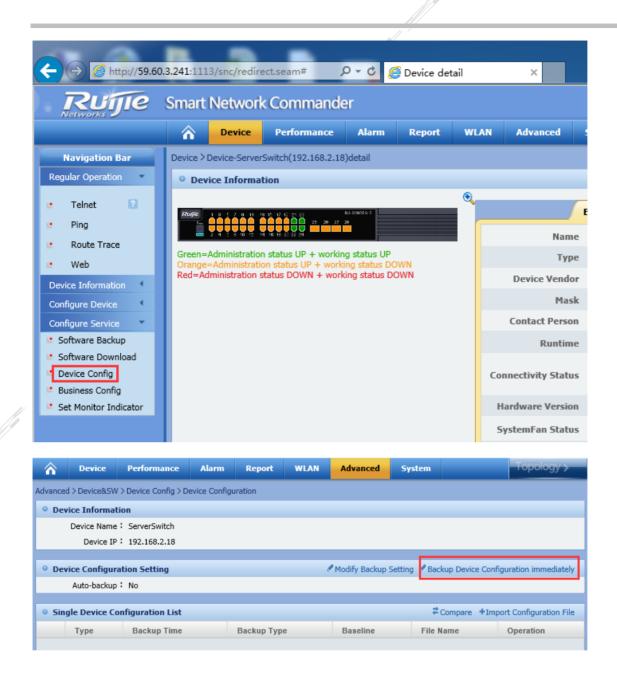
| Advanced > Interface > Int | Binding > Add Int Binding |
|---|--|
| • Add Int Binding | |
| * IP : * Interface : Binded IP : Binded MAC : Remarks : | |
| Kelharks - | \sim |
| er Prompt : | |
| If binded IP is NULL, lay The binded MAC addres | :e IP address field can be used to set a stacked device or high-end device ar 2 MAC, PORT binding will be used as default. s can be located using "Wizard Setting". ddresses with : or -, for example: 00-1E-4F-C6-8C-25 or 00:1E:4F:C6:8C:25 |
| | Add Cancel |
| | |

5.3 Device Configuration and Software Version

5.3.1 Management of the Device Configuration

When you want to backup device configuration, go to **Device >Device List** and click the appropriate device name to enter the device details page, then click on "**Device Config**", In the device details the left navigation bar, scroll down, and then click on the "**device configuration management**".

| Asset > Import Group Tree |
|--------------------------------|
| • Import Group Tree |
| Select File |
| |
| |
| Clear Imported Group and Asset |



Select the backup option on the below page, click "Backup".

| Backup Device Config | juration immedia | tely | X |
|--------------------------------|------------------|----------------|---|
| Backup Content: Enable VRF: | ☑ Startup Config | Running Config | |
| | Backup | Cancel | |

Automatic configuration backup, go to *Advanced* >*Config* & *SW* >*Add Auto-Backup Device* >*Select Device* and add success will automatically jump to the page of device configuration management.

| NB007 172.29.1.6 NB007 172.29.1.6 P: Name: Vendor: Model Selected Device List * Selected Device List * Selected Device List * Selected Device List * Name: Vendor: * Model * Config&SW > Device Config MGMT > Add Auto-Backup Device ** Descient | | | Name: | | Model: | • | Search | | | | |
|--|---|--|---|--|----------------|------------------------|-----------------------|-----------------|------------------|--|---------------------|
| □ Device theme/Hodel P Location Latest Startup Configuration Latest Backup Type Last Backup Type <th>9 Det</th> <th>vice Configuration</th> <th>n List</th> <th></th> <th></th> <th></th> <th>Look Configuration Sn</th> <th>anshot Plan Log</th> <th>Backup Now +Ad</th> <th>d Auto-Backup Device</th> <th>Batch Backup</th> | 9 Det | vice Configuration | n List | | | | Look Configuration Sn | anshot Plan Log | Backup Now +Ad | d Auto-Backup Device | Batch Backup |
| MM0072 172.29.1.6 Image: Control 172.29.1.6 2015.05.310 autom Name: Vendor: Model: Search No No <td>_</td> <td></td> <td></td> <td>Loci</td> <td>ation Late</td> <td>est Running Configurat</td> <td></td> <td></td> <td></td> <td></td> <td>Last Backup</td> | _ | | | Loci | ation Late | est Running Configurat | | | | | Last Backup |
| Advanced > ConfigSW > Device Config MOHT > Add Auto-Backup Device PR | | N18007 | | 2.29.1.6 | | | | | | 2016-05-10 | |
| Advanced > ConfighSW > Device Config MGMT > Add Auto-Backup Device PR Name Vendor Vendor Vendor Vendor Vendor Supported Paget 1 Device J Device 1 | | 38007E | | | | | | | | | |
| Pr: Name: Vendor: Vendor: Model: Search Selected Device List * Select Device List * Select Device: Device Compate Teher Template CWHP Ten * M8007 172.29.1.6 S8607E 255.255.252 SMMPV2C no.pass CWHP Ten * Device Backup Setting Content Person Person PageTotal Pages:1/Total * Device Backup Content: * STARTUP * RUNNINK Set Pans Schedule: Ferry weak * * Backup Contingt: * RUNNINK Set Pans Schedule: * RUNNI | | | | | | //// | | | | | |
| Pr: Name: Vendor: Vendor: Model: Search Selected Device List * Select Device List * Select Device: Device Compate Teher Template CWHP Ten * M8007 172.29.1.6 S8607E 255.255.252 SMMPV2C no.pass CWHP Ten * Device Backup Setting Content Person Person PageTotal Pages:1/Total * Device Backup Content: * STARTUP * RUNNINK Set Pans Schedule: Ferry weak * * Backup Contingt: * RUNNINK Set Pans Schedule: * RUNNI | Advanc | od \ Config8.CW \ D | ouico Confia M | | Packup Dovice | | | | | | |
| Selected Device List +Select Device List +Select Device List +Select Device List +Select Device List There is the importance of th | Auvance | su / confige.svi / b | evice coning in | OHT 7 Add Addo | -backup Device | | | | | | |
| Name IP • Model • Mask SMMP Template Template CWMP Template Image: N18007 172.29.1.6 S8607E 255.255.252 SMMPV2c no_pass test Image: N18007 172.29.1.6 S8607E 255.255.252 SMMPV2c no_pass test Image: N18007 1 Go 1 G | IP: | | Name: | | Vendor: | ✓ Mo | odel: | Search |] | | |
| Minimum Minim Minimum Minimum | • Se | lected Device List | | | | | | | | +Select Device 🖉 De | select 🥒 Desele |
| > Device Backup Setting Content PRESCHEDULED: : Backup Content: : 'STARTUP RUNNING Set Pian Schedule: igunday (00:00) Enable VRF: Add Cancel Ad | | Name | | IP • | | Model + | Mask | | SNMP Template | Telnet Template | CWMP Temp |
| Device Backup Setting Content PRESCHEDULED : Backup Content : STATUP ▼RUNNING Set Plan Schedule : every week sunday ▼ (00:00) Enable VRF : Add Cancel | ~ | N18007 | | 172.29.1.6 | | S8607E | 255.255.255.252 | | SNMPV2c | no_pass | test |
| PRESCHEDULED : | | | | | | | | | 🖂 1 Go 10 | Item Per PageTotal F | Pages:1/1Total1 |
| PRESCHEDULED : □ Badoup Content : □ STARTUP □ RUNNING Set Plan Schedule : every week □ anday □ (00:00) Enable VRF : □ Add Cancel | | | | | | | | | | | |
| Backup Content: ♥ STARTUP ♥ UNNING Set Plan Schedule: ♥ week ♥ ♥ sunday ● (00:00) Enable VRF: ● Add Cancel ● Advanced > Config4SSW > Device Config MGMT ● ● IP: Name: Model: ● ● Device Configuration List ● ● ● Device Rame/Model IP Location Laste Startup Configuration Last Backup Dave Elaste Backup Dave ● Rigory 172.29.1.6 ● ● 2016-05-10 admin ● Clobal Setting ● ● 2016-05-10 admin ● | | | | | | | | | | | |
| Set Plan Schedule : every week ▼ sunday ▼ (00:00) Enable VRF : Add Cancel Add Add Cancel Add Add Cancel Add Add Cancel Add Add Cancel Add Add Cancel Add Cancel Add Cancel Add Cancel Cancel Add Cancel | | _ | | _ | | | | | | | |
| sunday (00:00) Enable VRF : | | | | | | | | | | | |
| Enable VRF : Add Cancel Add | Set | | · · · | - | | | | | | | |
| Add Cancel Advanced > Config&SW > Device Config MGMT IP: Name: Model: Search • Device Configuration List ■ Look Configuration Snapshot Plan Log 副Backup Now +Add Auto-Backup Device 副Batch Backup • Device Hame/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup 1 N8007 172.29.1.6 Im Im Im Im Im Im • Global Setting Maximum Copies : 20 Backup Time: 00:00 Im | | | | (00:00) | | | | | | | |
| Advanced > Config&SW > Device Config MGMT IP: Name: Model Search Device Configuration List Device Rame/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Date Last Backup Device Rame/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Date Last Backup Date Last Backup Type Last Backup Date Last Backup Type Last Backup Date NB C D C Global Setting Maximum Copies : 30 Backup Time: 00:00 Auto Backup New Device : No Enable SCP : No | | Enable VRF • | _ | _ | | | | | | | |
| IP: Name: Model: Search Device Configuration List ILook Configuration Snapshot Plan Log Bladcup Now +Add Auto-Backup Device Blatch Backup Device Name/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup N18007F 172.29.1.6 Imit Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup S8607F 172.29.1.6 Imit Configuration Interst Startup Configuration Last Backup Type Last Backup Date Last Backup Restore Imit Configuration Interst Startup Imit Configuration Last Backup Type Last Backup Date Last Backup Restore Imit Configuration Interst Startup Imit Configuration Last Backup Imit Configuration Imit Configuration Secore Imit Configuration Interst Startup Imit Configuration Imit Conf | | | | | | Ad | id Cancel | | | | |
| IP: Name: Model: Search Device Configuration List ILook Configuration Snapshot Plan Log Bladcup Now +Add Auto-Backup Device Blatch Backup Device Name/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup N18007F 172.29.1.6 Imit Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup S8607F 172.29.1.6 Imit Configuration Interst Startup Configuration Last Backup Type Last Backup Date Last Backup Restore Imit Configuration Interst Startup Imit Configuration Last Backup Type Last Backup Date Last Backup Restore Imit Configuration Interst Startup Imit Configuration Last Backup Imit Configuration Imit Configuration Secore Imit Configuration Interst Startup Imit Configuration Imit Conf | | | | | | | | | | | |
| IP: Name: Model: Search Device Configuration List ILook Configuration Snapshot Plan Log Bladcup Now +Add Auto-Backup Device Blatch Backup Device Name/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup N18007F 172.29.1.6 Imit Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup S8607F 172.29.1.6 Imit Configuration Interst Startup Configuration Last Backup Type Last Backup Date Last Backup Restore Imit Configuration Interst Startup Imit Configuration Last Backup Type Last Backup Date Last Backup Restore Imit Configuration Interst Startup Imit Configuration Last Backup Imit Configuration Imit Configuration Secore Imit Configuration Interst Startup Imit Configuration Imit Conf | | | | | | | | | | | |
| • Device Configuration List ■ Look Configuration Snapshot Pin Log ■ Backup Now +Add Auto-Backup Device ■ Backup Device ■ Last Backup Device ■ Use Device Device ■ Use Device Device ■ Use Device Device <t< td=""><td></td><td></td><td></td><td>MGMT</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | MGMT | | | | | | | |
| • Device Configuration List ■ Look Configuration Snapshot Pin Log ■ Backup Now +Add Auto-Backup Device ■ Backup Device ■ Last Backup Device ■ Use Device Device ■ Use Device Device ■ Use Device Device <t< td=""><td>Advance</td><td>ed > Config&SW > D</td><td>Device Config N</td><td>nom</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | Advance | ed > Config&SW > D | Device Config N | nom | | | | | | | |
| Device Name/Model IP Location Latest Running Configuration Latest Startup Configuration Last Backup Type Last Backup Date Last Backup Date N18007 S8607E 172.29.1.6 Im Im Im 2016.05.10 admin • Global Setting Maximum Copies : 30 Backup Time : 00:00 Auto Backup New Device : No Im Im Im Im • Global Setting Im < | | ed ≻ Config&SW ≻ E | | | Model | | Search | | | | |
| N18007 S8607E 172.29.1.6 Image: Control of the second secon | | ed > Config&SW > [| | | Model: | • | Search | | | | |
| S8607E 17.2.9.1.0 NO 17.33.30 admin Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Setting Image: Colored Seting Image: | IP: | | Name: | | Model: | | | apshot Plan Log | 副Backup Now +Ad | d Auto-Backup Device | Batch Backup |
| Image: Contract of the contract | IP: | vice Configuration | Name: | | | | Look Configuration Sn | | | Last Backup Date | |
| Global Setting Maximum Copies 1: 30 Backup Time 2: 00:00 Auto Backup New Device 2: No Enable SCP 2: No | IP: | vice Configuration Device Name/ N18007 | Name: n List Model IP | P Loc | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 | Last Backu |
| Maximum Copies : 30 Backup Time : 00:00 Auto Backup New Device : No Enable SCP : No | IP: | vice Configuration Device Name/ N18007 | Name: n List Model IP | P Loc | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| Backup Time: 00:00 Auto Backup New Device: No Enable SCP: No | IP: | vice Configuration Device Name/ N18007 | Name: n List Model IP | P Loc | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| Auto Backup New Device : No Enable SCP : No | IP: | vice Configuration Device Name/ N18007 S8607E | Name: n List Model IP | P Loc | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| Enable SCP : No | IP: | vice Configuration Device Name/ N18007 S8607E | Name: n List 'Model IP 17 | 2 Loca 72.29.1.6 | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| | IP: | vice Configuration Device Name/ N18007 S8607E Dal Setting Maximu | Name: n List (Model IP 17 um Copies : 30 | 22.29.1.6 | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| C Prompt : | IP: | vice Configuration Device Name/ N18007 S8607E obal Setting Maxim Bac | Name: n List /Model IP 17 um Copies : 30 ckup Time : 00 | 2 Loca 72.29.1.6 | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| 🕍 Prompt : | IP: | vice Configuration Device Name/ N18007 S8607E Data Setting Maxim Bat Auto Backup Ne | Name: n List /Model IP 17 um Copies : 30 ckup Time : 00 ew Device : N | 2 Loca 72.29.1.6 30 10:00 No | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |
| | IP: De Global Global IP: De IP: De IP: IP: IP: IP: IP: IP: IP: IP: | vice Configuration Device Name/ N18007 S8607E S8607E S8607E S8607E S8607E Maxim Backup Auto Backup No E | Name: n List /Model IP 17 um Copies : 30 ckup Time : 00 ew Device : N | 2 Loca 72.29.1.6 30 10:00 No | ation Lat | | Look Configuration Sn | figuration | Last Backup Type | Last Backup Date 2016-05-10 17:33:30 | Last Backu admin |

bulk configuration backup, go to *Advanced* >*Config* &*SW* >*Batch Backup* then select the backup content and whether you enable VRF, and then click *backup* in the backup device configuration box in the pop-up".

| â | Asset | Device | Performance | Alarm | WLAN | Report | Advance | d System | | | | Topology >> |
|---------|-----------------------|-------------|-------------|----------|----------|-------------|------------|----------------|----------------------|---------------------|------------------------|-------------------|
| Advance | d ≻ Config&S\ | N≻Device C | onfig MGMT | | | | | | | | | |
| IP: | | Name | : | Model: | | | - Sea | rch | | | | |
| • Dev | ice Configu | ration List | | | | | | Look Configura | tion Snapshot Plan I | .og 🗊 Backup Now +A | dd Auto-Backup Device | 副Batch Backup 😂Ba |
| | Device Na | ame/Model | IP | Location | Latest R | unning Conf | figuration | Latest Startu | p Configuration | Last Backup Type | Last Backup Date | Last Backup Adı |
| | WS6008 WS6008 | | 172.29.3.1 | | 1 | | | | | 40 | 2016-05-10 17:56:15 | admin |
| | POEswitch S2928G-1 | | 172.29.3.2 | | | | | | | 40 | 2016-05-10 17:53:21 | admin |
| | N18007 S8607E | | 172.29.1.6 | | 5 | | | | | Pp | 2016-05-10 17:33:30 | admin |
| | | | | | | | | | | | | |

| | // ' |
|--|------|
| Batch Backup Config | × |
| Backup Content: STARTUP RUNNING Enable VRF: | |
| Backup Cancel | |

5.3.2 Restore Device Configuration

Restore configuration of single device, go to Advanced >Config &SW then click the device name to enter the device detailed interface, then go to Device config >Restore,

According to the actual situation and needs, determine whether the check "immediately".

| duanco | d \ Confige.CW \ F | Device Config MGMT > Devic | o Configuration | | | | |
|-----------------|--------------------|---|---------------------------|-------------------|-----------------------------|--------------|---|
| | ice Information | Vevice Config MGMT 7 Devic | e coniguration | | | | |
| Dev | Device Name : V | NCC000 | | | | | |
| | | | | | | | |
| | Device IP: 1 | ./2.29.3.1 | | | | | |
| • Dev | ice Configuratio | on Setting | | | | 🖉 Update B | ackup Setting 🥒 Backup Device Configuration |
| | Auto-backup: N | lo | | | | | |
| | | | | | | | |
| Sing | gle Device Confi | guration List | | | | | Compare +Import Config File |
| | Туре | Backup Time | Backup Type | Baseline | File Name | Backup Admin | Operation |
| | STARTUP | 2016-05-10 20:21:54 | PD . | | WS6008_160510_202151_5.text | admin | ③Restore ⊡Download ✓Set as Baseline |
| | RUNNING | 2016-05-10 20:21:51 | Po | | WS6008_160510_202151_0.text | admin | BRestore |
| | STARTUP | 2016-05-10 20:21:04 | 40 | | WS6008_160510_202101_2.text | admin | |
| dvance | d > Config&SW > I | Device Config MGMT > Rest | ore Backup Configuration | | | | |
| | vice Information | - | | | | | |
| | Device Name : \ | WS6008 | | | | | |
| | Device IP : | 172.29.3.1 | | | | | |
| 9 Por | tore Backup Co | nfiguration | | | | | |
| • Nea | Source : 9 | - | | | | | |
| | | STARTUP | | | | | |
| Effec | t Immediately | | | | | | |
| | Enable VRF : | | | | | | |
| | | | | | | | |
| <u>8</u> ⊒ ₩ | arning : | | | | | | |
| 2. "No | t effect immediat | indicates immediate restart ely" indicates that configura IP enabled, the restoration | ation takes effect only a | fter the next res | tart of device | | |

Batch restore equipment configuration, go to Advanced >Config & SW >Batch Restore >Change then select the correct

configuration file to restore the current device

| Advanced | > Config&SW > Device Cor | nfig MGMT > Batch Backup | Config | | | | |
|---------------------------|--------------------------|--------------------------|------------|----------------------------------|----------|-----------|-----|
| • Batch | h Backup Config | | | | | | |
| | To: STARTUP | | | | | | |
| Effect | Immediately : 🗌 | | | | | | |
| | Enable VRF : | | | | | | |
| _ | | | | | | | |
| Devic | e Configuration List | | | | | - Dele | ate |
| | Name | IP | Model | Target Config File | Baseline | Operation | |
| | WS6008 | 172.29.3.1 | WS6008 | Please select at least one item. | | ti Change | |
| | POEswitch | 172.29.3.2 | S2928G-12P | Please select at least one item. | | t‡Change | |

| Туре | Backup Time | Backup Type | Baseline | File Name | Operation |
|---------|------------------------|-------------|----------|-----------------------------|-----------|
| STARTUP | 2016-05-10 20:21:54 | Ф | | WS6008_160510_202151_5.text | ✓Select |
| RUNNING | 2016-05-10 20:21:51 | Q) | | WS6008_160510_202151_0.text | ✓Select |
| STARTUP | 2016-05-10 20:21:04 | 40 | | WS6008_160510_202101_2.text | ✓Select |
| RUNNING | 2016-05-10 20:21:01 | P D | | WS6008_160510_202101_5.text | ✓Select |
| STARTUP | 2016-05-10 17:56:18 | 40 | | WS6008_160510_175615_8.text | ✓Select |
| RUNNING | 2016-05-10 17:56:15 | Q. | | WS6008_160510_175615_4.text | ✓Select |

After all the target configuration file is replaced, check the device and click "*restore*"

| • Bat | ch Backup Config To: STAR | - | ı Backup Config | | | | |
|---|--|---|--|--|--|--|---|
| • Der | vice Configuration Lis | it. | | | | | 2 Delete |
| | Name | IP | Model | Target Config File | Baseline | Operation | |
| ✓ | WS6008 | 172.29.3.1 | WS6008 | WS6008_160510_202151_5.text | | 🕄 Change 🛛 Show Diff Info | |
| | POEswitch | 172.29.3.2 | S2928G-12P | POEswitch_160510_202150_6.text | | tl Change 🛛 Show Diff Info | |
| 1. "Eff 2. "No 3. For 4. Oni 5. A t | ect immediately" indica t effect immediately" ir devices with CWMP en y the selected target c arget configuration file | idicates that configura abled, the restoration onfiguration files will b should be selected, or | ation takes effect only aft operation will auto restar e applied. the restore operation wi | r the next restart of device t devices which lasts for long. I fail. | | | |
| | Bat Effect Oper V V V V V V V | Batch Backup Config To : STAR Effect Immediately : Enable VRF : Device Configuration Lie Name WS6008 V DeSwitch Configuration Not effect immediately' indica . Tofferct immediately' indica . Tofferct immediately' indica . Tofferct immediately' indica . Tof effect immediately' indica . Tof effect immediately' indica . Tof effect immediately' indica . Tof offect with CWP en . A target configuration fle | Batch Backup Config To : STARTUP Effect Immediately : Enable VRF : Device Configuration List Name IP WS6008 172.29.3.1 POEswitch 172.29.3.2 Warning : . 'Effect immediately' indicates immediate restart . Not effect immediately' indicates immediate restart S. For devices with CWMP enabled, the restoration S. Ar target configuration fies with solube selected, or S. At arget configuration fies with solube selected, or | To : STARTUP Effect Immediately : Period Configuration List Device Configuration List Name IP Model WS6008 172.29.3.1 WS6008 POEswitch 172.29.3.2 S2928G-12P Warning : 1. "Effect immediately" indicates immediate restart of device for configuration 2. "Not effect immediately" indicates immediate restart of device for configuration 3. "Not offect immediately" indicates immediate restart of device for configuration 4. Only the selected target configuration takes effect only aff 3. For devices with CWMP enabled, the restoration operation will auto restart 4. Only the selected target configuration feed. | • Batch Backup Config To: STARTUP Effect Immediately: Enable VRF: • Device Configuration List • Mame IP Model Target Config File WS6008 172.29.3.1 WS6008 172.29.3.2 S29286-12P POEswitch_160510_202151_5.text POEswitch 172.29.3.2 S29286-12P POEswitch_160510_202150_6.text I: "Effect immediately" indicates immediate restart of device for configuration to take effect 2: Not effect immediately" indicates isthat configuration takes effect only after the next restart of devices 3: For devices with CWRP enabled, the restoration operation will auto restart devices which lasts for long. 4: Only the selected target configuration files will be appled. 5: A target configuration files will be appled. | Batch Backup Config To : STARTUP Effect Immediately : Poevice Configuration List Name IP Model Target Config File Baseline WS6008 172.29.3.1 WS6008 WS6008_160510_202151_s.text POEswitch 172.29.3.2 S29286-12P POEswitch_160510_202150_6.text Write diffect immediately' indicates immediate restart of device for configuration to take effect . ''tot effect immediately' indicates immediate restart of device for configuration to take seffect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration takes effect . ''tot effect immediately' indicates that configuration its will be applied. . ''tot effect immediately' indicates that configuration files will be applied. . A target configuration files are set as baselines by defaut. | • Batch Backup Config To: STARTUP Effect Immediately: • Device Configuration List • Mame IP • Ws6008 172.29.3.1 • VS6008 172.29.3.2 S2928G-12P POEswitch_160510_202151_5.text • POEswitch 172.29.3.2 S2928G-12P POEswitch_160510_202150_6.text • Not effect immediately' indicates immediate restart of device for configuration to take effect. • Tot effect immediately' indicates immediate restart of device for configuration to take effect. • Tot effect immediately' indicates immediate restart of device for configuration to take effect. • Tot effect immediately' indicates immediate nestart of device for configuration to take effect. • Tot effect immediately' indicates immediate nestart of device for configuration to take effect. • Tot effect immediately' indicates that configuration take effect. • Tot effect immediately' indicates that configuration take effect. • Tot effect string to take effect do or the restore operation will advice start devices which lasts for long. • A traget configuration files are set as baselines by default. |

5.3.3 Device software version management

Restore software version of device, go to *Device >Device List t*hen click the appropriate device name to enter the device details page and then go to *Add Software from Device >Update Device Software >Backup.*

| RUJIE | Smart Netwo | rk Comm | ander | | | 0 | L 0 🗘 | 📌 Favor | ite 🔒 | Online Customer | Service 🇯 Chang |
|---|------------------------------|------------------|--------------------|----------------|-------------|----------------|-----------|---------------|-------|-------------------|-------------------|
| | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | | | |
| Navigation Bar | Device > Device-POE | switch(172.29 | .3.2)Details | | | | | | | | |
| Regular Operation | Device Inform | ation | | | | | | | | | |
| E Telnet <table-cell></table-cell> | Ruijie 3 7 9 1 | 3 45 17 (9 21 23 | PC-529280-12P | • | | | Basic I | nfo | CPU | Memory | Temperature |
| 😐 Ping | | | et 27 201 | | | Nam | _ | | | | IP |
| Route Trace | Green=Administrat | ion status UP | + working status U | IP | | Тур | | cen | | | Model |
| 🕛 Web | Red=Administration | n status DOWI | N + working status | DOWN | | Device Vendo | | etworks | | | SysOID |
| Device Information | | | | | | Mas | | 5.255.0 | | MA | AC Address |
| Configure Device | | | | | c | ontact Perso | | | | | e Location |
| Configure Service | | | | | | Runtim | e 36 dav | , 12:36:04.36 | 5 | Last Syn | chronization Time |
| Add Software From Device | | | | | | | | , | | , | |
| Download Software Device | o | | | | Conn | ectivity Statu | is Reacha | ble | | Network | Management Sta |
| Device Config MGMT | | | | | | | | | | | |
| Business Config | | | | | Har | dware Versio | n 1.01 | | | Softwa | are Version |
| | | | | | | | | | | | |
| Device > Device detail > Ad Basic Info | I Software From Device | | | | | | | | | | |
| Name | POEswitch | | | | | | SysO | ID. | 13/ | 6.1.4.1.4881.1.1. | 0 1 156 |
| Туре | Switch | | | | | | Mode | | | 28G-12P | |
| Device Description | Ruijie Full Gigabit Security | & Intelligence | Access Switch (S29 | 28G-12P) By Ru | ijie Networ | ks | | vare Version | | S 10.4(2b12)p2 R | elease(180357) |
| Telnet Template | default | | | | | | | | | | |
| Additional Information | ion | | | | | | | | | | |
| *Software List | rgos.bin | 7 | | | | | | | | | |
| Enable SCP | No | | | | | | | | | | |
| Enable VRF | | | | | | | | | | | |
| | | | | | | _ | | | | | |
| | | | Update Dev | ice Softwa | Backup | Retu | im | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

After the completion of the backup, it will automatically jump to the device software management page, you can be see the list of software files have been copied to the SNC server.

| Advanced | > Config&SW > Software | e MGMT | | | | | |
|----------|--------------------------|------------------|--------|----------------|---------------------|------------------------|-------------------|
| Name : | | Model: | Search | | | | |
| • Soft | ware List | | | | ⊡Softwa | are Creation Plan +Fro | m Local ×Delete |
| | Name | Software Version | Model | Name In Device | Creation Time | Memo | Operation |
| | 16051021090538 46.bin | 10.4.180357 | | rgos.bin | 2016-05-10 21:09:42 | from 172.29.3.2 | 🖉 Update |
| | | | | R 4 P R | > 1 Go 10 ✔ I | tem Per PageTotal Pag | es:1/1Total1Recor |

You can log in the device to confirm the software version of the backup.

| POEswitch#sh version | |
|---------------------------|---|
| System description : | Ruijie Full Gigabit Security & Intelligence Access Switch (S2928G-12P) By Ruijie Networks |
| | 2016-04-04 8:17:46 |
| | 36:12:55:7 |
| System hardware version : | |
| System software version : | RGOS 10.4(2b12)p2 Release(180357) |
| | 10.4(2b12)p2 Release(180357) |
| | 10.4(2b12)p2 Release(180357) |
| System serial number : | G1HDC82003208 |
| Device information: | |
| Device-1 | |
| Hardware version : 1. | |
| | 0S 10.4(2b12)p2 Release(180357) |
| | .4(2b12)p2 Release(180357) |
| | .4(2b12)p2 Release(180357) |
| Serial Number : G1 | HDC82003208 |
| | |

Import Device software version to SNC, go to Advanced >Config & SW >Software MGMT >From Local >Create

| Advanced > Config&SW > S | oftware MGMT | | | | | | |
|--|-------------------------------|----------------|--------------|------------------------|----------------------|---------------------|-----------------------|
| Name : | Model: | | Search | | | | |
| Software List | | | | | | (*)Softwa | re Creation Plan 🕂 Fr |
| Name | Software | Version | Model | | Name In Device | Creation Time | Memo |
| 16051021090 46.bin | 10.4.1803 | 57 | | | rgos.bin | 2016-05-10 21:09:42 | from 172.29.3.2 |
| | | | | | | 🖂 1 Go 10 🔽 It | em Per PageTotal Pag |
| Global Setting | | | | | | | a Up |
| E | nable SCP: No | | | | | | |
| | | | | | | | |
| From Local | | | | | | | |
| * Name : | 10.4(3) | | | | | | |
| | | | | | | | |
| * Name In Device : | rgos.bin | | | | | | |
| | 🖶 Add File | | | | | | |
| | | | | | | | |
| File : | rgos.bin | De | lete | | | | |
| | Uploading file | e successful | | | | | |
| | | | | | | | |
| | | | | | | | |
| * Version | 40.4464750 | | | | | | |
| | 10.4.161753 | | | | | | |
| | | | 4GT/12SFP > | × S5750-24SFP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 5750E-24SFP/12G |
| | S5750-24GT/129 | SFP × S5750P-2 | 4GT/12SFP ≯ | × \$5750-24\$FP/12GT × | S5750-48GT/4SFP × S: | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| | | | 4GT/12SFP > | × \$5750-24\$FP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 5750E-24SFP/12G |
| *Model : | S5750-24GT/129 | | 4GT/12SFP ≯ | × S5750-24SFP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 5750E-24SFP/12G |
| | S5750-24GT/129 | | 4GT/12SFP≯ | × 55750-245FP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| *Model : | S5750-24GT/129 | | 4GT/12SFP≯ | × 55750-245FP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| *Model : | S5750-24GT/129 | | 4GT/12SFP ≯ | × 55750-245FP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| *Model : | S5750-24GT/129 | | :4GT/12SFP > | × 55750-24SFP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × s | 55750E-24SFP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | :4GT/12SFP > | × 55750-24SFP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| *Model : Memo : | \$5750-24GT/125 +Add Model | | 4GT/12SFP > | × 55750-245FP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 55750E-245FP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/12SFP > | × 55750-245FP/12GT × | S5750-48GT/4SFP × S | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/12SFP > | × 55750-245FP/12GT × | | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/125FP > | | | 5750P-48GT/4SFP × s | 55750E-24SFP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/125FP > | | | 5750P-48GT/4SFP × s | 55750E-24SFP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/12SFP > | | | 5750P-48GT/45FP × 5 | 55750E-245FP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/12SFP > | | | 5750P-48GT/4SFP × S | 55750E-245FP/12G |
| *Model : Memo : @** Prompt : | \$5750-24GT/125 +Add Model | | 4GT/12SFP > | | | 5750P-48GT/4SFP × S | 55750E-24SFP/12G |
| •Model : Memo : এল Prompt : 1. Empty file not saved | \$5750-24GT/125 | | | Creat | | | |

| Advanced 2 | dvanced > Config&SW > Software MGMT | | | | | | | | | | | | |
|------------|-------------------------------------|------------------|--|----------------|---------------------|-----------------------|----------------------|--|--|--|--|--|--|
| Name : [| | Model: | ▼ Search | | | | | | | | | | |
| • Softw | vare List | | | | I Softwar | e Creation Plan +From | Local ×Delete | | | | | | |
| | Name | Software Version | Model | Name In Device | Creation Time | Memo | Operation | | | | | | |
| | 16051021090538 46.bin | 10.4.180357 | | rgos.bin | 2016-05-10 21:09:42 | from 172.29.3.2 | 🖉 Update | | | | | | |
| | 10.4(3) | 10.4.161753 | S5750-24GT/12SFP S5750P-24GT/12SFP S5750-24SFP/12GT S5750-48GT/4SFP S5750P-48GT/4SFP S5750E-24SFP/12GT | rgos.bin | 2016-05-11 14:15:08 | | 🖉 Update | | | | | | |
| | | | | RODR | 1 G0 10 🗸 Ite | em Per PageTotal Page | s: 1/1 Total2Records | | | | | | |

Distribute configuration command of device, go to Advanced >Service >Config Template Library >Add, on template definition page, input template name, then click the associated command in the command list.

| Advanced > Service > Confi | dvanced > Service > Config Template Library > Template Info | | | | | | | | | | | | |
|----------------------------|---|--------|-------|-------------------|-------------------|--------------|--|--|--|--|--|--|--|
| • Template Info | Template Info | | | | | | | | | | | | |
| * Template Name | mplate Name conft | | | | | | | | | | | | |
| Description | 1ption 55750 | | | | | | | | | | | | |
| Compatibility | Ruijie Networks; | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Compatibility Info | | | | | | Add Template | | | | | | | |
| Vendor | Туре | Series | Model | Template Protocol | Operation | | | | | | | | |
| Ruijie Networks | | | | TELNET | ✓ Update × Delete | | | | | | | | |

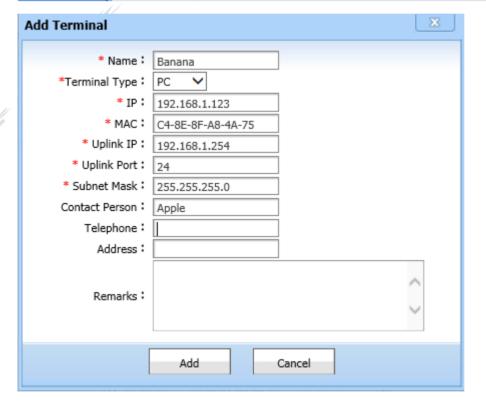
Business configuration schedule, go to Advanced >Service >Service Plan >Add >Select Template >Select Device >Finish, then click start plan

| Advanced 2 | Service > Service Plan | n≻Create Plan | | | | | | |
|------------|------------------------|------------------|---------------|------------------|--|---------------|----------------------|-------------------------|
| | Select Template | Select Device | ÷., | Set Parameter | Configure Task | | | |
| • Select | Template | | | | | | | +Select Template |
| Templa | te Name | | Compatible Ir | ıfo | Built-in | Description | Oper | ation |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Select | Device | | | | | | | X |
| IP: | | Name: | | v | endor: | Model: | | Search |
| 0 | | | | | | | | +Add [+]Add All |
| | Name | | IP ÷ | Model + | Mask | SNMP Template | Telnet Template | CWMP Template |
| | N18007 | | 172.29.1.6 | 5 S8607E | 255.255.255.252 | SNMPV2c | no_pass | test |
| ✓ | POEswitch | | 172.29.3.2 | S2928G-1 | 2P 255.255.255.0 | SNMPV2c | default | default |
| | WS6008 | | 172.29.3.1 | WS6008 | 255.255.255.0 | SNMPV2c | default | default |
| | | | | | N 0 0 | 0 1 Go 10 | Item Per PageTotal F | Pages: 1/1 Total3Record |
| | | | | | | | | |
| | | | | | | | | |
| • Plan | Setting | | | | | | | |
| | | | | | Dian Nama 1 | | | |
| | | | | | Plan Name: planA Plan Type: Manual plan | × · | | |
| | | | | | | | | |
| | | | | | Description : | | 0 | |
| | | | | | | | | |
| | | | | | Previous | Finish Ca | ancel | |
| | | | | | Previous | Finish | ancei | |
| | | | | | | | | |
| Plan f | lame : | Sea | rch | | | | | +Add |
| Plan N | | Plan Type | Plan Status | | | Next Due Time | Operation | |
| planA | | Manual plan | valid | not runnir | ng l | | Modify × Delete Plan | |

5.4 Terminal management

Modify terminal, go to *Device* >*Terminal List* > *Add* /*Update* /*Delete*, then set the terminal.

| ← → 🤌 http://59.60 | . <mark>3.241</mark> :111 | 3/snc/redirect.s | seam# ♀▼ | 💆 <i>6</i> Terminal Li | st | × | | | | |
|--|---------------------------|-------------------|-------------------------|-------------------------|----------------------|------------------------|-----------------|-----------------|----------------------|--------|
| Rujje | Smart | Network C | ommander | | | | | | 6 | |
| | Â | Device P | Performance A | larm Report | WLAN Ad | vanced System | | | | |
| Device | Device >1 | Terminal List | | | | | | | | |
| * Device List | | Name: | | IP: | | MAC: | | | | |
| * Add Device | | Uplink IP: | | Online User: | Sho | w online users only: | | | | |
| * Custom Extended Info | | ninal Type: | ✓ Cre | ation Time: | | Search | | | | |
| Device Autodiscovery | | | | | | | | | | |
| * Network Inspector | ③ Pro | ompt:If a termina | al in the list does not | have an uplink device I | P or port, the syste | em searches for uplink | uplink device 1 | IP and port and | identifies them with | * at f |
| * Device Template | <u> </u> | | | | | | | | | |
| * Batch Device Sync | • Terr | ninal List | | | | | | | +Add ×C | elete |
| IP Camera | | Name • | Terminal Type | Terminal Source | IP ¢ | MAC | Uplink IP | Binded • | Online Status | Or |
| | | 172.18.84.221 | (iii 👡 | ⊒+ | 172.18.84.221 | b0:9f:ba:3b:63:2b | 55.55.55.51 | No | Bonline | |
| IP Camera | | 172.18.83.240 | (iii 🖕 | a.≘ wua | 172.18.83.240 | 50:2e:5c:c6:aa:6e | 55.55.55.51 | No | SOFFLINE | |
| Terminal | | 172.18.84.83 | (k) | are - | 172.18.84.83 | 54:9f:13:42:20:f8 | 55.55.55.51 | No | BOFFLINE | |
| Terminal List | | 172.18.84.67 | (a., | ⊒•≘ wuxaa | 172.18.84.67 | 7c:1d:d9:3f:35:57 | 55.55.55.51 | No | SOFFLINE | |
| | | | | | | | | | CONTENTE | |



View terminal information, go to *Device* >*Terminal List* then select a row of terminal information, can view information terminal.

| | 🗖 | Device Perfo | ormance A | larm Report | WLAN Adv | ranced System | 1 | | | | | |
|--|---------------|-----------------------|-------------------|-------------------------|----------------------|-----------------------|-------------------|----------------|----------------------|-------------------|----------------|----------------|
| Device | Device > Term | ninal List | | | | | | | | | | |
| * Device List | , | Name: | | IP: | | MAC: | | | | | | |
| * Add Device | Upli | link IP: | C | Inline User: | Sho | w online users only: | | | | | | |
| Custom Extended Info Device Autodiscovery | Terminal | Туре: | ✓ Creation | ation Time: | | Search | | | | | | |
| Device Autodiscovery Network Inspector | 0. | | | | | | | | | | | |
| * Device Template | • Prompt | At:17 a terminal in t | the list does not | have an uplink device I | P or port, the syste | m searches for uplini | k uplink device I | P and port and | identifies them with | * at the beginnin | 9 | |
| * Batch Device Sync | • Termina | al List | | | | | | | +Add ×c | Delete +Bind ×U | nbind 🗱 Sync 🕨 | IP,MAC Collisi |
| IP Camera | | Name • T | Ferminal Type | Terminal Source | IP ¢ | MAC | Uplink IP | Binded • | Online Status | Online User | User Name | Online Ti |
| IP Camera | 17 | 172.18.84.221 | K., | a-E VLG | 172.18.84.221 | b0:9f:ba:3b:63:2b | 55.55.55.51 | No | Online | | | |
| | 17 | 172.18.83.240 | K. | a-E ora | 172.18.83.240 | 50:2e:5c:c6:aa:6e | 55.55.55.51 | No | BOFFLINE | | | |
| Terminal | 17 | 172.18.84.83 | × | a-E MLA | 172.18.84.83 | 54:9f:13:42:20:f8 | 55.55.55.51 | No | BOFFLINE | | | |
| Terminal List | 17 | 172.18.84.67 | άc. | a-E MLA | 172.18.84.67 | 7c:1d:d9:3f:35:57 | 55.55.55.51 | No | BOFFLINE | | | |
| ' Subnet Statistic | 17 | 172.18.83.153 | 1 | a+⊟ orta | 172.18.83.153 | 98:6c:f5:1f:20:dc | 55.55.55.51 | No | Conline | | | |
| | 17 | 172.18.83.52 | | a-E MLA | 172.18.83.52 | 90:b9:31:5f:a7:ee | 55.55.55.51 | No | SOFFLINE | | | |
| | 17 | 72.18.83.59 | 1 | a-E MLA | 172.18.83.59 | 9c:d3:6d:9d:eb:64 | 55.55.55.51 | No | BOFFLINE | | | |
| | 17 | 172.18.83.104 | 1. C | a-E | 172.18.83.104 | 40:f3:08:80:d8:7d | 55.55.55.51 | No | BOFFLINE | | | |
| | 17 | 172.18.83.56 | ά. | a-S | 172.18.83.56 | 90:fd:61:b8:9d:18 | 55.55.55.51 | No | BOnline | | | |
| | 17 | 172.18.83.68 | K. | a-E MA | 172.18.83.68 | 18:9e:fc:7f:09:d4 | 55.55.55.51 | No | BOFFLINE | | | |
| | | | | | | | | | | 1 Go 10 | ✓ Item Per Pa | igeTotal Page |

Click the terminal name link to see the terminal details. As shown below:

| ← → @ http://59.60.3.241:1113/sr | nc/ 🔎 🕆 C 🧉 Terminal Detai | 1 × | | | × □ - \ |
|--|------------------------------------|-----------------------|----------------------------------|-------------------------------|------------------|
| Ruffe Smart Ne | etwork Commander | | 5 0 0 🛇 | 📌 Favorite 🛛 🖉 He | lp 🥹 Logout |
| â 🗖 | evice Performance Ala | irm Report | WLAN Advanced | System | Topology >>> |
| Operation Device > Term | iinal > Terminal Detail | | | | |
| | nal Detail | | | | |
| * Route Trace Basic 1 | Info | | STA Wireless Info | | |
| | Name: 172.18.84.221 | | Working Mode | : 802.11a | |
| Ter | minal Type : 🔍 🔍 | | Associated AP IP | : 172.18.57.222 | |
| Term | inal Source : 🛲 | | Associated AP MAC | : 00:d0:f8:22:e0:09 | |
| | IP: 172.18.84.221 | | VLAN ID | : 1732 | |
| | MAC: b0:9f:ba:3b:63:2b | | SSID | : ruijie-802.1x-5G | |
| S | ubnet Mask: | | WLAN ID | : 9 | |
| Cre | eation Time: 2014-12-22 17:10:45 | | | | |
| Con | tact Person : | | | | |
| | Telephone : | | | | |
| | Address : | | | | |
| | Uplink IP : 55.55.55.51 | | | | |
| | Uplink Port : | | | | |
| | Port Status : | | | | |
| | User Name : | | | | |
| | Remarks : | | | | |
| Copyright of Ruijie Networks Technical | Service Hotline: 4008-111-000(IE7, | . IE8, IE9 are suppor | ted. The default resolution is 1 | 024*768, but 1280*1024 is hig | hly recommended) |

Import and export terminal information, go to Device >Terminal List >Import >Select Import File,

| D | evice > To | erminal List | | | | | | | | | | | |
|---|------------|---------------------------|----------------------|-------------------------|-----------------------|------------------------|-------------------|-------------------|-----------------------|--------------------|-----------------|-------------------|-----------------|
| | | Name: | | IP: | | HAC: | | | | | | | |
| | l | Jplink IP: | | Online User: | Sho | w online users anly: | | | | | | | |
| | Termi | nal Type: | Y Cre | eation Time: | | Search | | | | | | | |
| | () Pro | npt: If a terminal | in the list does not | t have an uplink device | IP or part, the syste | em searches for uplink | : uplink device I | IP and port and i | dentifies them with ' | * at the beginning | | | |
| | C Term | inal List | | | | | | | +add ×D | elete +Bind ×Un | ibind 195ync ≯1 | P,MAC Collision D | etection 🕨 More |
| | | Name + | Terminal Type | Terminal Source | IP o | MAC | Uplink 1P | Binded • | Online Status | Online User | User Name | Online Time | ≧I mport |
| | | 172.18.84.221 | 6 | 20 10 | 172.18.84.221 | b0:9f:ba:3b:63:2b | 55.55.55.51 | Na | Bonline | | | | i≟Export All |
| | | | | | | | | | | | | | |

| Device > Terminal > Terminal Import | |
|--|--|
| • Terminal Import | |
| 💠 Select Imported File | |
| | |
| | |
| | |
| 🔎 Prompt : | |
| Only CSV files can be imported. Click to Download Template file | |

IP/MAC binding, go to Device >Terminal List >Select terminal >Bind\Unbind,

| Device> | Terminal Lis | t | | | | | | | | | | | |
|---------|----------------|------------------------|---------------------|----------------------|-------------------|------------------|-----------------|-------------------|----------------------|-----------------------------|------------------|--------------------|----------|
| | Name: | | P: | | | MAC: | | | | | | | |
| | Uplink JP: | | Online User: | | Show anlin | e users only: | | | | | | | |
| Terr | minal Type: | ¥ | Creation Time: | | | Search | | | | | | | |
| () Pr | rompt: If a te | erminal in the list do | es not have an upli | nk device IP or port | ;, the system sea | rches for uplink | uplink device i | IP and port and i | identifies them with | * at the beginning | , | | |
| 🍳 Ter | minal List | | | | | | | | +Add ×D | elete <mark>H</mark> ind XU | nbind 🗱 Sync 🕨 I | P,MAC Collision De | stection |
| | Name 🔹 | Terminal T | Terminal | Source IP + | MAG | ; | Uplink IP | Binded 4 | Online Status | Online User | User Name | Online Time | • Op |

IP/MAC exception detection, go to Device >Terminal List >MAC-to-IPS /IP-to-MACs,

| | | | | | | | | 11 | | | | | |
|---|-------------------------------|---------------------------------------|--|-----------------------|------------------------|--------------------------------|-----------------------------------|--------------------------|---|--------------|------------------|-----------------|-------------------------------|
| vice) Te | erminal List | | | | | | | | | | | | |
| | | | | | | | _ | | | | | | |
| | Name: | | JP: | | MAC: | | | | | | | | |
| U | Jplink IP: | | Online User: | Sha | w online users only: | | | | | | | | |
| Termin | nal Type: | ✓ Cre | ation Time: | | Search | | | | | | | | |
| | | | | | Detreit | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | npt:If a terminal | in the list daes not | have an uplink device I | OP or port, the syste | em searches for uplin | s uplink device I | IP and port and | identifies them with | * at the beginning | 1 | | | |
| () Pron | | l in the list does not | have an uplink device I | CP or port, the syste | em searches for uplin | s uplink device I | P and port and | | | | ID MAD Collision | , Dabach | n bute |
| Pron | nptzīfa terminal inal List | in the list does not | have an uplink device I | IP or port, the syste | em searches for uplin | s uplink device I | P and port and | | * at the beginning Delete +Bind × Ur | | P,MAC Collision | Detection | on ≯Mor |
| Pron Fermi | | in the list does not Terminal Type | have an uplink device I Tenninal Source | IP or port, the syste | am searches for uplini | c uplink device I Uplink IP | P and port and Binded 4 | | | | | Debectio ≩ ♦ | |
| Pron Termi | inal List | | Terminal Source | | - | | Binded ¢ | +Add ≯r Online Status | Delete +Bind ×U | nbind 195ync | #MAC-to-IPs | | on ▶Mon Operatio &Updat |
| Pron Termi | inal List Name + | Terminal Type | | IP ¢ | MAC | Uplink IP | Binded ¢ | ♦Add Xe | Delete +Bind ×U | nbind 195ync | | | Operati |

Subnet statistics, go to Device > Subnet statistics >Sync.

| Asset | Device Po | erformance A | darm WLAN | Report | Advanced | System | | Topology >> |
|--|---|--|-------------------------------|-----------------|--------------------|---|-----------------------------|-----------------------|
| evice > Subnet Sta | tistics | | | | | | | |
| Prompt : | | | | | | | | |
| The IP addresses Terminal utilization Class-B subnets or | includes all termina subnet with non-s | als within the subne ubnet will not be sl | t IP segment. It in the list. | s possible that | a terminal is show | address in the IP add n in multiple subnets e, please be patient. | ress table. | |
| Subnet Statis | tics | | | | | | | t3Sync t3Update |
| Subnet IP • | Subnet Mask | Total Availab | le IP 🔹 🛛 U | sed IP • | Idle IP 🔹 | IP Utilization(% |) • Terminal Utilization(%) | Device Utilization(%) |
| 172.29.3.0 | 255.255.255.0 | 254 | 3 | | 251 | 1.18 | 0.0 | 1.18 |
| 172.29.6.0 | 255.255.255.0 | 254 | 5 | | 249 | 1.97 | 1.18 | 0.79 |
| 10.10.10.0 | 255.255.255.0 | 254 | 2 | | 252 | 0.79 | 0.0 | 0.79 |
| 172.29.7.0 | 255.255.255.0 | 254 | 4 | | 250 | 1.57 | 0.79 | 0.79 |
| 192.168.110.0 | 255.255.255.0 | 254 | 2 | | 252 | 0.79 | 0.0 | 0.79 |
| 10.20.12.0 | 255.255.255.0 | 254 | 0 | | 254 | 0.0 | 0.0 | 0.0 |
| 172.29.5.0 | 255.255.255.0 | 254 | 1 | | 253 | 0.39 | 0.0 | 0.39 |
| 172.29.2.0 | 255.255.255.0 | 254 | 1 | | 253 | 0.39 | 0.0 | 0.39 |

In the sub network usage statistics list page, select the remaining available IP number of this column, click the available IP number of 251, you can enter the available IP list :

| Device > Subnet Stat | tistics | | | | | | | | | | |
|---|---------------|----------------------|-----------|-----------|---------------------|---------------------------|-------------------------|--|--|--|--|
| Prompt : | | | | | | | | | | | |
| The IP addresses used by a device include the device IP address, device management IP address, and IP address in the IP address table. Terminal utilization includes all terminals within the subnet IP segment. It is possible that a terminal is shown in multiple subnets. Class-B subnets or subnet with non-subnet will not be shown in the let. Based on the actual network envionment, the "Sync Device Subnet" operation might consume longer time, please be patient. | | | | | | | | | | | |
| • Subnet Statis | tics | | | | | | tiSync tiUpdate | | | | |
| Subnet IP + | Subnet Mask | Total Available IP + | Used IP + | Idle IP 🗧 | IP Utilization(%) + | Terminal Utilization(%) + | Device Utilization(%) + | | | | |
| 172.29.3.0 | 255.255.255.0 | 254 | 3 | 251 | 1.18 | 0.0 | 1.18 | | | | |
| 172.29.6.0 | 255.255.255.0 | 254 | 5 | 249 | 1.97 | 1.18 | 0.79 | | | | |
| 10.10.10.0 | 255.255.255.0 | 254 | 2 | 252 | 0.79 | 0.0 | 0.79 | | | | |
| 172.29.7.0 | 255.255.255.0 | 254 | 4 | 250 | 1.57 | 0.79 | 0.79 | | | | |
| 192.168.110.0 | 255.255.255.0 | 254 | 2 | 252 | 0.79 | 0.0 | 0.79 | | | | |
| 10.20.12.0 | 255.255.255.0 | 254 | 0 | 254 | 0.0 | 0.0 | 0.0 | | | | |
| 172.29.5.0 | 255.255.255.0 | 254 | 1 | 253 | 0.39 | 0.0 | 0.39 | | | | |
| 172.29.2.0 | 255.255.255.0 | 254 | 1 | 253 | 0.39 | 0.0 | 0.39 | | | | |
| 172.29.4.0 | 255.255.255.0 | 254 | 1 | 253 | 0.39 | 0.0 | 0.39 | | | | |

In the sub network usage statistics list page, select the PC usage, click the usage rate, you can enter the PC list :

| Subnet Statis | tics | | | | | | ti-Sync ti-Update |
|---------------|---------------|----------------------|-----------|-----------|---------------------|---------------------------|-------------------------|
| Subnet IP + | Subnet Mask | Total Available IP + | Used IP + | Idle IP 🗧 | IP Utilization(%) + | Terminal Utilization(%) + | Device Utilization(%) + |
| 172.29.3.0 | 255.255.255.0 | 254 | 3 | 251 | 1.18 | 0.0 | 1.18 |
| 172.29.6.0 | 255.255.255.0 | 254 | 5 | 249 | 1.97 | 1.18 | 0.79 |

In the sub network usage statistics list page, select the device usage rate column, click on the use of the rate, you can enter the device

| | | | | | | // | |
|-----------------------------------|---------------|----------------------|-----------|-----------|---------------------|---------------------------|-----------------------|
| 172.29.6.0 | 255.255.255.0 | 254 | 5 | 249 | 1.97 | 1.18 | 0.79 |
| 172.29.3.0 | 255.255.255.0 | 254 | 3 | 251 | 1.18 | 0.0 | 1.18 |
| Subnet IP + | Subnet Mask | Total Available IP 🔹 | Used IP + | Idle IP 🔹 | IP Utilization(%) + | Terminal Utilization(%) + | Device Utilization(%) |
| Subnet Statis | tics | | | | | | t3Sync t3Update |
| | | | | | | | |

5.5 Management of The Device model, series

Query manufacturer, go to **System >Device Vendor**, **then** click the Add button to add a page, as shown in the following diagram:

| Add Vendor | | X |
|----------------------|--|-----------|
| * Name : | | |
| * Short Name : | | |
| Contact : | | |
| Vendor Logo : | 2 | |
| Upload vendor logo : | ✤ Select | |
| Description : | 0 | |
| | height of uploaded vendor logo image should be no more than 18 pixels, the file size 10KB and the valid file type is jpg, gif or png. | should be |
| | Carcol | |

Select a device vendor record, click the "*operation*" column of the "*modify*" link to modify the device vendor page, as shown below :

| Update Vendor | x |
|---------------------|---|
| * Name : | Uniview |
| * Short Name: | Uniview |
| Contact : | |
| Vendor Logo : | |
| Upload vendor logo: | + Select |
| Description : | ~ |
| | height of uploaded vendor logo image should be no more than 18 pixels, the file Ian or equal to 10KB and the valid file type is jpg, gif or png. |
| | Cancel |

Enter the equipment vendor management page, select to delete the record of equipment manufacturers, click the "*delete*" button, as shown :

| ystem > | stem > Device Vendor | | | | |
|---------|-----------------------|-----------------------|---------|-------------|--------------|
| Name | Search | | | | |
| • Devi | ce Vendor List | | | | +Add ×Delete |
| | Name | Short Name | Contact | Description | Operation |
| ✓ | 2 Uniview | Uniview | | | 🖉 Update |
| | 2 Zyxel | Zyxel | | | 🖉 Update |
| | 🕜 Yamaha | Yamaha | | | 🖉 Update |
| | Xyplex | Xyplex | | | / Update |
| | Xylogics | Xylogics | | | 🖉 Update |
| | Zedia | Xedia | | | ✓ Update |
| | Wyse Technology | Wyse Technology | | | & Update |
| | Wiesemann & Theis | Wiesemann & Theis | | | 🖉 Update |
| | Western Multiplex | Western Multiplex | | | 🖉 Update |
| | Vnetek Communications | Vnetek Communications | | | ✓ Update |

Model management, go to **System >Device Model**, then Select at least one device type record, click the delete button, the system will perform the delete operation.

| • Devic | ce Model List | | | | | | | | Add ×Delete |
|---------|-------------------|-----------------|-------------|----------------------------------|-------|------------|-------------|------------|-------------|
| | Device Model Name | Vendor | Device Type | System OID | 05 | Port Count | SCP Support | Туре | Operation |
| | S9620 | Ruijie Networks | Switch | 1.3.6.1.4.1.4881.1.1.10.1.4 6 | rgnos | | No | Predefined | 🖉 Update |
| | S8606 | Ruijie Networks | Switch | 1.3.6.1.4.1.4881.1.1.10.1.4 3 | rgnos | | No | Predefined | 🖉 Update |
| | S8610 | Ruijie Networks | Switch | 1.3.6.1.4.1.4881.1.1.10.1.4 4 | rgnos | | No | Predefined | 🖉 Update |
| | | | | | | | | | |

In the list, click the name of the model, and can view the information of the device type.



Click the "*Add*" button to add the page and then fill in the device Model information.

| Add Device Model | x |
|----------------------|-------------------|
| * Device Model Name: | |
| * System OID: | |
| Vendor : | UNKNOWN |
| * Device Series : | |
| Device Type : | Unknown |
| Product ID : | Add ID |
| SCP Support : | |
| HTTP Protocol : | ● HTTP ○ HTTPS |
| HTTP Port : | 80 |
| Default Homepage : | |
| Remarks : | $\langle \rangle$ |
| [| Save |

Click the "*Update*" button to update device model.

| Update Device Mode | al de la constante de la const | X |
|---------------------|--|---|
| Device Model Name : | S9620 | |
| System OID : | 1.3.6.1.4.1.4881.1.1.10.1.46 | |
| Vendor : | Ruijie Networks | |
| Device Series : | S96 | |
| Device Type : | Switch | |
| | Add ID | |
| Product ID : | 20060022 | |
| SCP Support : | | |
| HTTP Protocol : | ● HTTP ○ HTTPS | |
| HTTP Port : | 80 | |
| Default Homepage : | | |
| Remarks : | | |
| | Save | |

Device category list, go to System >Device Type, then select at least one device type record, click the delete button, the system will perform the delete operation.

| System > Device Typ | vstem > Device Type | | | | |
|---------------------|---------------------------------|------------------|------------|-------------|--------------|
| Device Type Co | Device Type Code: Type : Search | | | | |
| • Device Type Li | ist | | | | +Add ×Delete |
| De De | evice Type Code | Device Type Name | Туре | Description | Operation |
| RC | DUTER | Router | Predefined | | |
| SV | WITCH | Switch | Predefined | | |
| UN | NKNOWN | Unknown | Predefined | | |
| - | | | | | |

In the list, click the name of the model, and can view the information of the device type.

| Device Type Detail | X |
|--------------------|------------|
| Device Type Name : | Router |
| Device Type Code : | ROUTER |
| Туре: | Predefined |
| Description : | |
| | Cancel |

Click the "Add" button to add device category, and then fill in the type of device information. As shown below:

| Add Device Type | × |
|----------------------|-------------|
| * Device Type Name : | |
| * Device Type Code: | |
| Description : | \sim |
| | Save Cancel |

Query equipment series, go to System >Device Series, then click the Add button to add the device series.

| Add Device Series | x |
|------------------------|-----------------|
| * Device Series Name : | |
| *Vendor: | Ruijie Networks |
| *Device Type: | Router |
| Description : | |
| | Save Cancel |

Select the device to delete records, click the "*delete*" button, as shown below:

| System > | Device Series | | | | | | | | | |
|----------|--------------------|-----------------|---|--------|-------|-------------|------------|-------------|---|-------------|
| Device | e Series Name: | Vendor: | ~ | Search | Reset | | | | | |
| • Dev | rice Series List | | | | | | | | + | Add ×Delete |
| | Device Series Name | Vendor | | | | Device Type | Туре | Description | | Operation |
| | DES-7200 | Ruijie Networks | | | | Switch | Predefined | | | |
| | DGS-3610 | Ruijie Networks | | | | Switch | Predefined | | | |
| | OSM8500 | Ruijie Networks | | | | Switch | Predefined | | | |

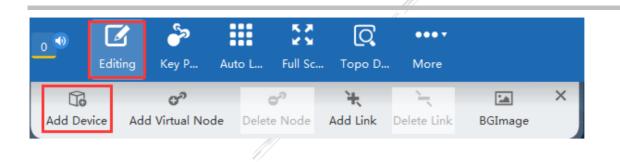
Click the browse detailed information recording equipment series link, enter the details page, shown in the following diagram:

| Device Series Detail | × |
|----------------------|-----------------|
| Device Type | Ruijie Networks |
| | Cancel |

5.6 Topology Management

5.6.1 Topology Edit

Add Device: click *Edit, add device button*

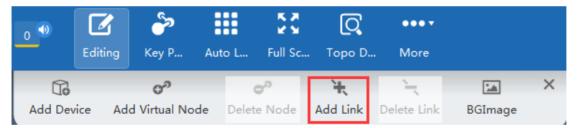


Delete node: select a node, click Edit, delete node button

| 0 | Editing | Key P | Auto L | Full Sc. | . Торо D | ●●● • More | | |
|---------|---------|--------------------------|--------|---------------|-----------------------|--------------------------|---------------------|---|
| Add Dev | vice Ad | ු d Virtual No | de Del | ං ete Node | `₩ Add Link | Delete Link | ⊡ BGImage | × |

Add link

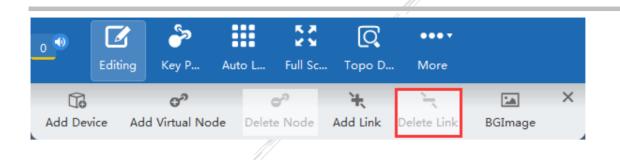
a) Select a node, click *Edit,* and *add the link button*.



b) Drag the cursor, click the target node, in the pop-up dialog box input line, node link interface, etc.

| Add Link | × |
|------------------------------------|--|
| Line : | Single Solid Line |
| Device : | N18007 |
| Device Interface: | Gi1/1 👻 |
| Device : | POEswitch |
| Device Interface: | Gi0/1 👻 |
| Link Bandwidth Calculation Method: | Associated Interface Based O Manual Settings |
| | |
| | |
| | |
| | |
| | |
| OK | Cancel |
| | |

Delete link: select a link, click *Edit, delete link* button.



Add virtual node

1) Click Edit, add virtual node

| 0 | Editi | ng | Key P | | to L | Full Sc. | · | Q Topo D | ●●● • More | | |
|---------|-------|-----|------------------------------|----|------------|----------|----|--------------------|--------------------------|---------|---|
| Add Dev | vice | Add | <mark>ා</mark> Virtual No | de | (Delet | e Node | Ad | ¥. Id Link | Delete Link | BGImage | × |

2) In the pop-up dialog box, enter the virtual node tab, select the node icon

| Add Virtual Node | | × |
|---------------------|----------------|-----|
| Virtual Node Label: | | |
| Virtual Node Icon: | Please select | |
| | Building | cel |
| | Internet Cloud | |

3) Add virtual nodes as shown in Figure



Custom background map

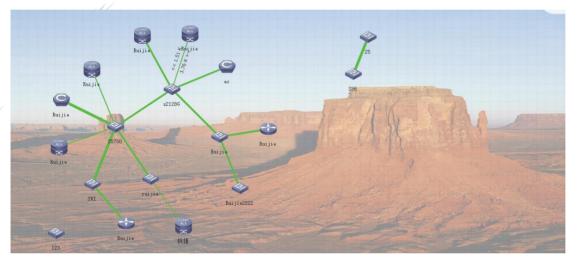
1) Click *Edit,* custom background map

| 0 🔍 | | ~ | | | K 3 K 3 | Q | | ••• • | | |
|---------|---------|---------------|-----|--------|------------|---------------|-----|----------|---------|---|
| _ | Editing | Key P | Aut | o L | Full Sc. | Торо 🛙 |) | More | | |
| í. | | 02 | | 0 | P | بر | | <u>`</u> | | × |
| Add Dev | vice Ad | ld Virtual No | de | Delete | Node | Add Link | Del | ete Link | BGImage | |

2) Click browse, upload pictures, save

| BGImage Settings | | |
|------------------|--------------|--------|
| | Select Image | Browse |

3) topology after background picture uploaded



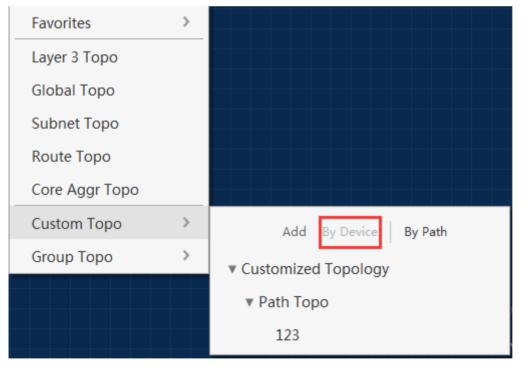
5.6.2 Topology Management

The system has the following topological views by default. the layer 3 topology, the whole network topology, network topology, routing topology, core aggregation topology

| Favorites | > | |
|----------------|---|--|
| Layer 3 Topo | | |
| Global Topo | | |
| Subnet Topo | | |
| Route Topo | | |
| Core Aggr Topo | | |
| Custom Topo | > | |
| Group Topo | > | |
| /// | | |

1. Custom topology

1) Custom topology, click on the corresponding tree node, according to the device to create



2) Enter the view name, select the device, and click Add.

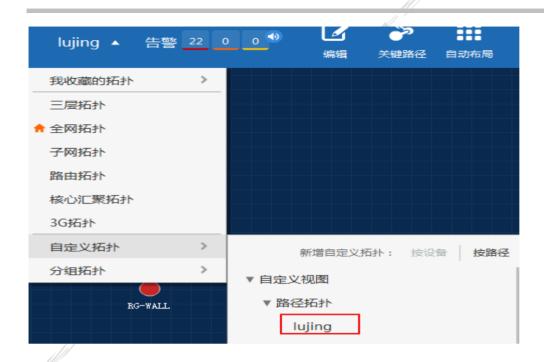
3) Custom topology, by path creation

| Favorites | > | |
|----------------|---|-----------------------|
| Layer 3 Topo | | |
| Global Topo | | |
| Subnet Topo | | |
| Route Topo | | |
| Core Aggr Topo | | |
| Custom Topo | > | Add By Device By Path |
| Group Topo | > | ▼ Customized Topology |
| | | |
| | | ▼ Path Topo |
| | | 123 |

4) Enter the topological name, source IP, destination IP, determine

| Path Topo | × |
|-------------------------------|---|
| Add existing path topology | |
| Path Topology Name: | |
| Source (Device Name/IP): | |
| Destination (Device Name/IP): | |
| OK Cancel | |

Create success

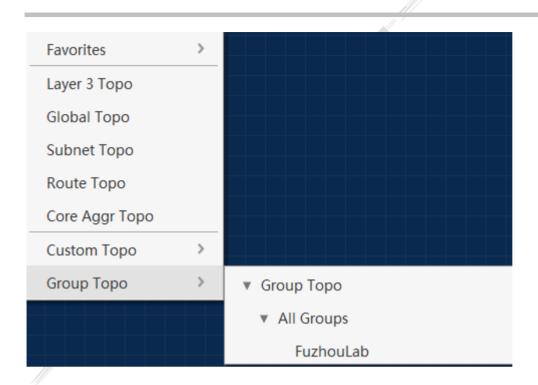


2. Grouped topology

1) Assets in the group for revision



2) Grouping structure, and the device will be synchronized to the grouping topology



3. Set home topology view

1) In the corresponding view, check the icon of the house, then set the home view to take effect



Default access to the home page after entering the topology

4. Save view

1) In the corresponding view, check the star standard, the save view into effect



5.6.3 Other Topology Operation

1. Critical path detection

1) On the menu bar, click on the critical path, enter the source IP, IP, which is divided into immediate and periodic detection.

| Editing | g Key P | Auto L | Full Sc | Topo D | More | | |
|---------------|-----------------------------------|------------------|------------------------------|--------------------------------------|-----------|---|---|
| | | | | | | | |
| Key Path I | Detection | | | | | | |
| | Source | (IP or name): | | | ? | | |
| | | Enable VRF | | | | | |
| | Dest.(Device/terminal | IP or name): | | | 2 | | |
| | | | | | | - | |
| | | | | | | | |
| | | Detec | t Now A | Add to Periodical | Detection | | |
| | | Detec | t Now | Add to Periodical | Detection | | |
| Period: | 5 Min Set | _ | t Now | | | Next Execution | ı |
| Period: SN | 5 Min Set Source(Name o | | | Plan Last Exe | | Next Execution | |
| | | or IP) | Run | Plan Last Exe ne or IP) | cution | | 0 |
| SN | Source(Name o | or IP) 3.254] | Run Dest.(Nan | Plan Last Exe ne or IP) 157.99 | cution | Last Execution Result | 0 |
| SN 1 | Source(Name o VSU-S57[172.29.3 | or IP) 3.254] | Run Dest.(Nan 218.85.1 | Plan Last Exe ne or IP) 157.99 | cution | Last Execution Result ping unreachable | 0 |
| SN 1 | Source(Name o VSU-S57[172.29.3 | or IP) 3.254] | Run Dest.(Nan 218.85.1 | Plan Last Exe ne or IP) 157.99 | cution | Last Execution Result ping unreachable | O |
| SN 1 | Source(Name o VSU-S57[172.29.3 | or IP) 3.254] | Run Dest.(Nan 218.85.1 | Plan Last Exe ne or IP) 157.99 | cution | Last Execution Result ping unreachable | 0 |

2) This is the result of detection.

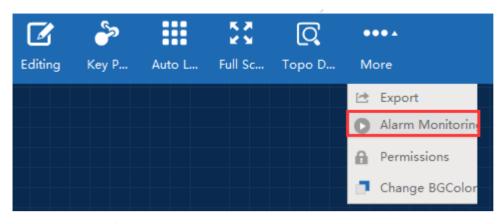
| Detection Result | |
|--|----------------------|
| Ping:Connectable TraceRoute Result: traceroute 172.29.3.2 %< press Ctrl+C to brea Tracing the route to 172 | .29.3.2 |
| Dest.(Name | msec <1 msec <1 msec |
| N18007# 218.85.11 | 57.99 ОК |

3) Add cycle detection, we can set the detection cycle

| Period: | 5 Min Set | Run Plan Last Ex | ecution | Next Execution | |
|---------|-----------------------|-------------------|----------|-----------------------|-----------|
| SN | Source(Name or IP) | Dest.(Name or IP) | VRF Name | Last Execution Result | Operation |
| 1 | VSU-S57[172.29.3.254] | 218.85.157.99 | | ping unreachable 🖸 | 08 |

2. Alarm carousel

1) On the menu bar click alarm carousel, enter the carousel pattern



2) Click the right upper corner of the setting, can set the keep alive time, the display of the alarm level

| Alarm Monitoring Parameter Settings | × |
|--|---|
| Keepalive Time (Unit: Sec 5 30 | |
| Alarm Levels 🗹 Critical 🗹 Major 🗹 Normal | |
| OK Cancel | |

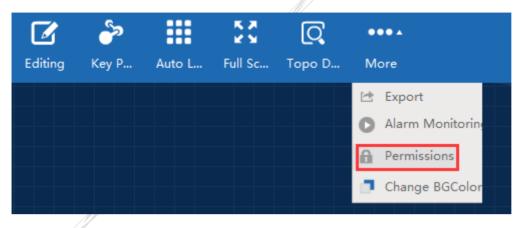
3) Carousel effect as below

🗱 Setting 🔚 Full Screen 🛛 🕲 Exit

| • RG-SNC | | 🛠 Setting 📜 Full Screen 🖉 Exit |
|-------------------------|--|--------------------------------|
| | 🥜 Normal | • |
| | | |
| | | |
| | | |
| | WS6008 (172. 29. 3. 1) | |
| | | |
| | rforms a warm start. | |
| | | |
| | | |
| | Be in Play Status 2Hour8Minuteearlier | |
| | Be in Play Status 2Hour8Minuteearlier | |
| | POEswitch | N 1 |
| | | |
| | | |
| Global Alarm Statistics | | |
| Global Alarm Statistics | | |
| 23:03 g | | |
| 2016-05-10 | | |

3. Permission settings

1) Click on the permissions settings, permissions can be set corresponding to the role of topology



2) Select the role to whom the topology view is visible.

| Topology Vie | ew Permissions Setting | < |
|--------------|------------------------|---|
| Role Name: | Please select 🔻 | |
| | Admin | |
| | Guest | |
| | Sch01 | |
| | Admin1 | |
| | tempadmin | |
| | | |
| | | |
| | | |
| | | |
| | OK Cancel | |

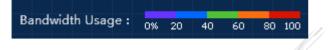
4. The administrator login can only see the topology view which he has the permission

5. Normal and traffic mode

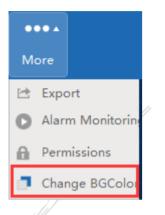
1) Normal mode, with the line of the thickness of the representative bandwidth



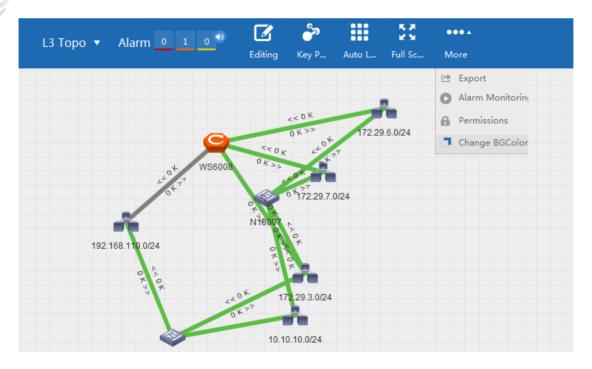
2) Traffic mode, color of the line on behalf of bandwidth utilization



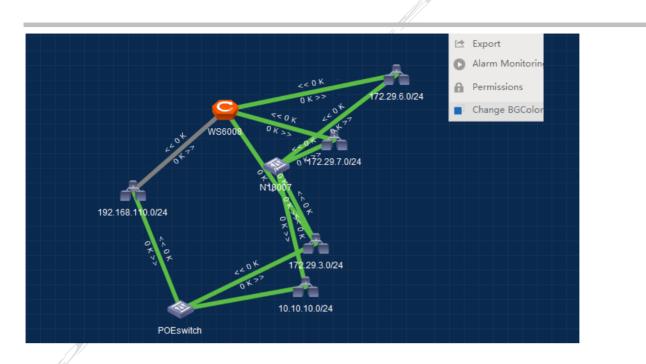
3) Switching background, on the menu bar, click "Change BGColor"



White

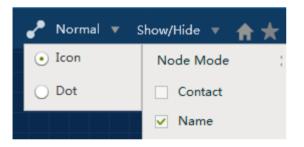


Dark blue

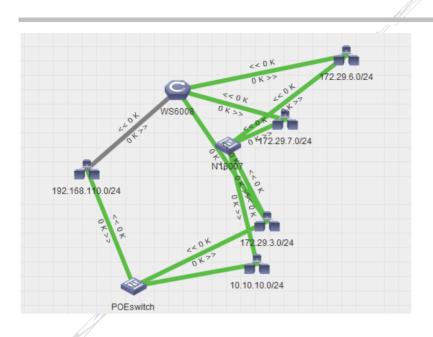


6. Show / hide

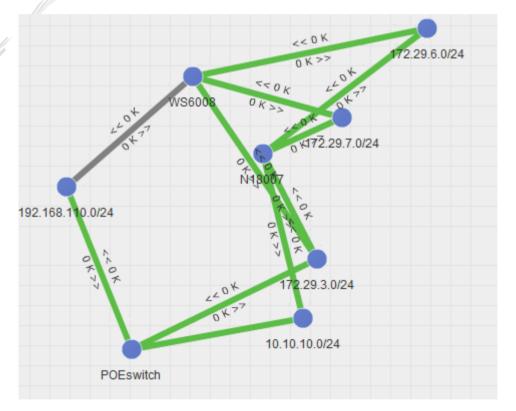
1) Dot / icon display mode switch



Icon pattern

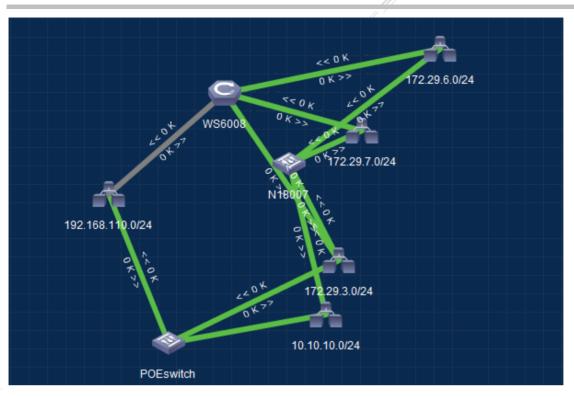


Dot pattern, display required less space



2) Show / hide related items, and can be customized to display / hide the information in the topology

Note: the number of +AP in the terminal list exceeds 1K, in order to ensure the display effect, the topology will not show PC and AP



7. Automatic layout

Spread out the nodes and links according to the principle that the linked notes attract each other, and non-linked notes repeal each other. It gets fine effect if the nodes is less than 200.

| 13 Topo 🔻 | Alarm 0 1 0 🖤 | | ð | | к ж К Ж | ••• • |
|-----------|---------------|---------|-------|--------|------------|-------|
| | | Editing | Key P | Auto L | Full Sc | More |

8. Other common operations

1) Double click the icon to enter the device details page, we can view the device related information, and customize the icon

| Detailed Device Info and | l Operation | |
|--------------------------|----------------------|--|
| | Name: | WS6008 |
| | sysOID: | 1.3.6.1.4.1.4881.1.3.1.1.115 |
| | Device type: | AC |
| | Device model: | WS6008 |
| 📝 Change Icon | Connectivity Status: | Reachable |
| Basic Info | IP: | 172.29.3.1 |
| Alarm Info | Mask: | 255.255.255.0 |
| | MAC: | 58:69:6c:20:ba:84 |
| Ping | Description: | |
| TraceRoute | | Ruijie Networks. |
| Int List | | |
| IP Address Table | Remarks: | |
| Path Detection | Runtime: | 0:02:18.39 |
| Path Detection | PoE Support : | No |
| Detailed info | | |
| Web Mgmt | | |
| Telnet ? | | Synchronize Device |

2) You can input keyword on the upper right corner to search when there are too many devices.



After locating the device, double click the device information in the search area to highlight the topology.

| iearch Result | | | | | | | | | |
|---------------|--------|------------|-------------------|----------|-----------|----------|--|--|--|
| Туре | Name | IP | MAC | Int Name | Int Alias | Int Note | | | |
| AC | WS6008 | 172.29.3.1 | 58:69:6c:20:ba:84 | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

3) Zoom in/out



4) Supports full screen display: full screen display of the browser, which is prompted by the full screen mode will not be able to enter and edit keyboard input, do you want to continue? "We choose yes to enter. To exit the full screen mode, press the ESC key to exit the full screen mode.

| | ి | | к.ж. К.Ж. | Q | •••• |
|---------|-------|--------|--------------|--------|------|
| Editing | Key P | Auto L | Full Sc | Topo D | More |

5) export topology file format can be PNG

| | ా | | 5 A S | Q | |
|---------|-------|--------|---------|--------|------------------|
| Editing | Key P | Auto L | Full Sc | Topo D | More |
| | | | | | 🖄 Export |
| | | | | | Alarm Monitoring |
| | | | | | Permissions |
| | | | | | Change BGColor |

6) In the topology view, the general information of the alarm



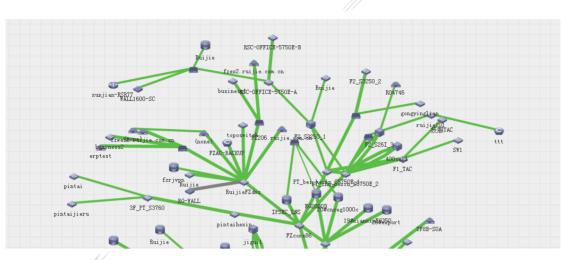
Red means a serious warning, orange is an important warning, yellow said the general alarm, click on the number can be viewed at the corresponding level of alarm information.

| Alarm Leve | Alarm Descriptic | Device Name | IP | Alarm Time | Operatio |
|------------|------------------|-------------|------------|---------------------|--------------|
| P* | The device pe | WS6008 | 172.29.3.1 | 2016-05-10 20:54:46 | R (E) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

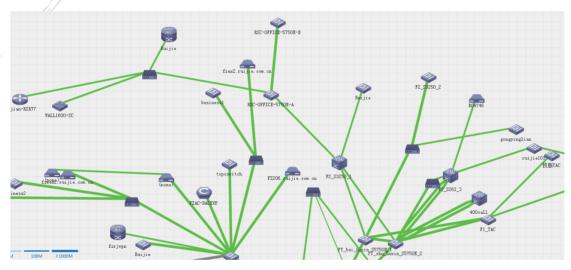
7) Topology can zoom in/out



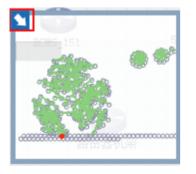
Zoom out



Zoom in

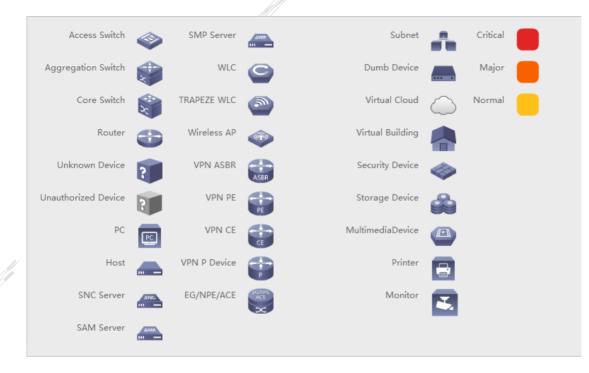


Show / hide view: display a miniature version of topology display, can choose a region to show.
 Click the image below to hide.





9) Shows the specific meaning of device icon, such as what the shape of the device shows what device, while the alarm level of different display color icon is not the same.



5.7 Performance Monitoring

5.7.1 Setting of Performance Parameter

Go to *Performance > Modify Indicators, then* click the *Add* button to add a page, as shown in the following diagram:

| â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | Topology > |
|--|-------------------------------|---------|-------------|--------|-----------|--------|-----------------|----------|--|
| Performa | erformance > Monitored Device | | | | | | | | |
| | | IP: | | Name | : | м | odel: | - | l de la constante de |
| Realt | ime Monitor | Status: | ~ | Search | | | | | |
| ○ Monitored Device List +Add × Delete > Start Realtime Monitor ■ Stop Realtime Monitor I Modify Monitoring Indicators in Batches | | | | | | | | | |
| | Name | | IP | Туре | Model | R | ealtime Monitor | r Status | Operation |
| | WS6008 | | 172.29.3.1 | AC | WS6008 | S | tarted | | Modify Indicators QView Indicator Thresholds Stop Realtime Monitor |
| | POEswit | ch | 172.29.3.2 | Switch | S2928G-12 | P S | tarted | | Modify Indicators QView Indicator Thresholds Stop Realtime Monitor |
| | N18007 | | 172.29.1.6 | Switch | S8607E | s | tarted | | Modify Indicators QView Indicator Thresholds Stop Realtime Monitor |
| | | | | | | | | | 🖂 🥪 🖂 🚺 🚺 🚺 🔽 Item Per PageTotal Pages:1/1Total3Record |

Go to Performance > Global Perf Threshold, then select the threshold needed adjust, click "Modify".

| Performance > View Global Performance Indicator Thresholds | | | | | | | |
|--|--------------------|-------------------------|---------------------------|--|--|--|--|
| • Device Monitoring Indicators | | | | | | | |
| Indicator Name | Description | Level 1 Upper Threshold | Level 2 Upper Threshold 🏴 | | | | |
| CPU Utilization (%) | CPU Utilization | 85 | 90 | | | | |
| Memory Utilization(%) | Memory Utilization | 85 | 90 | | | | |
| Temperature(degrees Celsius) | Temperature | 55 | 65 | | | | |
| Disk Utilization(%) | Disk Utilization | 85 | 90 | | | | |

| Details On Global Pe | Details On Global Performance Indicator Thresholds | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|
| • Details On Globa | Details On Global Performance Indicator Thresholds | | | | | | | | | |
| Name: CPU Utilization (%) | | | | | | | | | | |
| Description | Description : CPU Utilization | | | | | | | | | |
| ✓ Alarm will be triggered if the value is greater than threshold. | | | | | | | | | | |
| Level 1 Linner | 85.0 (%)Normal alarm if monitored value is greater than this. | | | | | | | | | |
| Level 2 Upper Threshold | 90.0 (%)Major alarm if monitored value is greater than this. | | | | | | | | | |
| Level 3 Upper Threshold | 95.0 (%)C itical alarm if monitored value is greater than this. | | | | | | | | | |
| | | | | | | | | | | |
| | Modify Cancel | | | | | | | | | |

5.7.2 Device Management

Go to *Performance >Monitored Device >Add >Select Device >Save,* You can enter the device IP, device name, device type or real-time monitoring status, click the search button to query, as shown below :

| Pe | rformance > Monitored Device | | |
|----|------------------------------|--------------|--|
| | IP: | Name: Model: | |
| | Realtime Monitor Status: | Search | |

Go to Performance, Click "*Add*" to add a monitor device, then select device, and then click the *Add and Save* button to complete the adding operation of the monitoring device,

5.8 Monitor Real-time Performance

5.8.1 Monitor Real-time Device

Go to Performance > Monitored Device > Start/Stop Real-time Monitor.

| ^ | | | | | | | | | | | | Topologium |
|----------|----------------------------|------------|---------------------|--------|-----------|-------------|--------------------|--------------|---------|----------------------|---------------------------------|----------------------------------|
| | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | Systen | n | | | Topology >>> |
| Performa | ormance > Monitored Device | | | | | | | | | | | |
| | IP: Name: Model: | | | | | | | | | | | |
| Real | time Monitor | Status: | ~ | Search | | | | | | | | |
| • Mor | nitored Dev | ice List | | | | | +Add > | Delete 🕨 | Start R | ealtime Monitor = Si | top Realtime Monitor 🖋 Modify I | Monitoring Indicators in Batches |
| | Name | | IP | Туре | Model | | Realtime Monito | r Status | | Operation | | |
| | N18007 | | 172.29.1.6 | Switch | S8607E | 5 | stopped | | | Modify Indicators | QView Indicator Thresholds | Start Realtime Monitor |
| | WS6008 | | 172.29.3.1 | AC | WS6008 | 5 | topped | | | Modify Indicators | QView Indicator Thresholds | Start Realtime Monitor |
| | POEswit | ch | 172.29.3.2 | Switch | S2928G-12 | P S | topped | | | Modify Indicators | QView Indicator Thresholds | Start Realtime Monitor |
| | | | | | | | | | | | 1 Go 10 🗹 Item Per | PageTotal Pages:1/1Total3Record |
| • Rea | ltime Perfo | rmance Col | lection Interval Se | tting | | | | | | | | |
| | | | | | Re | altime Perf | ormance Collection | n Interval : | 30s | ~ | | |
| | | | | | | | Save | | | | | |
| | | | / | | | | | | | | | |

Enter the monitor device management page. You can see the "real time performance sample frequency settings" column.

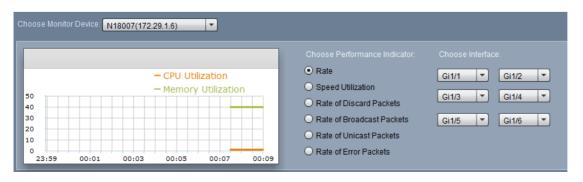
| Realtime Performance Collection Interval Setting | |
|--|---|
| | Realtime Performance Collection Interval : 1 minute |
| | Save |

5.8.2 Viewing Single Device

Go to Performance > Single-device View and then select the device name, and then select the system to refresh the view.

| Choose Monitor Device: | | 1 |
|------------------------|--|---|
| | | |
| | N18007(172.29.1.6) WS6008(172.29.3.1) | |
| | POEswitch(172.29.3.2) | |
| | | |
| | | |
| | | |

A minute later, the system information collection is completed, you can see the device performance in the upper left corner view:



| Select time range. | | |
|---|-----------------|--|
| | | 10 Minutes 30 Minutes 1 Hour 2 Hours 3 Hours |
| Choose Performance Indicator: | | |
| Rate | Gi1/1 	 Gi1/2 | |
| O Speed Utilization | Gi1/3 T Gi1/4 T | |
| Rate of Discard Packets | | |
| Rate of Broadcast Packets | Gi1/5 T Gi1/6 T | |
| Rate of Unicast Packets | | |
| Rate of Error Packets | | |

Select monitoring indicators and monitoring interfaces.

| Choose Monitor Device: N18007(172.29.1.6) | | |
|---|---|--|
| - CPU Utilization - Memory Utilization 50 40 30 20 10 0 00:00 00:02 00:04 00:06 00:08 00:10 | Choose Performance Indicator: Rate speed Utilization Rate of Discard Packets Rate of Broadcast Packets Rate of Unicast Packets Rate of Error Packets | Choose Interface: Gi1/1 Gi1/2 Gi1/2 Gi1/3 Gi1/4 Gi1/5 Gi1/6 Gi1/6 |

5.8.3 Comprehensive View

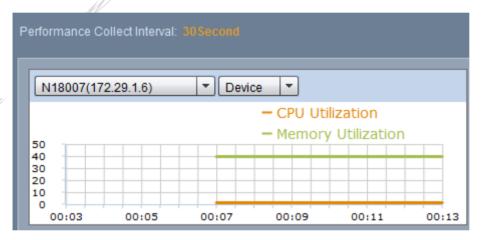
Go to Performance > All View then select monitoring device

| Pe | Performance Collect Interval: 30Second | | | | | | | | | | |
|----|--|---------|--|--|--|--|--|--|--|--|--|
| | N18007(172.29.1.6) | | | | | | | | | | |
| | N18007(172.29.1.6) | | | | | | | | | | |
| | WS6008(172.29.3.1) | | | | | | | | | | |
| | POEswitch(172.29.3.2) | | | | | | | | | | |
| | | | | | | | | | | | |

Select the performance indicator, "device" or "interface":

| Performance Collect Interval: 30.Sec | | |
|--------------------------------------|--------|---------|
| | | |
| N18007(172.29.1.6) | | |
| | | |
| | Device | |
| | Device | |
| | | |
| | Gi1/1 | |
| | Gi1/2 | ▼ |
| | | |

Select monitoring device indicator:



5.8.4 Viewing History Performance

Go to *Performance > History Per Query* then select device and indicator.

| Performan | Performance > History Perf Query | | | | | | | | | | | |
|-----------|----------------------------------|-------|---------|------|---------------|---|-----------------|-------|------------------------|--------------|--|--|
| IP: | | Name: | Vendor: | ~ | Model: | • | Search | | | | | |
| • Selec | ted Device List | | | | | | | +Sele | ct Device 🖌 Deselect 🚄 | Deselect All | | |
| | Name | IP ÷ | Model + | Mask | SNMP Template | | Telnet Template | | CWMP Template | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| > History Perf Q | | | | | | | | | | // | | | |
|---|---|---|--|---|---|--|--|--|---|--|---|--|---------------------|
| , , | Jery | | | | | | | | | | | | |
| | Name: | Vendor | r: 🔽 | | | | ~ | Мо | del: | Search | 1 | | |
| Selected Device List +Select Device →Deselect → Deselect Al | | | | | | | | | | | | | |
| Name | ID ÷ | | | Mode | ¢ | | | | | Mask | SNMP Template | Telnet Template | CWMP Template |
| N18007 | 172.29.1 | .6 | | S8607 | E | | | | | 255.255.255.252 | SNMPV2c | no_pass | test |
| POEswitch | 172.29.3 | .2 | | S2928 | G-12P | | | | | 255.255.255.0 | SNMPV2c | default | default |
| WS6008 | 172.29.3 | .1 | | WS60 | 08 | | | | | 255.255.255.0 | SNMPV2c | default | default |
| | | | | | | | | | | N 9 D 0 | 1 Go 10 🗸 | Item Per PageTotal F | ages:1/1Total3Recor |
| Query Set | | | | | | | | | | | | | |
| CPU Utilization | ~ | Query Time:2 | 016- | 05-11 | | | | Qı | Jery | Export | | | |
| Device Perform | ance List | | | | | | | | _ | | | | |
| ame | Device IP | Moni | | | | | | | Sat 7 | Line card/Device | MAX + | AVG + | MIN + |
| | | | | _ | - | _ | | - | 14 | | | | |
| | | 2 | 21 | 15 16 | 17 | 18 | 19 | 20 | 21 | | | | |
| 0 0 0 | Name N18007 POEswitch WS6008 Uuery Set PU Utilization Newice Performation | d Device List Name IP € N18007 172.29.1 POEswitch 172.29.3 NX56008 172.29.3 Utery Set PU Utilization ✓ Evice Performance List | d Device I ist Name IP N18007 172.29.1.6 POEswitch 172.29.3.2 WS6008 172.29.3.1 Utilization Utilizatio | d Device List Name IP N18007 172.29.1.6 POEswitch 172.29.3.2 WS6008 172.29.3.1 Uurry Set Uurry Set Uurry Curry Time:2016 Evoice Performance List Ime Device IP Moni 19 20 | IP • Model Name IP • Model N18007 172.29.1.6 58607 POEswitch 172.29.3.2 52928 WS6008 172.29.3.1 WS600 tuery Set | ID evice List IP ● Model ● N18007 172.29.1.6 S8607E POEswitch 172.29.3.2 S29286-12P WS6008 172.29.3.1 WS6008 Utury Set Villion Villion Evice Performance List Sun Mon Tuet Ime Device IP Moni 20 8 9 | ID evice List Model ● N18007 172.29.1.6 S8607E POEswitch 172.29.3.2 S29286-12P WS6008 172.29.3.1 WS6008 tuery Set Second 1000 Second 1000 revice Performance List Sun Mon Tue.Wed Sun Mon Tue.Wed 19 1 2 3 4 20 8 9 10 1 < | ID evice List Model € N18007 172.29.1.6 S8607E POEswitch 172.29.3.2 S29286-12P WS6008 172.29.3.1 WS6008 Utury Set Court Time: S2016-05-11 Evice Performance List Court Time: Sum Mon TueWed Thu Imme Device IP Monti 1 2 3 4 5 20 8 9 10 11 12 | Id Device List Model € N18007 172.29.1.6 S8607E POEswitch 172.29.3.2 S2928G-12P WS6008 172.29.3.1 WS6008 Utury Set Control (100 - 100 | Id Device List Model ● N18007 172.29.1.6 S8607E POEswitch 172.29.3.2 S2928G-12P WS6008 172.29.3.1 WS6008 Utury Set Vision Query Time:2016-05-11 Query Control of the second sec | Id Device List Model ÷ Mask N18007 172.29.1.6 S8607E 255.255.255.252 POEswitch 172.29.3.2 S29286-12P 255.255.255.0 WS6008 172.29.3.1 WS6008 255.255.255.0 Werey Set Export Export PU Utilization ✓ Query Time:2016-05-11 © Query Export Vervice Performance List Sun Mon TueWed Thu Fri Sat Line card/Device 19 1 2 3 4 5 6 20 8 9 10 11 12 13 14 | IP + Model + Mask SINAP Template N18007 172.29.1.6 S8607E 255.255.252 SINAPYCc POEswitch 172.29.3.2 S29286-12P 255.255.255.0 SINMPV2c WS6008 172.29.3.1 WS6008 255.255.255.0 SINMPV2c Wseo08 172.29.3.1 WS6008 255.255.255.0 SINMPV2c Image: Sinme with the set of t | |

5.9 Alarm Setting

5.9.1 Alarm Parameter

Go to Alarm > Alarm parameter to set alarm parameter.

| Alarm > Alarm Parameter |
|---|
| Alarm Parameter |
| * Alarm History : Alarms within 30 days are saved by the system. |
| * PING Delay Threshold - During a connection test, if the ping response delay exceeds 1000 milliseconds, the system generates a ping delay alarm. |
| * Alarm Expired : All alarms will expire in 3 days. They will be set to Solved and remark "Alarm expired" will be added automatically. |
| Alarm Sound Settings |
| Critical: 🔇 🕂 Select |
| Major : 🔇 🐳 Select |
| Normal: 🔇 🕂 Select |
| Inform : 🔇 🕂 Select |
| Update Default |

5.9.2 Alarm Event Management

Go to *Alarm > Alarm Event > Add* or *Modify alarm events*.

| Alarm > Alarm Event > Add trap | | |
|--------------------------------|---|--------|
| • Add trap | | |
| • Add trap | | |
| | * Event : | |
| | * Trap ID : | |
| | Level : Critical 🔽 | |
| | *Category: Device 🗸 | |
| | *Status: Enabled | |
| | | |
| | Event Reason : | \sim |
| | | \sim |
| | | _ |
| | | ~ |
| | Repair Suggestion : | |
| | | |
| | | ~ |
| | Event Message : | |
| | | |
| | | |
| | | |
| | Add Return | |
| | Add Return | |
| • Update Trap Settings | Add Return | |
| Update Trap Settings | | |
| Update Trap Settings | Event : Cold Start | |
| • Update Trap Settings | Event: Cold Start Trap ID: 1.3.6.1.6.3.1.1.5.1 | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform 🔽 | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform v Category : Device v | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform v Category : Device v Status : Enabled v | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform v Category : Device v | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform v Category : Device v Status : Enabled v | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform \checkmark Category : Device \checkmark Status : Enabled \checkmark The device is powered on. | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform \checkmark Category : Device \checkmark Status : Enabled \checkmark The device is powered on. | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform \checkmark Category : Device \checkmark Status : Enabled \checkmark The device is powered on. Event Reason : | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform \checkmark Category : Device \checkmark Status : Enabled \checkmark The device is powered on. | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform \checkmark Category : Device \checkmark Status : Enabled \checkmark The device is powered on. Event Reason : | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform v Category : Device v Status : Enabled v The device is powered on. Event Reason : Repair Suggestion : | |
| Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform V Category : Device V Status : Enabled V The device is powered on. Event Reason : Repair Suggestion : The device performs a cold start. | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform v Category : Device v Status : Enabled v The device is powered on. Event Reason : Repair Suggestion : | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform V Category : Device V Status : Enabled V The device is powered on. Event Reason : Repair Suggestion : The device performs a cold start. | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform V Category : Device V Status : Enabled V The device is powered on. Event Reason : Repair Suggestion : Event Message : The device performs a cold start. | |
| • Update Trap Settings | Event : Cold Start Trap ID : 1.3.6.1.6.3.1.1.5.1 Level : Inform \checkmark Category : Device \checkmark Status : Enabled \checkmark The device is powered on. Event Reason : Repair Suggestion : The device performs a cold start. Event Message : | |

5.9.3 Alarm Generation Rule

Go to Alarm > Alarm Rule> Add and then fill in the rule information.

| | // [/] |
|--------------------------|------------------|
| Alarm > Alarm Rule > Add | Alarm Rule |
| • Add Alarm Rule | |
| * Name: | |
| Rule Description : | Ç |
| Event Source Setti | ing |
| Match Type: | Yes 🗸 |
| Select Device : | |
| Event Type Setting | J |
| Match Type : | Yes |
| Select Event Type : | Event |
| | Add Back to List |
| | |

5.10 Viewing Alarm Message

5.10.1 Real Time Alarm

Go to *Alarm > Real time Alarm Monitor* then check the alarm information in the alarm list.

| Alarm > R | Jarm > Realtime Alarm View | | | | | | | | | | | | |
|-----------|---|--------|------------|------------|---|------------|---------------------|------------------------|----------------|----------------------------|--|--|--|
| Display | Display: Latest 20 alar 🔍 Refresh Interval: 10 seconds 🔽 | | | | | | | | | | | | |
| • Real | Realtime Alarm View ✓Addnowledge ∠dear × Delete ∆Export | | | | | | | | | | | | |
| ✓ | Level | Name | Device IP | Event | Description | ACK Status | First Alarm Time | Last Alarm Time | Repeated Times | Operation | | | |
| ✓ | ۲ | WS6008 | 172.29.3.1 | Warm Start | The device performs a warm start. | UnAcked | 2016-05-09 23:36:46 | 2016-05-10 20:54:46 | 4 | Detail Adjust Threshold | | | |
| | | N18007 | 172.29.1.6 | Link Up | The interface Gi1/14(link-to- S2910C 14 TEMP) of device (N18007(172.29.1.6)) is up. | UnAcked | 2016-05-10 15:13:13 | 2016-05-10 15:13:13 | 1 | Detail Adjust Threshold | | | |

Click "Acknowledge" to change the alarm status.

| Alarm > R | Jarm > Realtime Alarm View | | | | | | | | | | | | |
|-----------|--|--------|------------|------------|---|------------|---------------------|------------------------|----------------|----------------------------|--|--|--|
| Display | Display: Latest 20 alar 🔍 Refresh Interval: 10 seconds 💟 | | | | | | | | | | | | |
| • Real | Realtine Alarm View ✓ Clear × Delete △ Export | | | | | | | | | | | | |
| ✓ | Level | Name | Device IP | Event | Description | ACK Status | First Alarm Time | Last Alarm Time | Repeated Times | Operation | | | |
| • | ۳ | WS6008 | 172.29.3.1 | Warm Start | The device performs a warm start. | UnAcked | 2016-05-09 23:36:46 | 2016-05-10 20:54:46 | 4 | Detail Adjust Threshold | | | |
| • | | N18007 | 172.29.1.6 | Link Up | The interface Gi1/14(link-to- S2910C 14 TEMP) of device (N18007(172.29.1.6)) is up. | UnAcked | 2016-05-10 15:13:13 | 2016-05-10 15:13:13 | 1 | Detail Adjust | | | |

Click on the "*clear"*, to change the alarm level of alert.

| larm > Re | ealtime Alar | m View | | | | | | | | |
|-----------|--------------|----------|-----------------|---------------|---|------------|---------------------|------------------------|---------------------|----------------------------|
| | | | | | | | | | | |
| Display: | Latest 20 | alar 🗸 🛛 | Refresh Interva | l: 10 seconds | ~ | | | | | |
| | | | | | | | | | | |
| Real | time Alarn | n View | | | | | | | Acknowledge 🖌 Clear | ×Delete △Export |
| | Level | Name | Device IP | Event | Description | ACK Status | First Alarm Time | Last Alarm Time | Repeated Times | Operation |
| | 2 | WS6008 | 172.29.3.1 | Warm Start | The device performs a warm start. | UnAcked | 2016-05-09 23:36:46 | 2016-05-10 20:54:46 | 4 | Detail Adjust Threshold |
| | 2 | N18007 | 172.29.1.6 | Link Up | The interface Gi1/14(link-to- S2910C 14 TEMP) of device (N18007(172.29.1.6)) is up. | UnAcked | 2016-05-10 15:13:13 | 2016-05-10 15:13:13 | 1 | Detail Adjust |
| | | | | | | | | | | |

Click on the alarm list Details icon

| Alarm > Alarm Details | | | |
|-----------------------|--|----------------------|---|
| • Alarm Details | | | ✓Acknowledge ⊖Cancel Acknowledgment →Clear ×Delete |
| Level | P | Event Name | Warm Start |
| First Alarm Time | 2016-05-09 23:36:46 | Last Alarm Time | 2016-05-10 20:54:46 |
| Device IP | 172.29.3.1 | Alarm Category | Device |
| ACK Status | UnAcked | Clear Status | Not Cleared |
| Repeated Times | 4 | Alarm Description | The device performs a warm start. |
| Effect | The device is restarted. The network performance is restored. | Alarm Reason | The administrator configures scheduled auto-restart due to CPU auto-protection, temperature or other error |
| Repair Suggestion | | | |
| 111 | | | |

Add warning annotation, Add Alarm Note, and click Confirm. And then see the new addition of comments in the "alarm notes list".

| Add Alarm Note | | × |
|-------------------|----------------------------------|----------------------|
| Device IP: 1 | 72.29.3.1 | |
| Description : 1 | The device performs a warm start | |
| | | ~ |
| * Note : | | \sim |
| L | | |
| | Confirm Cancel | |
| | | |
| • Alarm Note List | | |
| Note Maker | Note Time | Note |
| | 2014-12-23 02:00:00 | Alarm expired |
| | 2014-12-23 02.00.00 | Alarin expired |
| admin | 2016-05-11 00:57:56 | temperature too high |

Go to *Alarm > Realtime Alarm View then* click on the top right corner of the "Export" button.

| | | | | | | | | / | | | | | |
|---------|--|----------|-----------------|---------------|---|------------|---------------------|------------------------|---------------------|----------------------------|--|--|--|
| rm ≻R | ealtime Alar | m View | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | = | | | | | | | | |
| Display | Latest 20 |) alar ⊻ | Refresh Interva | l: 10 seconds | ∠ | | | | | | | | |
| | P Realtime Alarm View ✓Acknowledge ⊋Gear ×Delete △Excort | | | | | | | | | | | | |
| • Rea | itime Alarr | n view | | | | | | ×. | Acknowledge - Clear | A Delete | | | |
| | Level | Name | Device IP | Event | Description | ACK Status | First Alarm Time | Last Alarm Time | Repeated Times | Operation | | | |
| | ۳ | WS6008 | 172.29.3.1 | Warm Start | The device performs a warm start. | UnAcked | 2016-05-09 23:36:46 | 2016-05-10 20:54:46 | 4 | Detail Adjust Threshold | | | |
| | 2 | N18007 | 172.29.1.6 | Link Up | The interface Gi1/14(link-to- S2910C 14 TEMP) of device (N18007(172.29.1.6)) is up. | UnAcked | 2016-05-10 15:13:13 | 2016-05-10 15:13:13 | 1 | Detail Adjust Threshold | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

If want to delete alarm, go to Alarm > Realtime Alarm View then select the check box and click "delete".

| Alarm > Re | altime Alar | m View | | | | | | | | | | | | |
|------------|---|--------|------------|------------|---|------------|---------------------|------------------------|----------------|----------------------------|--|--|--|--|
| Display: | Display: Latest 20 alar 🔍 Refresh Interval: 10 seconds 🔽 | | | | | | | | | | | | | |
| • Real | P Realtime Alarm View ✓Acknowledge →Clear ×Delete △Export | | | | | | | | | | | | | |
| | Level | Name | Device IP | Event | Description | ACK Status | First Alarm Time | Last Alarm Time | Repeated Times | Operation | | | | |
| ✓ | 2 | WS6008 | 172.29.3.1 | Warm Start | The device performs a warm start. | UnAcked | 2016-05-09 23:36:46 | 2016-05-10 20:54:46 | 4 | Detail Adjust Threshold | | | | |
| | R | N18007 | 172.29.1.6 | Link Up | The interface Gi1/14(link-to- S2910C 14 TEMP) of device (N18007(172.29.1.6)) is up. | UnAcked | 2016-05-10 15:13:13 | 2016-05-10 15:13:13 | 1 | Detail Adjust Threshold | | | | |
| | | // | | | | | | | | | | | | |

5.10.2 History Alarm

Go to *Alarm > Historical Alarm* then Select the check box to confirm the alarm information, click "Acknowledge" / "*Cancel Acknowledgement*" / "*Clear*" / "*delete*" Search Result.

| • Hist | orical Alar | m List | | | | | | ✓Acknowledge ⊖Cancel Acknowledgment ∠Clear ×Delete ×Delete Search Resu | | | | |
|--------|-------------|--------|------------|------------|--|----------------|------------|--|------------------------|------------------------|----------------|--|
| | Level | Name | Device IP | Event | Description | Alarm Category | ACK Status | Clear Status | First Alarm Time | Last Alarm Time | Repeated Times | |
| | ۲ | WS6008 | 172.29.3.1 | Warm Start | The device performs a warm start. | Device | UnAcked | Not Cleared | 2016-05-09 23:36:46 | 2016-05-10 20:54:46 | 4 | |
| | ۲ | N18007 | 172.29.1.6 | Link Down | The interface Gi1/23(link-to- WS6008- Gi0/6) of device (N18007 (172.29.1.6)) is down. | Device | Acked | Cleared | 2016-05-10 20:53:00 | 2016-05-10 20:53:00 | 1 | |
| | ۲ | N18007 | 172.29.1.6 | Link Down | The interface Gi1/23(link-to- WS6008- Gi0/6) of device (N18007 (172 29 1 6)) | Device | Acked | Cleared | 2016-05-10 20:44:27 | 2016-05-10 20:44:27 | 1 | |

Click on the "Device Name" link to view the device information pages, view device details.

| | | | 11 | |
|--|---------------------|-----------------|---------------------------|---|
| Device > Device-WS6008(172.29.3.1)Details | | | | |
| Device Information | | | | |
| | | Basic Info CPU | Memory Temperature | Alarm |
| 1 2 3 4 5 6 7 8 9 10 11 | Name | WS6008 | IÞ | 172.29.3.1 |
| Green=Administration status UP + working status UP | Туре | AC | Model | WS6008 |
| Red=Administration status DOWN + working status DOWN | Device Vendor | Ruijie Networks | SysOID | 1.3.6.1.4.1.4881.1.3.1.1.115 |
| | Mask | 255.255.255.0 | MAC Address | 58:69:6c:20:ba:84 |
| | Contact Person | | Device Location | |
| | Runtime | 3:07:27.29 | Last Synchronization Time | 2016-05-11 00:00:37 Synchronizing device information |
| | Connectivity Status | Reachable | Network Management Status | SNMPConnected TelnetConnected WMP Disconnected. Reason:The CWMP template related to device has a parameter error or CMMP protocol access to device failed # Update |
| | Hardware Version | 1.00 | Software Version | AC_RGOS 11.1(5)B8, Release |

5.10.3 Invalid Alarm Message

Go to *Alarm > Undefined Alarm Event then* click "*Disable Uspecified Alarm Generation*" to disable the function.

| Marm > Under | efined Alarm Ev | vent | | | | | | | | | | |
|--|--|------|-----------|-------|-------------|----------|------------------|-----------------|------------------|--|--|--|
| Device IP: | Device IP: Level: V Last Event Time: To Search | | | | | | | | | | | |
| Undefined Alarm Event List Stable Unspecified Alarm Generation XDelete | | | | | | | | | | | | |
| | Level | Name | Device IP | Event | Description | Category | First Event Time | Last Event Time | Repetition Count | | | |

5.11 Alarm Notification

5.11.1 Mail Notification

Go to System > Mail server Setting > Update to set the information of mail server.

| System > Mail Server Setting | | | |
|---|------------------------------|------------------|---|
| • Primary Mail Server Setting | | | |
| | * Mail Server Address : | smtp.163.com | |
| | * Port Number: | 25 | |
| | Authentication Required : | Yes | • |
| | * Mail User Name : | wiwchenx | |
| | * Password : | ••••• | |
| | * Confirm Password : | | - |
| | * Mail Destination Address : | wiwchenx@163.com | |
| Secondary Mail Server Setting | | | _ |
| | Mail Server Address : | | |
| | | | |
| | Port Number : | | |
| | Authentication Required : | res 🗸 | |
| | Mail User Name | | |
| | Password : | | |
| | Confirm Password : | | |
| | Mail Destination Address : | | |
| | Update | turn Email Test | |

Click the "*Email Test*" to check whether the mail server is configured successfully.

| Email Sending | g Test | | X |
|---------------|-----------|--------|---|
| * Re | cipient : | | |
| | Send | Cancel | |

5.11.2 Setting Mail Warning Notification

Go to Alarm > Alarm Notification > Select Role > Add > Select Device > Select Alarm Level > Select Alarm Event.

| Alarm > A | larm Notification | | | |
|-----------|-------------------|------------------|------------------------------|---|
| • Role | e List | | | +Select Role ×Delete |
| | Select Role | Role Description | Status | Operation |
| | Admin | | Configuration Uncompleted | Alarm Notification Setting |
| | | | 🖌 Item Per Pa | geTotal Pages: <mark>1/1</mark> Total1Records |

| â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | | | | Topology >> | |
|----------|--|---------|-------------|-------|------|--------|----------|---------|---|---------------|-----------------|----------------------|--|
| Alarm No | Narm Notification > Current RoleAdmin > Alarm Notification Setting | | | | | | | | | | | | |
| | Select Device Select Alarm Select Alarm Event | | | | | | | | | | | | |
| D | Device Alarm Level Alarm Event | | | | | | | | | | | | |
| IP: | | N | ame: | Mod | el: | | Sea | rch | | | | | |
| • Se | elected Devi | ce List | | | | | | | + | Select Device | ×Delete 📢 👒 🖂 I | ¤ ₩ ₩ ₽ ₽ ₽ ₽ | |
| | Name | | IP ÷ | | | Туре | | Model : | • | 0 | peration | | |

After adding device, check the message alarm to the device.

| Alarm I | arm Notification > Current RoleAdmin > Alarm Notification Setting | | | | | | | | | | | |
|---------|---|---------------|------------|-----------------|------------|-----------------------|-----------|---------------------------------------|---|--|--|--|
| | | Select Device | | t Alarm evel | + | Select Alarm Event | | | | | | |
| | Device Alarm Level Alarm Event | | | | | | | | | | | |
| I | IP: Name: Model Search | | | | | | | | | | | |
| 0 5 | Selected Device List +Select Device ×Delete ◁ ☆ □ ☆ □ ☆ □ ☆ □ ☆ 2 ☆ | | | | | | | | | | | |
| | | Name | IP + | Туре | Model + | Operation | _ | | | | | |
| | | WS6008 | 172.29.3.1 | AC | WS6008 | Voice Noti | ification | Mail Notification | WhatsApp Notification 🗌 SMS Notification 🗹 Realtime Alarm Display | | | |
| | | N18007 | 172.29.1.6 | Switch | S8607E | Voice Noti | ification | Mail Notification | WhatsApp Notification SMS Notification 🗹 Realtime Alarm Display | | | |
| | | POEswitch | 172.29.3.2 | Switch | S2928G-12P | Voice Noti | ification | Mail Notification | WhatsApp Notification SMS Notification 🗹 Realtime Alarm Display | | | |
| | | | | | | | | k | 🛛 < 🕞 🗐 🚺 🔽 Item Per PageTotal Pages:1/1Total3Records | | | |
| | Finish Back to List | | | | | | | | | | | |

Select according to alarm level:

| Select Alarm Level | 3 |
|---|---|
| Alarm Level: Critical 🗌 Major 🗌 Normal 🗌 Inform 🗌 | |
| Confirm Cancel | |

Select alarm event according to the actual need

| Alarm Event | | X |
|-----------------|---------|-----------------|
| Event: Trap ID: | Search | |
| 0 | | +Add [+]Add All |
| Event Name | Trap ID | Level |
| | | |
| | | |
| | | |

When the configuration is finished, return to the alarm alert notification: view state change from incomplete to complete.

| â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | Topology >>> | | | | | | |
|-----------|-------------------------------------|--------|-------------|-------|------|--------|----------|--------|-----------------|----------------------------|------------------------------|--|--|--|--|
| Alarm > A | Alarm >Alarm Notification | | | | | | | | | | | | | | |
| • Role | Role List +Select Role × Delete | | | | | | | | | | | | | | |
| | Select Role Role Description | | | | | | | | | Status | Operation | | | | |
| | Admin | _ | | | | | | | | Configuration Completed | Alarm Notification Setting | | | | |
| | test | | | | | | | | | Configuration Completed | | | | | |
| | | | | | | | | | K⊲ ⊳ ⊳K 1 G0 10 | 🗸 Item Per Paç | eTotal Pages:1/1Total2Record | | | | |

5.11.3 Faulty Device Navigation

Go to Alarm > Devices with Alarm then Click on the "Device Name" link to view the device information pages.

| Alarm > Devices with | arm > Devices with Alarm | | | | | | | | | | | | |
|----------------------|---|-------------|----------------------|-----|----------|--|--|--|--|--|--|--|--|
| Device IP: | Model: | ▼ Search | | | | | | | | | | | |
| • Devices with A | larm | | | | | | | | | | | | |
| Name | Device IP | Alarm Level | Unacknowledged Alarm | Mod | del Type | | | | | | | | |
| WS6008 | 172.29.3.1 | P | 1 | WS6 | 5008 AC | | | | | | | | |
| | IC < C > CI 1 GO 10 ▼ Item Per PageTotal Pages:1/1TotaliRecords | | | | | | | | | | | | |

5.12 Report Setting

5.12.1 Report List

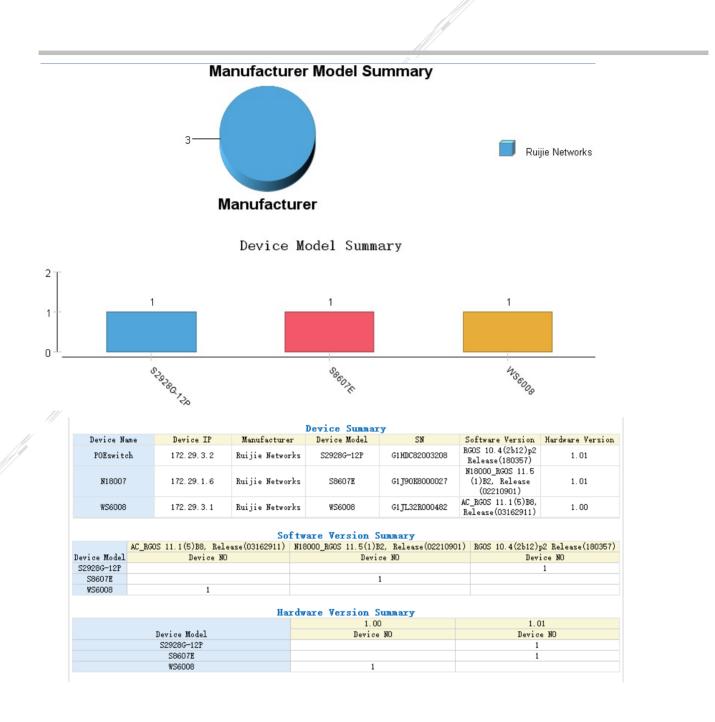
Go to **Report > Report List >Create Report.**

| Report > Report List > Create Report | |
|--------------------------------------|--|
| | |
| Report Info | |
| * Report Name : | |
| | Global Alarm Report Template |
| Report Parameter | Device Report Template |
| | WLAN Asset Management Report Template |
| | WLAN AP Load Report Template WLAN AC Load Report Template |
| | WLAN Out-of-Service Rate Statistics Report Template |
| | WLAN Traffic Statistics Report Template WLAN STA Statistics Report Template |
| | WLAN Idle AP Statistics Report Template |
| | Select Device All O By Group O Select Device |
| | |
| | Show Device Alarm Summary(grouped) |
| | |
| | Save Save and Preview Cancel |
| | |
| | |
| | |

1. View global alarm reports, there are unresolved warning trend statistics (including the total number of alarms, the number of serious alarms, the number of major alarm, general alarm number)

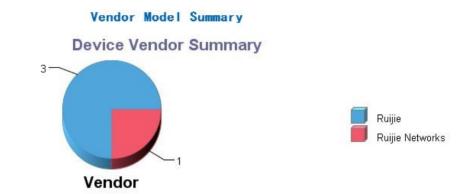


2. Asset management reports (including summary vendors' equipment, model summary, asset management summary, device model summary, etc.)



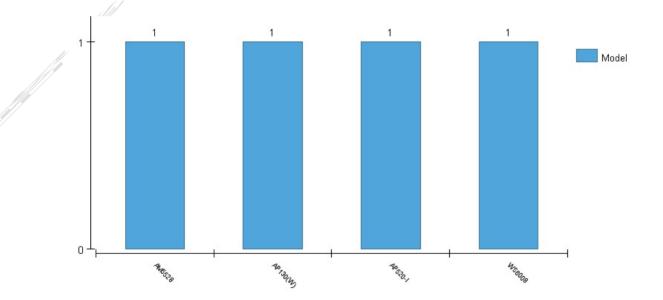
3. WLAN asset reports (including equipment manufacturers, models, etc.)

WLAN Asset Report



10

Device Model Summary



| | | | | | 11 | | | | | | | | | |
|--------------------|------------------------|--------------------|--------------|--|---------------------|----------|-----------------|---------|--|--|--|--|--|--|
| | WLAN Device Asset List | | | | | | | | | | | | | |
| Device Name | Device IP | Vendor | Device Model | Software Version | Hardware Version | Location | Hotspot Name | Remarks | | | | | | |
| WS6008 | 172.29.3.1 | Ruijie Networks | WS6008 | AC_RGOS 11.1 (5)B8, Release (03162911) | 1.00 | | | | | | | | | |
| ap520 | 10. 10. 10. 100 | Ruijie | AP520-I | AP_RGOS 11.1 (5)B8 | 1.01 | | | | | | | | | |
| ap130 | 10. 10. 10. 101 | Ruijie | AP130(W) | AP_RGOS 11.1 (5)B6 | 2.00 | | | | | | | | | |
| 5869.6c60.a5 11 | 172.29.3.5 | Ruijie | AM5528 | AM_RGOS 11.1 (5)B8 | 1.01 | | | | | | | | | |

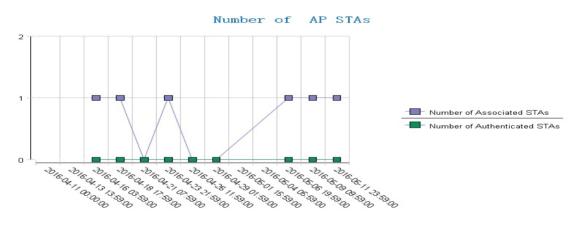
Software Version Summary

| Device Model | AC_RGOS 11.1(5)B8, Release(03162911) | AM_RGOS 11.1(5)B8 | AP_RGOS 11.1(5)B6 | AP_RGOS 11.1(5)B8 | | | | | | | | | |
|--------------|---|-------------------|-------------------|-------------------|--|--|--|--|--|--|--|--|--|
| | Number of Devices | Number of Devices | Number of Devices | Number of Devices | | | | | | | | | |
| AM5528 | | 1 | | | | | | | | | | | |
| AP130(W) | | | 1 | | | | | | | | | | |
| AP520-I | | | | 1 | | | | | | | | | |
| ¥S6008 | 1 | | | | | | | | | | | | |

Hardware Version Summary

| Device Model | 1.00 | 1.01 | 2.00 |
|--------------|-------------------|-------------------|-------------------|
| | Number of Devices | Number of Devices | Number of Devices |
| AM5528 | | 1 | |
| AP130(W) | | | 1 |
| AP520-I | | 1 | |
| WS6008 | 1 | | |

4. AP load report:

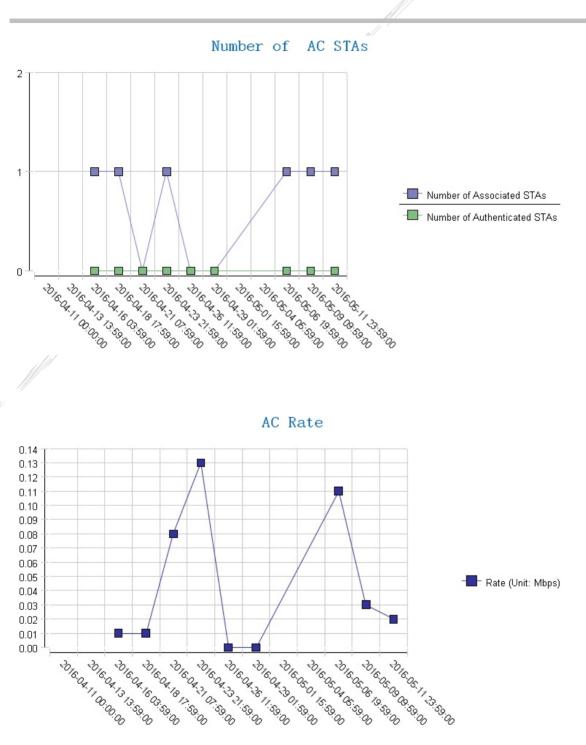




AP Loading List

| | | | | Associate | Belonged | Number of Associated STAs | | | Numbe | Average | | |
|--------------------|-----------------|--------|----------|-----------|----------|---------------------------|------------------|------------------------|---------------|--------------------------|------------------------|----------------|
| AP Name | IP Address | Vendor | Model | AC | Hotspot | | Average Value | Peak Time | Peak Value | STAs Average Value | | Rate (Mbps) |
| ap520 | 10. 10. 10. 100 | Ruijie | AP520-I | WS6008 | | 1 | 0 | 2016-05-07 00:00:00 | 0 | 0 | 2016-05-11 00:00:00 | 0.01 |
| ap130 | 10. 10. 10. 101 | Ruijie | AP130(W) | WS6008 | | 1 | 1 | 2016-05-11 00:00:00 | 0 | 0 | 2016-05-11 00:00:00 | 0.03 |
| 5869.6c60.a5 11 | 172.29.3.5 | Ruijie | AM5528 | WS6008 | | 0 | 0 | 2016-04-11 00:00:00 | 0 | 0 | 2016-04-11 00:00:00 | 0.00 |

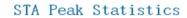
5. AC load report:



AC Loading List

| AC Name | TD 11 | . Y. 1 | Model | Number of Associated STAs Peak Average Volue Volue Peak Time | | | Numb | Average Rate | | |
|---------|------------|--------------------|--------|--|------------------|------------------------|---------------|------------------|------------------------|--------|
| AL Name | IP Address | Vendor | Woder | Feak Value | Average Value | Peak Time | Peak Value | Average Value | Peak Time | (Mbps) |
| WS6008 | 172.29.3.1 | Ruijie Networks | WS6008 | 2 | 0 | 2016-05-07 00:00:00 | 0 | 0 | 2016-05-11 00:00:00 | 0.02 |

6. User amount statistical report





| Hotspot Name | Hotspot Location | Number of APs | | sociated STAs | Number of Authenticated STAs | | |
|--------------|------------------|---------------|------------|------------------------|---------------------------------|------------------------|--|
| - | - | | Peak Value | Peak Time | Peak Value | Peak Time | |
| Office | | 0 | 0 | 2016-04-11 00:00:00 | 0 | 2016-04-11 00:00:00 | |
| Lab | | 0 | 0 | 2016-04-11 00:00:00 | 0 | 2016-04-11 00:00:00 | |

7. Rate of AP retreat statistics

| Out-of-Service Rate Statistics Report | | | | | | | |
|---------------------------------------|-----------------|---------------|--------------|--------------|----------------------------|--|--|
| | G | lobal Out-of- | Service Rate | | | | |
| Global Out-of-Service Rate: | 14.42% | | | | | | |
| | | AP Out-of-Ser | vice Rate | | | | |
| AP Name | IP Address | Vendor | Model | Hotspot Name | Out-of-Service Rate (%) | | |
| 5869.6c60.a511 | 172.29.3.5 | RUIJIE | AM5528 | | 38.59% | | |
| ap520 | 10. 10. 10. 100 | RUIJIE | AP520-I | | 4.66% | | |
| Hot Spot Out-of-Service Rate | | | | | | | |
| Hotspot Name | P | ath | Hotspot | t Location | Out-of-Service Rate (%) | | |

| | Idle AP Statistics Report | | | | | | | | |
|---------|----------------------------|-----------|------------|--------------|---------------------|----------------------------|--------------------|--|--|
| | | | | | | | | | |
| | | Daily Idl | e AP Stati | istics | | | | | |
| AP Name | Location | Vendor | Model | Hotspot Name | Hotspot Location | Daily Traffic (Kb) | Statistic Time | | |
| | Monthly Idle AP Statistics | | | | | | | | |
| AP Name | Location | Vendor | Model | Hotspot Name | Hotspot Location | Monthly Traffic (Mb) | Statistics Time | | |

5.12.2 History Report

Go to Report > History report > View

| sport > His | storical Report | | | | | |
|-------------|--------------------|---|--------------|---------------------|------------------------------------|---------|
| · · | ort Name: | Report Template: | Report Type | . 🔽 | | |
| • Hist | orical Report List | | | | | ×Delete |
| | Report Name + | Report Template | Report Type | Creation Time + | Operation | |
| | AC Load | WLAN AC Load Report Template | Daily Report | 2016-05-11 00:30:05 | EView △ Download 	Publish Report | |
| | Idle AP | WLAN Idle AP Statistics Report Template | Daily Report | 2016-05-11 00:30:04 | 🖺 View 🗳 Download 🖋 Publish Report | |

Click the *download* button to save the report

| (eport | > Hist | orical Report | | | | | |
|--------|---|-------------------|---|--------------|---------------------|------------------------------------|---------|
| R | Report Name: Report Template: Report Type: Start Time: End Time: Search | | | | | | |
| • H | listo | rical Report List | | | | | ×Delete |
| |] | Report Name + | Report Template | Report Type | Creation Time + | Operation | |
| |] | AC Load | WLAN AC Load Report Template | Daily Report | 2016-05-11 00:30:05 | 🖹 View 🗳 Download 🖋 Publish Report | |
| | | Idle AP | WLAN Idle AP Statistics Report Template | Daily Report | 2016-05-11 00:30:04 | 🖥 View 🗳 Download 🖋 Publish Report | |

Publish Report.

| Repo | ort Name: | Rep | ort Template: 🔍 Report Type: 🔍 | |
|---------|--------------------|----------|---|---|
| Sta | art Time: | | End Time: Search | |
| • Histe | orical Report List | | Report Publishing | |
| | Report Name + | Report 1 | Publish to Admin: scott | Operation |
| | AC Load | WLAN AC | *Publish to Email : wiwchenx@163.com | 🛙 View 🗳 Download 🖋 Publish Report |
| | Idle AP | WLAN Idl | ③ Prompt: | 🛙 View 🗳 Download 🖋 Publish Report |
| | AC Load | WLAN AC | Before publishing report, please go to mail server configuration module in system admin page for setting proper mail server info | 🛙 View 🗳 Download 🖋 Publish Report |
| | Idle AP | WLAN Idl | | 🛙 View 🗳 Download 🖋 Publish Report |
| | AC Load | WLAN AC | Confirm | 🛙 View 🗳 Download 🖋 Publish Report |
| | ACT | | | Bassing Records of Appletate parameters |

5.13 Association Configuration

Go to System > Mail server SAM/SMP Register to set the information of mail server.

| | | | | | /// | // | | | |
|---|------------|------------|-------------|-------|------|--------|----------|--------|--|
| Â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | |
| System > | SAM/SMP F | Register | | | | | | | |
| • Reg | ister SAM/ | SMP Server | | | | | | | |
| Server Type : SMP V * Server IP Address : | | | | | | | | | |
| | | | | | | | Add | Return | |
| | | | | | | | | | |

Depending on the type to make a selection, the SNC configuration needs to add the IP address of the server.

| Server List Registered | | |
|------------------------|-------------|-------------|
| Server IP Address | Server Type | Operation |
| 172.29.2.11 | SMP | ×Unregister |
| 172.29.2.19 | SAM | ×Unregister |
| | | |
| | | |

6 WLAN Module Configuration Guide

6.1 Basic Configuration

In order to manage the wireless network by SNC, there are some basic configuration.

Configure the SNMP and telnet protocols, refer to the basic configuration.

To add wireless devices AC, go to *WLAN > AC > Add,* Add the IP address of AC, select the relevant SNMP template and TELNET template.

| Add AC | | | × |
|----------------------|------------|---|-------------|
| IP: * | 172.29.3.1 | | |
| SNMP Template: | SNMPV2c | Ŧ | + Add SNMP |
| Add Telnet Template: | default | Ŧ | + Telnet Te |
| | | | |
| Only ACs can be | added | | |
| | OK Cancel | | |

Click "*OK*" when complete setting.

To add hotspot information, go to WLAN > Hotspot> Add Child Hotspot, Add a hot spot information, click save.

| Add Hotspot Info | × |
|------------------|------------------|
| Name: * | ruijienetwork |
| Address: | fz |
| Description: | fz_ruijienetwork |
| | |
| | Save Cancel |

And then on the basis level 1 hot spot, click "Add Child Hotspot" to add a lower level of hot.

| 실 Import 스 Export | |
|----------------------------|--|
| Hotspot Navigation | |
| Add Child Hotspot × Delete | |
| a | |
| 🔻 📷 RuijienetworksFujian | |
| 🐁 🌅 🛨 Lab | |
| 🏊 🛅 🖶 Office | |
| 💫 🛅 🕂 ruijienetwork | |

Note: if you need to add much hot information, you can directly import hot information template in the web interface, please refer to the WLAN module configuration guide.

Wireless device AP associated hotspot, go to WLAN > Hotspot, select the hot spot, click "add AP"

| Â | Asset Device Performance | Alarm WLAN Report | Advanced System | | Topology >>> |
|--|--|-------------------|--|--|---|
| Summary Hotspot | AP AC STA | Alarm Rogue A | P Assistant Topology | Last | Synchronization Time: 3Minutes Age |
| Linport ∠ Export Hotspot Navigation Add Child Hotspot × Delete Q Add Child Hotspot × Delete Ad | AP Info Location • AP Name Locat | Q, Vie 0-11152 | e Period: 24 Hours 3 Days ers Associated STAs Authe | 7 Days I 30 Days nticated STAs Time 0 03-12 14:55 2 5 4 3 2 1 5 5 5 5 5 5 5 5 5 5 5 5 5 | SSID8 AII iod: 24 Hours 3 Days 7 Upon-click Rate Down 05-11 23:00 05-12 06:40 0 Delete AP Delete AII Connectio Flow Alarm |
| Add AP | | | | | × |
| AP Name: | Location: | Ν | lodel: | • | |
| AP IP: | AC Name: | | SSID: | Query | Reset |
| List of Available APs | | | | | + Add [+] Add All |
| Location | AP Name | MAC | AP Model | Associated AC | Connection |
| | ap130 | 58:69:6c:66:b5:3b | AP130(W) | WS6008 | Reachable |
| | 5869.6c60.a511 | 58:69:6c:60:a5:11 | AM5528 | WS6008 | Reachable |
| | ap520 | 58:69:6c:56:dd:60 | AP520-I | WS6008 | Reachable |

Added successfully, you can find "AP hotspots associated information,"

Prompt

x

Operation succeeded

6.2 Comprehensive

6.2.1 Custom Settings Page

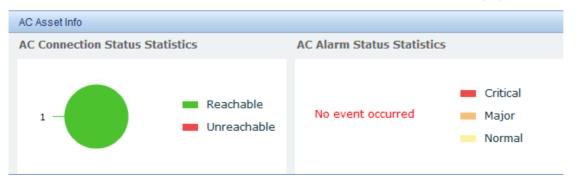
The function is used to customize the comprehensive page statistics. Go to *WLAN > Summary*, according to the actual needs of custom to add the function list.

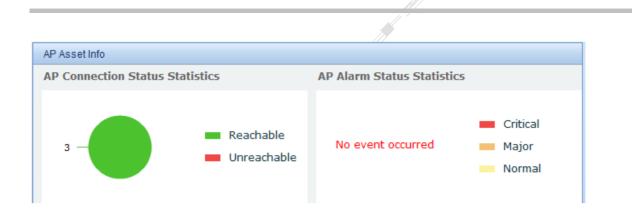
| WLAN Homepage Custom Settings | | | × |
|--|---|--|---|
| Custom List AC Asset Info AP Asset Info Global Rate Statistics Global STA Statistics Top N Global Idle flow Statistics Global Rate Statistics(Top N) Global Out-of-Service Rate Statistics Global Out-of-Service Rate Statistics | < <add Delete>> Move Up Move Down Reset</add | Function List Rogue AP Statistics Global Idle Traffic Statistics | |
| | Save | | |

Click "Save" when complete setting.

6.2.2 AC、AP Assets Information

The function is used to check the results of the reachability of AC in the system and the results of the AC alarm statistics.. go to *WLAN > Summary*, to see the AC and AP asset information, as shown in the following figure:





6.2.3 Total Network Availability Rate Statistics(TopN)

The function is used to view the statistics of the hot spot availability rate TopN and AP availability rate TopN.

| | Configure Calculation Tim | ne Range | × |
|---|---------------------------|------------------------|---|
| | Time Range: | 7 Days | |
| | | Last 24 Hours | |
| | | 3 Days | |
| | | 7 Days | |
| 1 | | One Month | |
| | C | Please select the time | |

Go to WLAN > Summary >Global Out-of-Service Rate >Configuration Time .

6.2.4 Total Network Idle Traffic Statistics (TopN)

The function is used to view the entire network AP idle traffic TopN. go to *WLAN > Summary >Top N Global Idle flow Statistic >Idle AP,* According to the actual need to configure the flow and time of the super idle AP

| Top N Global Idle flow Statistics | | 🔆 Idle AP | | | | |
|-----------------------------------|-------------------|--|--------------|--|--|--|
| Monthly (Less Than10Mb, Ca | lculation1Months) | Daily (Less Than1Kb, Calculation7Day(s)) | | | | |
| Location/Name | Monthly(Mbps) | Location/Name | Daily(kbps) | | | |
| | | | | | | |
| | | | | | | |
| | [0] idle APs | | [0] idle APs | | | |

Click "*OK*" when complete setting.

| 111 | | | | | | | |
|---|--|--|--|--|--|--|--|
| | | | | | | | |
| Configure Idleness Flow Status Statistics | | | | | | | |
| Enable Statistic on Monthly Traffic | | | | | | | |
| Monthly Average flow less than: 10 Mbps, Time Range: 1 Month(s) | | | | | | | |
| Enable Statistics on Daily Traffic | | | | | | | |
| Daily Average flow less than: 1 Kbps, Time Range: 7 Day(s) | | | | | | | |
| At least one should be enabled, monthly is taken as default | | | | | | | |
| Save Cancel | | | | | | | |

Click "Save" when complete setting.

6.2.5 Total Network Rate Statistics (TopN)

The function is used to view the statistics of the hot spot rate TopN and AP rate TopN. Go to *WLAN > Summary >Global Rate Statistics.*

| Global Rate Statistics | | | | | | | | | |
|----------------------------|------------|-----------|----------------|------------|-----------|--|--|--|--|
| Hotspot Rates | | | AP Rates | | | | | | |
| Uplink | Dow | nlink | Uplink | D | Downlink | | | | |
| < 10M 3 | < 10M | 3 | < 10M 3 | < 10M | 3 | | | | |
| 10-50M 0 | 10-50M | 0 | 10-50M 0 | 10-50M | 0 | | | | |
| 50-100M 0 | 50-100M 0 | | 50-100M 0 | 50-100M | 50-100M 0 | | | | |
| > 100M 0 | > 100M | 0 | > 100M 0 | > 100M | > 100M 0 | | | | |
| | | | | | | | | | |
| Global Rate Statistics(Top | N) | | | | | | | | |
| Hotspot Sort by: | Total Rate | Check All | AP Sort by: | Total Rate | Check All | | | | |
| Name | Uplink | Downlink | Location/Name | Uplink | Downlink | | | | |
| ruijienetwork | 0.00Kbps | 0.00Kbps | ap130 | 0.00Kbps | 0.00Kbps | | | | |
| Office | 0.00Kbps | 0.00Kbps | ap520 | 0.00Kbps | 0.00Kbps | | | | |
| Lab | 0.00Kbps | 0.00Kbps | 5869.6c60.a511 | 0.00Kbps | 0.00Kbps | | | | |
| | | | | | | | | | |

Go to WLAN > Summary >Global Rate Statistics (TopN) >Hotspot Check All to show all the hot rate statistics

| Global Rate Statistics(Top |) N) | | | | |
|----------------------------|------------|-----------|---------------|--------------|-----------|
| Hotspot Sort by: | Total Rate | Check All | AP Sort by: | Total Rate 🔻 | Check All |
| Name | Uplink | Downlink | Location/Name | Uplink | Downlink |

Go to WLAN > Summary >Global Rate Statistics (TopN) >AP Check All to show all the AP rate statistics

| Global Rate Statistics(Top N) | | | | | | | | | | |
|-------------------------------|------------|-----------|------|-----------|------------|-----------|--|--|--|--|
| Hotspot Sort by: | Total Rate | Check All | ΑΡ | Sort by: | Total Rate | Check All | | | | |
| Name | Uplink | Downlink | Loca | tion/Name | Uplink | Downlink | | | | |

6.2.6 Full Network Users Statistics

The function is used to view the statistical time of the total network AP the number of related users and the number of authentication users.

Go to WLAN > Summary >Global STA Statistics. Then Click on the drop-down menu statistical SSID.

| Global STA Statistic | S | | SSIDs | All | • |
|----------------------|----------------------------|-------------|----------------|-----------|-------------|
| Select Time Period | 24 Hours 3 Days 7 Days | s 30 Days | | All | ^ |
| STAs Users | | Associa | ated STAs 📩 Au | 802.1x_au | |
| 4 | | | | AP130 | ≣ |
| 3 2 | | | | AS | |
| 1 | | | | vlan10 | ▼ ne |
| 0 | 05-11 23:25 | 05-1 | 12 07:20 | 0: | 5-12 15:15 |

6.3 Hot Spot

6.3.1 Import and Export Hot Spot

The function is used to import and export hotspot information. Go to *WLAN > Hotspot >Export*, to export the hotspot relative files.

| Smart Network Commander | | | | | | | 2 0 0 🔮 📌 Favorite | | | |
|-------------------------|--------------------|---|-------|--------|-------------|-------|--------------------|--------|----------|---------|
| | | â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System |
| Summary | Hotspot | | | | STA | | | | Assistan | t Topol |
| 실 Import 실 | ک Import کے Export | | | | | | | | | |

| Field | Hotspot Name | Parent Hotspot Name | Hotspot Location | Remarks | |
|-------------|---|---|--|---|--|
| | Mandatory (The length can be between 1 to 30 characters) | Mandatory (The length can be between 1 to 255 characters) | Mandatory (The length can be between 1 to 255 characters) | (The length can be between 1 to 255 characters) | |
| Description | Hotspot name, for example, building 19 or 19#. | A parent hotspot refers to the hotspot that the current hotspot belongs to (the top hotspot does not belong to any hotspot and the Parent Hotspot Name filed is NULL). | A hotspot location must be exact to the building number or floor number. | The remark serves as additional description. | |
| | RuijienetworksFujian | | | | |
| | Office | RuijienetworksFujian | | | |
| | ruijienetwork | RuijienetworksFujian | fz | fz_ruijienetwork | |
| | Lab | RuijienetworksFujian | | | |

Click on the "*import*" after the hot information excel form is completed.

| Smart Network Commander | | | | | | | | | 0 0 | | 📩 Favorite | |
|-------------------------|----------------------------------|---|---|--------------------------|----------------------------|--------------|--------|-------------|------------|----------|-------------|--|
| | | ^ | Asset | Device | Performanc | e Alarm | WLAN | Repor | t Advar | iced | System | |
| Summary | Hotspot | Δ | | | ST | | | | | sistant | | |
| 실 Import 스 | 실 Import 실 Export | | | | | | | | | | | |
| Hotspot Navig | jation | | Hots | pot Info | | | | | | | | |
| + Add Chi | + Add Child Hotspot 🗙 Delete | | | | Name: RuijienetworksFujian | | | | | Address: | | |
| | | • Q | [1] Hotspot-Associated SSIDs: AP130 Details | | | | | | | | | |
| 🔻 🚮 Ruijiene | 🔻 🚹 RuijienetworksFujian(APs: 1) | | | Out-of-Service Rate Info | | | | | User Count | | | |
| 🐁 🛄 🕂 | | Time Range: [7 Days] Rate: 0.00% 🗱 Configuration Time | | | | | n Time | Select Time | Period | 24 Hours | | |
| 🚡 🛅 🛨 Office | | | Top N of Hotspot Top N of AP | | | | | | STAs User | s 🗖 A | ssociated S | |
| 🏠 🗂 🕇 | ruijienetwork(| (APs: 1) | | Name | Rate | Location/Nar | me Ra | ite | 4 | | | |

6.3.2 Hot spot information modification

The function is used to modify the hot information, including hot names, hot spots address, and hot description. Go to WLAN >

| Hotspot, in the upper right corner click the icon 🐔 🎑 🕂 Lab, t | to add Hotspot information. |
|--|-----------------------------|
| Add Hotspot Info | × |
| Name: * Lab | |
| Address: | |
| Description: | |
| | |
| Save Cancel | |

Click "Save" when complete setting.

6.3.3 How to view the hot spot related AP information

This feature is used to check the hot spot information. Go to WLAN > Hotspot, in the upper right corner click the icon

| ۵. | • | e L |
|----|---|-----|
|----|---|-----|

.ab, then click "*AP Info*" to check the hotspot information.

| Ruije Smart N | letwork Commander | | 2 0 0 🕚 | 📩 Favorite 🛛 🔓 Online Cus | tomer Service 🗯 Change Password | | | | | |
|------------------------------|--------------------------------|---------------------------------|----------------------------------|---|----------------------------------|--|--|--|--|--|
| | Asset Device Performa | nce Alarm WLAN | Report Advanced | System | | | | | | |
| Summary Hotspot | AP AC | STA Alarm | Rogue AP Assistar | nt Topology | Last Synchroniza | | | | | |
| ك Import ك Export | | | | | | | | | | |
| Hotspot Navigation | Hotspot Info | | | | Q View Hea | | | | | |
| + Add Child Hotspot 🗙 Delete | Name: Lab | | Address: | | Description: | | | | | |
| | [0] Hotspot-Associated S | SIDs: | · | | | | | | | |
| RuijienetworksFujian(APs: 1) | Out-of-Service Rate Info | | User Count | SSIDs All | Rate Statistics | | | | | |
| 🐁 🎦 🕂 Lab | Time Range: [7 Days] Rate | : 0.00% 🛠 Configuration | Select Time Period: 24 | Hours 3 Days 7 Days 3 | 30 Days Select Time Period: 24 | | | | | |
| 🐁 🛅 🛨 Office | Top N of AP | | STAs Users 💼 Associa | ted STAs 💼 Authenticated S | STAs Rate Kbps Upor | | | | | |
| 🏠 🛅 🕂 ruijienetwork(APs: 1) | Location/Na | me Rat | 5 | | 5 | | | | | |
| | | | 4 | | 4 | | | | | |
| | | | 3 | | 3 | | | | | |
| | | | 2 | | 2 | | | | | |
| | | | 1 | | Time | | | | | |
| | | Q Vie | 0 | :55 05-12 07:50 05 | | | | | | |
| | | | 05-11 16:00 05-11 23 | | | | | | | |
| | AP Info | | | / F | Re-associate 🔺 Add AP 🍃 Delete . | | | | | |
| | Location: | Connectio | SSID: | | | | | | | |
| | MAC: Copyright of Ruijie Ne | tworks(IE7, IE8, IE9 are suppor | ted. The default resolution is : | Reset 1024*768, but 1280*1024 is hig | hly recommended) | | | | | |

6.3.4 How to view hot spot information statistics

The function is used to check the hot statistical information. Go to WLAN > Hotspot, in the upper right corner click the icon

, then click "*Out-of-Service Rate Info*" and "User Count" to check the hotspot statistical information.

| | | Asset | Device | Performance | Alarm | WLAN | Report | Advan | ced | System | | | | | | Topolo |
|-------------------------------|-------------|-------|---------------|-----------------|----------|-----------|------------|------------|----------|------------|------------|--------------|----------|-----------------|------------|-----------------|
| Hotspot Navigation | | Hots | pot Info | _ | | | | | | | | | | Q, View | Heat Map | / Modify |
| + Add Child Hotspot | × Delete | | Name | : Lab | | | 1 | ddress: | | | | De | escripti | ion: | | |
| [0] Hotspot-Associated SSIDs: | | | | | | | | | | | | | | | | |
| 🚹 RuijienetworksFujia | n(APs: 1) | Out-o | f-Service Rat | e Info | | | User Co | un | | SSIDs | All | . | Ra | te Statistics | | SSIDs |
| 🐁 🎦 🕂 Lab | | Time | Range: [7 D | ays] Rate: 0.00 | % 🔆 Conf | iguration | Select Tin | ne Period: | 24 Ho | urs 3 Da | ys 7 Day | ys 30 Days | Sele | ct Time Period: | 24 Hours | 3 Days |
| 🚡 🛅 🕂 Office | | Top N | l of AP | | | | STAs Us | ers 📩 As | sociated | I STAs 🚃 | Authentica | ted STAs | Ra | te Kbps 📃 | Upon-click | Rate <u> </u> D |
| 💫 📄 🕂 ruijienetwo | ork(APs: 1) | | L | ocation/Name | | Rat | 5 | | | | | | 5 | 1 | | |

6.4 AP

6.4.1 AP Query Page Configuration

The function is based on query AP conditions, query related AP information. Go to *WLAN > AP*, according to the actual needs, you can query terms such as AP, AC, MAC, and SSID.

| Â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | | |
|-------|-------|--------|-------------|-----------|--------|--------------|----------|--------|---------------|--|
| | AP | AC | STA | A | | Rogue AP | Assistan | t Topo | ology | |
| | AP N | ame: | Co | nnection: | | · ▼ Mod | iel: | Ŧ | MAC: | |
| tions | AC N | ame: | J | oin Time: | | ▼ Flo | ow: | • | Working Mode: | |
| | | | | | 1011.0 | | | | | |

Click "Out-of-Service Rate" to set the calculation time range.

| Configure Calculation Tim | × | | | | | |
|---------------------------|------------------------|--|--|--|--|--|
| Time Range: | | | | | | |
| | Last 24 Hours | | | | | |
| | 3 Days | | | | | |
| | 7 Days | | | | | |
| | One Month | | | | | |
| C | Please select the time | | | | | |

Click "*OK*" when complete setting.

Click "*Idle AP*" and then set configuration parameters about idleness flow status statistics.

| Configure Idleness Flow Status Statistics |
|---|
| ✓ Enable Statistic on Monthly Traffic |
| Monthly Average flow less than: 10 Mbps, Time Range: 1 Month(s) |
| Enable Statistics on Daily Traffic |
| Daily Average flow less than: 1 Kbps, Time Range: 7 Day(s) |
| At least one should be enabled, monthly is taken as default |
| Save Cancel |

Click "*Alarm Thresholds*" to set the alarm threshold.

| | | | | | · | | | | | |
|---|----------------|-----------------|-------------------|--------------|--------------------|--------------|-------------|--------|--|--|
| AP Name: | Connection: | Model: | • | MAC: | | SS | ID: | | | |
| AC Name: | Join Time: | Flow: | ▼ W | orking Mode: | ▼ Spe | ectrum Analy | sis: | • | | |
| AP List Spectrum Analysis: 🗸 Enable 🗶 Disable 🖉 Associate 🔅 Out-of-Service Rate 🔅 Idle AP 🔅 Alarm Thresholds 🔅 Rogue AP Configuration Wiz | | | | | | | | | | |
| Location + | AP Name 🕈 | Primary AC Name | Secondary AC Name | Working Mod | Associated Hotspot | Associated | Authenticat | Flow a | | |
| [No Location Info] | ap130 | WS6008 | | Access | ruijienetwork | 0 | 0 | Norm | | |
| [No Location Info] | 5869.6c60.a511 | WS6008 | | Access | | 0 | 0 | Norm | | |
| [No Location Info] | ap520 | WS6008 | | Access | | 0 | 0 | Norm | | |
| | | | | | | | | | | |

Click "*Export*" to export query results.

| Connection: | ▼ Model: | v | MAC: | | SS | ID: | | Location: | | |
|------------------------|---------------------|--------------------|---------------|--------------------|---------------|--------------|-------------|-----------|----------------|-------|
| Join Time: | Flow: | ▼ W | orking Mode: | ▼ Spe | ectrum Analys | sis: | • | Query | Reset | |
| Analysis: 🗸 Enable 🗙 🛛 | Disable 🕜 Associate | * Out-of-Service R | ate 🗱 Idle AP | 🔅 🕸 Alarm Threshol | ds 🛠 Rogu | e AP Configu | iration Wiz | ard 🙆 Exp | oort 🗙 De | lete |
| AP Name + | Primary AC Name | Secondary AC Name | Working Mod | Associated Hotspot | Associated | Authenticat | Flow + | Alarm | Rate 🕈 | Conn |
| ap130 | WS6008 | | Access | ruijienetwork | 0 | 0 | Normal | 1 | Q 0.00% | Unrea |
| 5869.6c60.a511 | WS6008 | | Access | | 0 | 0 | Normal | P | Q 0.00% | Reach |
| ap520 | WS6008 | | Access | | 0 | 0 | Normal | P | Q 0.00% | React |
| | | | | | | | | | | |

Click "Delete" to delete Aps.

| Connection: | Model: | - | MAC: | | SS | ID: | | Location: | | |
|----------------------|---------------------|--------------------|---------------|--------------------|---------------|--------------|------------|-----------|----------------|------|
| Join Time: | Flow: | | orking Mode: | ▼ Spe | ectrum Analys | sis: | - | Query | Reset | |
| Analysis: 🗸 Enable 🔀 | Disable 🕜 Associate | ☆ Out-of-Service R | ate 🔅 Idle AF | Alarm Threshol | lds 🔆 Rogu | e AP Configu | ration Wiz | ard 🕹 Exp | oort 🗙 De | lete |
| AP Name + | Primary AC Name | Secondary AC Name | Working Mod | Associated Hotspot | t Associated | Authenticat | Flow + | Alarm | Rate 🕈 | Conn |
| ap130 | WS6008 | | Access | ruijienetwork | 0 | 0 | Normal | 1 | Q 0.00% | Unre |
| 5869.6c60.a511 | WS6008 | | Access | | 0 | 0 | Normal | 2 | Q 0.00% | Read |
| ap520 | WS6008 | | Access | | 0 | 0 | Normal | 2 | Q 0.00% | Read |
| | | | | | | | | | | |

Click "*Modify*" to modify the physical location of the AP

| AP | List Spectrum | Analysis: 🗸 Enable 🗙 🛛 | Disable 🕜 Associate | 🗱 Out-of-Service R |
|----|--------------------|------------------------|---------------------|--------------------|
| | Location + | AP Name + | Primary AC Name | Secondary AC Name |
| ✓ | [No Location Info] | ap130 | WS6008 | |
| | [No Location Info] | 5869.6c60.a511 | WS6008 | |
| | [No Location Info] | ap520 | WS6008 | |
| | | | | |
| | | | | |

| Modify AP Deployment | × |
|---|--------|
| issue data to device: Location: | |
| If it isn't issued to device, they are saved in the | system |
| Save Cancel | |

Click "Save" when complete setting.

6.4.2 Operation AP Detailed Page

Go to WLAN > AP >AP name >Synchronize AP to synchronous AP information.

| 🔉 Synchronize AP 🖞 Radio List 🔅 Al | arm Threshold 🔅 Rogue AP Configuratio | on Wizard 🔅 Rogue APs Statistic | s Spectrum Analysis: Close | 1 11 | | | | |
|------------------------------------|---------------------------------------|---|-----------------------------|---------------------------|--|--|--|--|
| Device Info | | | | | | | | |
| Location: | AP Name: ap130 | МА | C: 58:69:6c:66:b5:3b | Model: AP130(W) | | | | |
| Connection: Unreachable | IP: 10.10.10.101 | Subnet Mas | ik: 255.255.255.0 | Gateway Ad 10.10.10.254 | | | | |
| Software Na rgos.bin | Software Ve AP_RGOS 11. | .1(5)B6 Software Ve | RUDIE | Vendor: RUIJIE | | | | |
| Flow: Normal | Device SN: G1JDCEV0200 | 08C Running Per | | Online Period: | | | | |
| Norking Mo Access | Containment Not Configure | ed | | | | | | |
| Time Range: [7 Days] Rate: 0.00% | | | | | | | | |
| Ssociated AC (W56008) | Associated Hotspot(ruijienetwork) | K Number of SSIDs(1) | Critical Alarm(1) 🎆 Major A | larm(0) 🏶 Normal Alarm(0) | | | | |
| AP STA Number | SSIDs All | Number of SSIDs(1) AP Association Times | Critical Alarm(1) 🎇 Major A | Jarm(0) 🎆 Normal Alarm(0) | | | | |
| | SSIDs All | | Critical Alarm(1) 🗰 Major A | | | | | |

Go to WLAN > AP >AP name >Alarm Threshold then click Edit to set the alarm threshold.

| 🚯 Synchroniz | e AP 🕎 Radio List 🔆 Alarm Threshold 🔆 Rogue AP Configuration Wizard | * Rogue APs Statistics Spectrum Analysis: Closed |
|------------------------------------|---|---|
| Device Info | Alarm Threshold | × |
| Location | | / Edit |
| Connection Software Na. Flow | CPU Threshold(%): 100 802.11a | Memory Threshol 100 802.11b |
| | Interference T 60 (Global Global Value(60) Noise Threshol -70 (Global Global Value(-70) Maximum Num 32 (Global Global Value(32) RF Utilization(80 (Global Global Value(30) | Interference T 60 (Global Global Value(60) Noise Threshol70 (Global Global Value(-70) Maximum Num 32 (Global Global Value(32) |
| AP STA Numb | Throughput(b 15000000(Global Mode) Global Value(15000000) | RF Utilization(80 (Global Global Value(80) Throughput(b 150000000(Global Mode) Global Value(15000000) |
| Select Time P STAs Users 5 1 | | |

Click "Save" when after completing.

6.4.3 How to view RRM's AP statistics

Go to WLAN > AP >RRM to view the RRM AP statistics.

| | Asset | Device | Perform | ance Alarm | WLAN | Report | Advan |
|---|-------|-------------|---|--------------------|------|-------------------|-----------|
| All AP Hotspot Partitions | AC N | lame: | | Join Time: | | ▼ Fl | ow: |
| RuijienetworksFujian Lab | AP L | | | Analysis: 🗸 E | | | Associate |
| 3 Office | | Location | | AP Name ap13 | | Primary A WS60 | |
| Tuijienetwork All APs Not Partitioned | | [No Locatio | _ | ap520 5869.6c60 | | WS60 | |
| _ | | [NO EOCALIC | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 3809.0000 | | W300 | 108 |
| | | | | | | | _ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| RRM | | | | | | | _ |
| AP Radio-on/Radio-Off Task AP Connectivity Test Task | 4 | | | | | | |

6.4.4 How to configure the AP timer switch

Go to *WLAN > AP >AP Radio-on/Radio-Off Task >Add* to add a timer switch AP task., then select device and configure Aps Switch, Click finish, return the AP timer switch task list.

| W | /LAN > AP Radio-on/Radio-off Task > Create Plan |
|---|---|
| | Step 1 Basic information |
| | * Plan Name : Plan Type : Prescheduled plan ▼ * Start Time : 2016-05-12 20:37 * End Time : 2016-05-13 20:37 Set Plan Schedule : every interval ▼ *[10 hours as the running interval Description : |
| | Next Cancel |

| | | | earch | | |
|--------------|---|--|-------------------|-----------------------------|----------------|
| ted Device | List | | | +Select Device fro | om Plan +Selec |
| Select D | evice | | | | |
| IP: | AP Nar | me: | Search | | |
| 0 | | | | | +Ad |
| | AP Name | AP IP address | MAC | Primary Backup AC | Locat |
| | ap130 | 10.10.101 | 58:69:6c:66:b5:3b | | |
| | 5869.6c60.a511 | 172.29.3.5 | 58:69:6c:60:a5:11 | | |
| | ap520 | 10.10.10.100 | 58:69:6c:56:dd:60 | > 🖂 1 Go 10 🗸 Item Per Page | |
| | | | | | |
| WLAN > AP Ra | idio-on/Radio-off Task > Create Pla | // n | | | |
| | idio-on/Radio-off Task≻Create Pla s Switch Configuration | // n | | | |
| | s Switch Configuration | n Restart All Non-Opera | ation | | |
| • FIT AP | s Switch Configuration | | ation | | |
| • FIT AP | s Switch Configuration | | ation | | |
| • FIT AP | s Switch Configuration | Restart All Non-Opera 3.5 IP:10.10.10.100 | ation | | |

| • Plan List | | | | | | +Add |
|--------------------|-------------------|-------------|-------------|---------------|---------------------|--|
| Plan Name | Plan Type | Plan Status | Task Status | Last Run Time | Next Due Time | Operation |
| а | Prescheduled plan | valid | not running | | 2016-05-12 20:41:58 | ✓Update Start Plan ✓Disabled |
| Radio Off at night | Prescheduled plan | expired | not running | | | ✓Update ×Delete > Start Plan tActivate |
| | | | | | | 0 10 V Item Per PageTotal Pages:1/1Total2Records |

After the implementation of the task plan, click on the name of the project to see the results of the plan, as shown below:

| Basic Information | | | | | | | |
|---------------------|---------------------|-------------------|-----------|-------|------|--|--|
| Plan Name | а | | | | | | |
| Plan Type | Prescheduled plan | Prescheduled plan | | | | | |
| Plan Status | valid | valid | | | | | |
| Task Status | wait to run | wait to run | | | | | |
| Last Run Time | 2016-05-12 20:42:16 | | | | | | |
| Description | | | | | | | |
| Run Log | | | | | | | |
| Start Time | End Time | Status | Exit Code | Total | Suco | | |
| 2016-05-12 20:42:27 | 2016-05-12 20:42:27 | COMPLETED | COMPLETED | 3 | 2 | | |
| 2016-05-12 20:42:16 | 2016-05-12 20:42:18 | COMPLETED | COMPLETED | 3 | 2 | | |

6.4.5 How to configure AP connectivity test tasks

Go to WLAN > AP >AP Connectivity Test Task >Add to add a connected test task. Then select device.

| LAN > AP Connectivity Test > Create Plan |
|--|
| Step 1 Basic information |
| * Plan Name : |
| Plan Type : Prescheduled plan |
| * Start Time: 2016-05-12 20:46 🔤 🥅 |
| * End Time: 2016-05-13 20:46 🛛 🕅 |
| Set Plan Schedule : 🛛 every interval |
| Period: * Every n hours:10 |
| |
| Description : |
| |
| |
| Next Cancel |
| |

Click "finish", and the system returns the AP connectivity test task list, Click "Activate" then start plan.

| Plan Name: | Search | | | | | |
|------------------------|-------------------|-------------|-------------|---------------|---------------------|--|
| • AP Connectivity Test | | | | | | +Add |
| Plan Name | Plan Type | Plan Status | Task Status | Last Run Time | Next Due Time | Operation |
| а | Prescheduled plan | valid | not running | | 2016-05-12 20:48:02 | 🖉 Update 🕨 Start Plan 🛹 Disabled |
| | | | | K | □ < | Item Per PageTotal Pages: 1/1Total1Records |

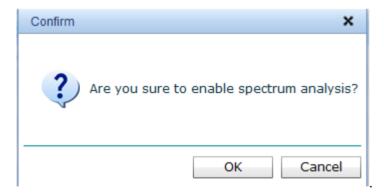
After the implementation of the task plan, click on the name of the project to see the results of the plan, as shown below:

| • Basic Information | | | | | | | |
|---|--|--|-----------|-------|-----------------|---------------------------|--------------------------|
| Plan Name | а | | | | | | |
| Plan Type | Prescheduled plan | | | | | | |
| Plan Status | valid | | | | | | |
| Task Status | running | | | | | | |
| Task Status | running | | | | | | |
| Last Run Time | 2016-05-12 20:48:14 | | | | | | |
| Description | | | | | | | |
| • Run Log | | | | | | | |
| _ | | | | | | | |
| Start Time | End Time | Status | Exit Code | Total | Reachable Count | Unreachable Count | Operation |
| 2016-05-12 20:48:14 | 2016-05-12 20:48:27 | COMPLETED | COMPLETED | 3 | 2 | 1 | Detail |
| | | | | | | io 10 🔽 Item Per PageTota | l Pages:1/1Total1Records |
| Batch Plan Run Lo | уд : | | | | | | |
| BACK DATE SKIPPED: TH FAST EXCEPTION EXIT: | he plan starts five minutes after the Operation on a device fails and the | preschedule and is ski plan is exit | pped | | | | |

6.4.6 Batch Setting Spectrum Analyzer

Go to WLAN > AP select APs then click "Enable" to enable the spectrum analysis.

| ^ | Asset Device Perfor | mance Alarm WLAN | Report Advan | ced System | | | |
|--|---------------------|------------------|-----------------|-------------------|--------------|--------------------|------------------|
| Summary Hotspot | AP AC | STA Alarm | Rogue AP Ass | istant Topolog | JY | Las | st Synchronizati |
| AP Navigation | AP Name: | Connection: | Model: | • | MAC: | | SSID: |
| 🔻 🚹 All AP Hotspot Partitions | AC Name: | Join Time: | Flow: | ▼ W | orking Mode: | v Spe | ctrum Analysis: |
| ▼ M RuijienetworksFujian % Lab AP List Spectrum Analysis: ✓ Enable × Disable ✓ Associate % Out-of-Service Rate ※ Ide AP % Alarm Thresholds | | | | | | | |
| S Office | Location + | AP Name + | Primary AC Name | Secondary AC Name | Working Mod | Associated Hotspot | Associated (Au |
| | [No Location Info] | ap130 | WS6008 | | Access | ruijienetwork | 0 |
| 🏠 ruijienetwork | [No Location Info] | ap520 | WS6008 | | Access | | 0 |
| 🔠 All APs Not Partitioned | [No Location Info] | 5869.6c60.a511 | WS6008 | | Access | | 0 |
| | | | | | | | |
| | | | | | | | |



Click "OK" to return to AP List.

6.4.7 How to bulk associate AP to hot spots

Go to *WLAN > AP >Associate* to link the hot spot

| | | | | | // | | | |
|---|----------------|-----------------|----------------|--------------------------|------|---------------------------|----------|--|
| | Asset | Device | Performance | Alarm | WLAN | Report | Advanc | ed System |
| Summary Hotspot | AP | AC | STA | A | larm | Rogue AP | 9 Assi | stant Topolog |
| AP Navigation AP Navigation All AP Hotspot Partitions RuijienetworksFujian | AP Na AC Na | | | onnection: Join Time: | | ▼ Mod | tel: | |
| Tab Soffice | AP Lis | Location | Spectrum Analy | sis: ✓ Ena AP Name | | Disable 🥒 A Primary AC | SSOCIATE | Out-of-Service Radio Secondary AC Name |
| | | | | | | | | |
| Re-associate | | | | × | | | | |
| Associate Hotspot: | | | | v | | | | |
| | Lab | | | | | | | |
| | Offic | e | | | | | | |
| OK | | networ ancei | k | | | | | |

Click "*OK*" when complete setting.

6.4.8 Customize AP List

The AP page can choose whether to show more AP fields, as shown in the following figure:

| AP | List Spectrum | Analysis: 🗸 Enable 🗙 | Disable 🕜 Associate | 🔆 Out-of-Service Ra | ate 🗧 |
|--------------|--------------------------|----------------------|---------------------|---------------------|-------|
| | Location + | AP Name + | Primary AC Name | Secondary AC Name | Worl |
| \checkmark | [No Location Info] | ap130 | WS6008 | | Ac |
| ✓ | [No Location Info] | ap520 | WS6008 | | Ac |
| | [No Location Info] | 5869.6c60.a511 | WS6008 | | Ac |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| A | ttributes to be displaye | ed: 🗌 Model 🗌 MAC 🗌 | Spectrum Analysis | | |

6.5 AC

6.5.1 Add, Query and Delete AC

This feature is used to add, query and delete the AC device. Go to *WLAN > AC >Add*, add the IP AC address, select the relevant SNMP template and TELNET template

| | | × |
|------------|-----------------------------|------------------------------|
| 172.29.3.1 | | |
| SNMPV2c | Ŧ | + Add SNMP. |
| default | Ŧ | + Telnet Te |
| | | |
| added | | |
| OK Cancel | | |
| | SNMPV2c default added | SNMPV2c default default |

After completion, it will automatically synchronize the associated AP AC

| Prompt | × |
|---------------------|---|
| Operation succeeded | |

Enter the query terms, click the query.

| Rujie | Smart Netv | ork Comma | ander | | 1 0 0 🛠 Favorite 🔓 Online Customer Service 🖞 Ch | | | | | | |
|---------------|------------|------------|-------------|-------------|---|-------------------|--------------|-------|--|--|--|
| | Asse | t Device | Performance | Alarm WLAN | Report Adv | anced System | | | | | |
| Summary Hotsp | | AC | STA | | Rogue AP A | ssistant Top | ology | | | | |
| Device Name: | | Device IP: | | Connection: | v | SSID: | Query | Reset | | | |
| AC List | | | | | | | | | | | |
| Device Name | IP ¢ | Vendor + | Model + | APs + | Associated STAs | Authenticated ST/ | Connection + | Alarm | | | |
| WS6008 | 172.29.3.1 | RUIJIE | WS6008 | 2 | 0 | 0 | Reachable | ۲ | | | |
| | | | | | | | | | | | |

Click "*delete*" to delete AC

| Net | Ruijie | Smart Netv | vork Comm | ander | | 1 0 | 1 0 🔍 ጵ Favorite 🔓 Change Password @ Heb 🧉 | | | | | | |
|--------------|-------------|------------|------------|-------------|-------------|-----------------|--|--------------|-------|---------------------------------------|--|--|--|
| | | Asse | t Device | Performance | Alarm WLAN | Report Ad | lvanced System | | | Topology >> | | | |
| Sumn | nary Hotsp | ot AP | AC | STA | Alarm | Rogue AP | Assistant Top | ology | | Last Synchronization Time: 4Minutes A | | | |
| Devi | ice Name: | | Device IP: | | Connection: | | SSID: | Query | Reset | | | | |
| AC L | ist | | | | | | | | | + Add AC 🗙 Delete | | | |
| \checkmark | Device Name | IP ¢ | Vendor + | Model + | APs + | Associated STAs | Authenticated ST/ | Connection + | Alarm | Action | | | |
| ✓ | WS6008 | 172.29.3.1 | RUIJIE | WS6008 | 2 | 0 | 0 | Reachable | P | Q Web M 🔅 teinet 🙎 🗙 Del | | | |
| | | | | | | | | | | | | | |

6.5.2 How to synchronize AC information

This feature is used to add, query and delete the AC device. Go to *WLAN > AC >AC name >Synchronize AC*, to synchronize AC.

| | 1 | | | | | | | | |
|-------------------------------|------------|--------------|---------------|---------------|---------|------------|--------------------|-------------|-----|
| ^ | Asset | Device | Performance | e Alarm | WLAN | Report | Advanced | System | |
| ummary Hotspot | AP | AC | ST | A Ala | rm | Rogue A | P Assistant | Topology | 7 |
| AC Details | | | | | | | | | |
| 🔉 Synchronize AC 🔍 Details 🗦 | 🌣 Alarm 1 | Threshold | | | | | | | |
| Device Info | | | | | | | | | |
| Device Name: WS6008 | | | | MAC: | 58:69 | :6c:20:ba: | 33 | | |
| Vendor: RUIJIE | | | | Model: | WS60 | 08 | | | |
| Software&H Ruijie Gigabit Wi | ireless Sv | vitch(WS600 | 08) By R | Software Na | rgos | | | | Sof |
| Software Ve RUIJIE | R | uijie Gigabi | t Wireless Sv | vitch(WS6008) | 2016- | 05-12 20:5 | 8:53 | | Run |
| System Status | B | y Ruijie Net | works. | | | | Device Performan | се | |
| Connection: Reachable | | S | NMP Connect | i Connectio | n succe | eded | Select Time Period | d: 24 Hours | 3 D |
| Telnet Connection: Connection | n succeed | led | | | | | Utilization% | | |
| | | | | | | | 80- | | |
| (2) APs 🛛 🔍 Numb | per of SSI | Ds(5) | | | | | 60 | | |
| Critical Alarm(0) 🎇 N | Major Alar | m(0) 🎬 | Normal Aları | m(0) | | | 40 | | |
| • | | ^w | | | | | 20- | | |
| 1 | | | | | | | 0 | | |

6.5.3 How to set up AC alarm threshold

This feature is used to add, query and delete the AC device. Go to *WLAN > AC >AC name >Alarm Threshold,* according to the actual needs, set AC alarm threshold parameters.

| Alarm Threshold | | | | |
|--------------------|----------|----|--------------------|----------|
| 802.11a | | | 802.11b | |
| Interference Thre | 60 | | Interference Thre | 60 |
| Noise Threshold(| -70 | | Noise Threshold(| -70 |
| Maximum Number | 32 | | Maximum Number | 32 |
| RF Utilization(%): | 80 | | RF Utilization(%): | 80 |
| Throughput(bps) : | 15000000 | | Throughput(bps) : | 15000000 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | ОК | Cancel | |
| | | | | |

6.5.4 AC device information detailed configuration

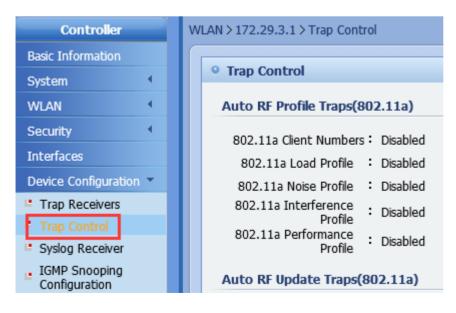
Go to *WLAN > AC >AC name >Details >Basic Information and then* modify the general properties of the wireless controller configuration information.

| | Â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System |
|---|--------------|--------------------------|--------|-------------|-------|-------------|--------------------|----------|--------|
| AC Details AC Details AC Details AC Details AC Name: AP Falover Priority: Runtime: Contact Person: Device Location: | AC Q Details | Asset AP * Alarm 1 | AC | STA | | WLAN arm | Report Rogue AP | Assistan | |
| Connectivity Status : SNMP Connectivity Status Teinet Connectivity Status | 😺 Connected | | | | | | | | |

Go to *WLAN > AC >AC name >Details >Trap Receivers and then* click "Add" to add the message server which needs to receive traps.

| AC Details | |
|-----------------------|------------------------------------|
| | |
| 🚯 Synchronize AC 🔍 De | tails 🔆 Alarm Threshold |
| Device Info | |
| | |
| | Asset Device Performance |
| Controller | WLAN > 172.29.3.1 > Trap Receivers |
| Basic Information | |
| System 🔹 | Trap Receivers |
| WLAN 1 | IP Address |
| Security 4 | 172.29.4.1 |
| | 172.29.2.5 |
| Interfaces | |
| Device Configuration | 172.29.2.4 |
| Trap Receivers | |
| Trap Control | |
| Syslog Receiver | |
| Trap Receivers | |
| IP Address | Remarks |
| 172.29.4.1 | |
| 172.29.2.5 | |
| 172.29.2.4 | |

Go to WLAN > AC >AC name >Details >Trap Control and then click "Update" to modify the Trap parameters.





Go to *WLAN > AC >AC name >Details >Syslog Receiver and then* Syslog reception can be added, deleted, synchronous operation.

| Rujje | Smart | Netwo | rk Comm | nander | | | 1 | 0 0 🖤 | 쑭 Favorite | Sonline Customer Service 👸 Change Password 🔹 🖲 |
|---|--------|-------------|--------------|-------------|-------|------|--------|----------|------------|---|
| | Â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | |
| Controller | WLAN > | 172.29.3.1 | >Syslog Rece | iver | | | | | | |
| Basic Information | | | | | | | | | | |
| System 📢 | • 5 | syslog Rece | iver List | | | | | | | +Add ≧Add SNC Server ×Delete ≧Sync(Last Sync Time |
| WLAN 🔸 | | IP Ac | ldress | | | | | | F | Remarks |
| Security 4 | | | | | | | | | | |
| Interfaces | | | | | | | | | | |
| Device Configuration 🔻 | | | | | | | | | | |
| Trap Receivers | | | | | | | | | | |
| Trap Control | | | | | | | | | | |
| Syslog Receiver | | | | | | | | | | |
| IGMP Snooping Configuration | | | | | | | | | | |
| 802.11 | | | | | | | | | | |
| 802.11a/n | | | | | | | | | | |
| 802.11b/g/n | | | | | | | | | | |
| License | | | | | | | | | | |

6.6 Users

6.6.1 How to view the entire network of wireless user statistics

Go to WLAN > STA >Global STAs , add the view the entire network of wireless user statistics.

| Ruffe Smart Netwo | rk Comr | nander | | | 1 (|) 0 🕚 | 📩 Fav | orite 🔒 | Online Customer Ser | vice 🇯 Change Pa |
|---|-------------|---------------|---------|--------|-----------|--------------|---------------|---------|---------------------|------------------|
| Asset | Device | Performance | Alarm | WLAN | Report | Advance | ed Syste | m | | |
| Summary Hotspot AP | | STA | AI | arm | Rogue AP | Assis | stant T | opology | | Last S |
| STA Key STA STA Statistics T the Global STAs Image: State | MAC IPv4 | | User ID | | | User Na | | 1- | SSID: | Reset |
| 🔻 📷 All Hotspots | | | IPVC | | | Online/Offli | | • | Query | Reset |
| 🔻 📶 RuijienetworksFujian | STA List | MAC | SSIC |) \$ | AP Name | ÷ 0 | nline/Offline | On | line Period | RSSI ÷ |
| 🚡 Lab | | | | vlan11 | |) | Online | | | Strong(-47) |
| 🚡 Office | | 2:dd:f8:f9:f5 | AS | | ap520 | | Offline | | | |
| All Unassociated APs | e0:ad | ::cb:cb:3a:b3 | vlan10 | | ap520 Off | | Offline | | | |
| - | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Click "STA Statistics" then select a hot spot to view the STA information.

| Ruffe Smart Netwo | ork Commander | | | 📩 Favorite 🛛 🔓 Online Custom | er Service 📋 Change Passwo | ord 🕜 Help 🥥 Logout |
|----------------------------|---|--|--------------------------|---|--|------------------------------|
| Asset | Device Performance A | Jarm WLAN Repo | ort Advanced | System | | Topology |
| Summary Hotspot AP | AC STA | Alarm Rogu | e AP Assistant | Topology | Last Synch | nronization Time: Within 1 M |
| STA Key STA STA Statistics | | SSIDs 3 Days 7 Days 30 D Associated STAs — Aut | | Rate Statistics Select Time Period: 24 He Rate Kbps | SSIDs ours 3 Days 7 Days 1 Upon-click Rate = | |
| | 4 3 2 1 0 05-11 21:30 05-12 05:22 | 5 05-12 13:20 | Time 7 05-12 21:15 | 0 | 05:20 05-12 13:0 | |
| | STA Count(Top N) | rt by: Associated ST | As Check All | Top N Rates | Sort by: T | otal Rate V Check All |
| | | · · · · · · · · · · · · · · · · · · · | uthenticated STAs | Location/Name | Uplink | Downlink |
| | STA Statistics-by Frequency Bands | STA Status | Online 🛛 🔻 | STA Statistics-by Connection | Protocols STA Status | Online 🔹 |

6.6.2 Full Network Users List

Go to WLAN > STA >a single hot spot >Key STA Settings, to set the threshold for the received packet retransmission rate

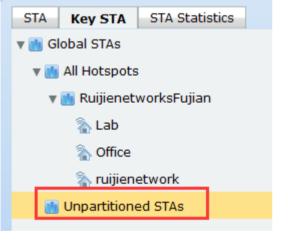
| | | | | | | | 🖋 Key STA Settings |
|------|--------|-----------|----------------|--------------------------|-------------|-------------|--------------------|
| | SSID + | AP Name 🕈 | Online/Offline | Online Period | RSSI + | Uplink 🕈 | Downlink + |
| 2:bd | vlan11 | ap520 | Online | 2Hour(s)45Minute(s)23Sec | Strong(-47) | 4.60 (Kbps) | 600.00 (bps) |
| 9:f5 | AS | ap520 | Offline | | | | |
| a:b3 | vlan10 | ap520 | Offline | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Key STA Settings | × |
|---------------------|---|
| Retransmit Rate T 1 | |
| | |
| | |
| OK Cancel | |

Customize more terminal fields, as shown in the following figure:

| ST/ | A List | | | | |
|-----|---------------------|-------------|----------------|----------------|------------------------|
| | MAC | SSID ÷ | AP Name 🕈 | Online/Offline | Online Period |
| ✓ | 14:75:90:f9:42:bd | vlan11 | ap520 | Online | 2Hour(s)45Minute(s)235 |
| | 28:c2:dd:f8:f9:f5 | AS | ap520 | Offline | |
| | e0:ac:cb:cb:3a:b3 | vlan10 | ap520 | Offline | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | User ID 📃 User Name | IP 🗌 Hardwa | re Type 📃 OS 📃 | Product Type | 🛛 🔍 🕨 🕅 Tot |
| 1 | | | | IIII | _ |

Go to *WLAN > STA > Key STA*, then select a single hot port, click "*Add Key STA*" and set the parameters of STA.



| Use | er ID: | MAC: | | Online/ | STA Type: | v Query | Reset | |
|-----|----------|---------|----------------|---------------------------|-------------------------------|-------------------------|------------|--------|
| Key | STA List | | | 🔅 Batch Set | Retransmit Rate | Threshold 🕂 Add Key STA | × Remove K | ey STA |
| | MAC | User ID | Online/Offline | Retransmit Rate Threshold | RSSI + | AP Name 🕈 | Alarm | STA Ty |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Click "Batch Set Retransmit Rate Threshold" to set the threshold for the received packet retransmission rate.

| User ID: | MAC: | | Online/ | STA Type: | ▼ Query | Reset | |
|---------------------|----------------|----------------|---------------------------|-----------------|-------------------------|------------|----------|
| Key STA List | | | 🔆 Batch Set | Retransmit Rate | Threshold 🔸 Add Key STA | × Remove K | ey STA |
| MAC MAC | User ID | Online/Offline | Retransmit Rate Threshold | RSSI + | AP Name + | Alarm | STA Type |
| ✓ 14:75:90:f9:42:bd | | Online | 1 | Strong(-47) | ap520 | 2 | Compute |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Batch Set Retr | ansmit Rate Th | reshold | × | | | | |
| Retransmit I | Rate Thres | 1 | | | | | |
| | | | | | | | |
| | OK Can | cel | | | | | |
| | | | | | | | |

Click "*Remove Key STA*" to delete the Key STA.

| Us | er ID: | MAC: | | Online/ | | STA Type: | • | Query | Reset | |
|--------------|-------------------|---------------|----------------|-----------------|-----------|-------------------------------|---------------|------------|------------|----------|
| Key | STA List | | | * | Batch Set | Retransmit Rate | Threshold 🕂 A | dd Key STA | × Remove k | (ey STA |
| \checkmark | MAC | User ID | Online/Offline | Retransmit Rate | Threshold | RSSI ¢ | AP Name | e + | Alarm | STA Type |
| | 14:75:90:f9:42:bd | | Online | 1 | | Strong(-47) | ap520 | D | 2 | Compute |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 0 | Confirm | | | | | × | | | | |
| | | | | | | | | | | |
| | ? Are | e you sure yo | u want t | o delete t | the ke | y STA? | | | | |
| | | | | ОК | Ca | ncel | | | | |

6.7 Alarm

6.7.1 Alarm Source Navigation

Go to *WLAN > Alarm,* then click ", you can render the associated subordinate navigation. Then click the current alarm source, and the alarm list is presented with the alarm information generated by the device.

| â | Asset | Device | Performance | Alar | m WLAN | Report | Advanced | System | | |
|---------------------------|-------|-------------|-------------|-------|----------------|--------------|-------------|------------|--------------------|---------------------|
| Summary Hotspot | | | | | Alarm | Rogue AP | Assista | nt Top | pology | |
| Alarm Source Navigation | De | vice Name: | | | Alarm Level: | 🗸 Critical 🗸 | Major 🗹 No | ormal 📃 Ir | nform Ack Status: | 🗹 Acked 🗹 UnAcke |
| 🔻 🚹 All Alarms | D | escription: | | | Alarm Time: | | 📰 to | | | |
| 🃺 All Acess Controllers | Alar | m List | | | | Acknowled | ge 🥔 Resolv | ved 🗙 De | lete 🔅 Alarm Cor | nfiguration 👌 Expor |
| 🔻 👖 All Hotspot Areas | | Alarm Sour | ce + Level | Evei | Desc | ription | Ack Statu | Resolvin I | First Alarm Time 🔹 | Last Alarm Time 🔹 |
| 🔻 🚹 RuijienetworksFujian | | ap130 | P | AP (| Device (WS600 | 8(172.29.3.1 |) UnAcked | Unresolv | 2016-05-12 15:20 | 2016-05-12 15:20 |
| 🚡 Lab | | ruijienetw | vork 💾 | Mas M | Massive APs ur | der hotspot | (UnAcked | Unresolv | 2016-05-12 15:20 | 2016-05-12 15:20 |
| 🚡 Office | | | | | | | | | | |
| 🏠 ruijienetwork | | | | | | | | | | |
| 🚻 All APs Not Partitioned | | | | | | | | | | |

6.7.2 Export Alarm Procedure

Go to WLAN > Alarm, then click "Export" to export the alarm list.

| ce Name: scription: | | Alarm Level: V Critical V M Alarm Time: | lajor 🗹 Normal 🛄 i | Inform Ack Status: | 🗹 Acked 🗹 UnAcke | d Resol | ving: Resolved 🗸 Unres Query R |
|------------------------|------------|--|--------------------|--------------------|---------------------|----------|-----------------------------------|
| List | | 🗸 Acknowledge | Resolved × D | elete 🔅 Alarm Cor | nfiguration 🖪 Expor | t 🗱 Alai | rm Window Configuration |
| Alarm Source 🔹 | Level + Ev | ei Description | Ack Statu Resolvin | First Alarm Time 🔹 | Last Alarm Time 🔹 | Times | Action |
| ap130 | P AP | (Device (WS6008(172.29.3.1) | UnAcked Unresol | 2016-05-12 15:20 | 2016-05-12 15:20 | 1 | Details More+ |
| ruijienetwork | Ma | s Massive APs under hotspot (| UnAcked Unresol | 2016-05-12 15:20 | 2016-05-12 15:20 | 1 | Details More- |
| | | | | | | | |

6.7.3 How to deal with alarm information

Go to *WLAN > Alarm*, then Select the check box before the alarm information in the alarm list. Click "*Acknowledge*" then alarm status change to confirmation.

| 0 | Device Name: | | | Alarm Level: | 🗹 Critical 🗹 M | ajor 🗹 No | rmal 📃 I | nform Ack Stat | us: 🗹 Acked 🗹 UnAck |
|---|----------------|-------|------|---------------|----------------|-----------|----------|------------------|----------------------|
| | Description: | | | Alarm Time: | | 📰 to | | | |
| A | larm List | | | | 🗸 Acknowledge | 🥔 Resolv | ed 🗙 D | elete 🔅 Alarm | Configuration 👍 Expo |
| | Alarm Source 🕈 | Level | Evei | Des | cription | Ack Statu | Resolvin | First Alarm Time | + Last Alarm Time + |
| V | ap130 | - E | AP (| Device (WS600 | 08(172.29.3.1) | UnAcked | Unresolv | 2016-05-12 15 | :20 2016-05-12 15:20 |
| | ruijienetwork | | Mas | Massive APs u | nder hotspot (| UnAcked | Unresolv | 2016-05-12 15 | :20 2016-05-12 15:20 |
| | | | | | | | | | |
| | | | | | | | | | |

Click "Resolved" then alarm state to solve has been solved.

| Device Name: Alarm Level: Critical Major Normal Inform Ack Status: Acked U Description: Alarm Time: to | | | | | | | | | | |
|---|----------------|-------|------|-----------------------------|-----------|----------|--------------------|--------------------|--|--|
| Alarn | n List | | | ✓ Acknowledge | 2 Resolv | ed X De | | nfiguration 🗳 Expo | | |
| | Alarm Source 🕈 | Level | Evei | Description | Ack Statu | Resolvin | First Alarm Time 🔹 | Last Alarm Time 🕈 | | |
| | ap130 | 2 | AP (| Device (WS6008(172.29.3.1) | UnAcked | Unresolv | 2016-05-12 15:20 | 2016-05-12 15:20 | | |
| | ruijienetwork | P | Mas | Massive APs under hotspot (| UnAcked | Unresolv | 2016-05-12 15:20 | 2016-05-12 15:20 | | |
| | | | | | | | | | | |

Click the "Delete" will delete the selected alarm.

| Dev | vice Name: | | | Alarm Level: 🗹 Critical 🗹 Major 🗹 Normal 🗌 Inform 🛛 Ack Status: 🗹 Acked 🗹 UnAck | | | | | | | | |
|-------|-------------------|-------------------|------|---|-----------|----------|--------------------|-------------------|--|--|--|--|
| D | escription: | | | Alarm Time: | 📰 to | | | | | | | |
| Alarr | elete 🗱 Alarm Cor | figuration 🗳 Expo | | | | | | | | | | |
| | Alarm Source + | Level | Evei | Description | Ack Statu | Resolvin | First Alarm Time 🔹 | Last Alarm Time 🔹 | | | | |
| | ap130 | 2 | AP C | Device (WS6008(172.29.3.1) | UnAcked | Unresolv | 2016-05-12 15:20 | 2016-05-12 15:20 | | | | |
| | ruijienetwork | 🚩 Mas | | Massive APs under hotspot (| UnAcked | Unresolv | 2016-05-12 15:20 | 2016-05-12 15:20 | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Go to WLAN > Alarm > Alarm Configuration, then set alarm information.

| Device Name: | Alarm Level: 🗹 Critical 🗹 Major 🗹 Normal 📃 Inform Ack Status: 🗹 Acked 🗹 |
|----------------|---|
| Description: | Alarm Time: to |
| Alarm List | ✓ Acknowledge |
| Alarm Source + | Level & Ever Description Ack Stati Resolvin First Alarm Time + Last Alarm Tir |
| ✓ ap130 | Alarm Configuration 2 15:20 2016-05-12 |
| ruijienetwork | AP Down Alarm Under Hotspot 2 15:20 2016-05-12 |
| | ✓ APs Down Alarm Under Hotspot Alarm Threshold of APs Down Under Hotspot: 50 % |
| | Save |

Go to *WLAN > Alarm,* click a single hot port, then click "*Alarm Window Configuration*" to define whether to enable the popup window warning prompt.

| | Asset | Device Perf | ormance | Alarm | WLAN | Report | Advanced | Systen | n | | | |
|--|-------|----------------|-----------|---------|----------------|--------------|--------------|----------|--------------------|--------------------|------------|--------------------------------|
| Summary Hotspot | AP | AC | STA | | Alarm | Rogue AP | Assistar | it To | pology | L | ast Synchi | ronization Time: Within 1 Mini |
| Alarm Source Navigation | De | vice Name: | | 4 | Alarm Level: | 🛛 Critical 🗹 | 🛾 Major 🗹 No | rmal 📃 I | nform Ack Status: | 🗹 Acked 🗹 UnAck | ed Resol | ving: 🗌 Resolved 🗹 Unreso |
| 🔻 🚹 All Alarms | C | Description: | | 4 | Alarm Time: | | 📰 to | | | | | Query Re |
| 🚹 All Acess Controllers | Alar | m List | | | - | Acknowled | ge 🍃 Resolv | ed x D | elete 🔅 Alarm Cor | nfiguration 👌 Expo | rt 🔆 Alar | m Window Configuration |
| 🔻 🃺 All Hotspot Areas | | Alarm Source + | Level + E | Evei | Descr | iption | Ack Statu | Resolvin | First Alarm Time 🔹 | Last Alarm Time 🔹 | Times | Action |
| 🔻 🛗 RuijienetworksFujian | | WS5302 | P (| Dev The | e device is un | reachable | UnAcked | Unresolv | 2016-06-01 13:50 | 2016-06-06 09:41 | 1040 | Details |
| 🚡 Lab | | | | | | | | | | | | |
| Solution The Company of Company o | | | | | | | | | | | | |
| 🚡 ruijienetwork | | | | | | | | | | | | |

| Real-Time Alarm Config | uration | | × |
|--|---------|-------------|---------|
| Display Window: Alarm Sound: Location: | | | |
| Page Duration: | 30 5 | econds(10 t | 0 300s) |
| | OK Can | cel | |

6.8 Illegal AP

6.8.1 Illegal AP Configuration Wizard

Go to WLAN > AP > Rogue AP Configuration Wizard, then view the information of illegal AP.

| ^ | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | |
|-------------------------------|------------|-------------|----------------|----------------|----------|-------------|----------------|-------------------------------|-------------------------|
| ummary Hotspot | АР | AC | ST/ | A Ala | arm | Rogue A | P Assistan | t Topology | Last Synchroi |
| AP Details | | | | | | | | | |
| 🚯 Synchronize AP 🛛 🖞 Radio Li | st 🛠 Aları | m Threshold | 🛠 Rogue Al | P Configuratio | n Wizard | 🗱 Rogue | APs Statistics | Spectrum Analysis: Closed | |
| Device Info | | | | | | | | | |
| Location: | | | AP Name: | ap130 | | | MAC: | 58:69:6c:66:b5:3b | Model: AP130(W) |
| Connection: Unreachable | | | IP: | 10.10.10.101 | | | Subnet Mask: | 255.255.255.0 | Gateway Ad 10.10.10.2 |
| Software Na rgos.bin | | Sof | ftware Ve | AP_RGOS 11.1 | L(5)B6 | | Software Ve | RUIJIE | Vendor: RUIJIE |
| Flow: Normal | | | Device SN: | G1JDCEV0200 | 8C | | Running Per | | Online Period: |
| Working Mo Access | | Cor | ntainment | Not Configure | d | | | | |
| Time Range: [7 Days] Rate: | 0.00% | | | | | | | | |
| Associated AC (WS60 | | Associate | d Hotopot(rui | ijionotwork) | 6 No. | umbor of SS | IDs(1) 🎒 (| Critical Alarm(1) 🎇 Major Ala | rm(0) 🎇 Normal Alarm(0) |

Go to WLAN > AP select multiple AP, and then click on the "Rogue AP Configuration Wizard", then set the illegal AP.

| AP N | lame: | Connection: | Model: | v | MAC: | | SS | ID: | |
|-------|--------------------|----------------------|---------------------|---------------------|---------------|---------------------|-------------|--------------|------------|
| AC N | lame: | Join Time: | Flow: | ▼ We | orking Mode: | ▼ Spe | ctrum Analy | sis: | • |
| AP Li | ist Spectrum | Analysis: 🗸 Enable 🗙 | Disable 🖋 Associate | * Out-of-Service Ra | ate 🔅 Idle AP | 🔅 🗱 Alarm Threshold | is 🗱 Rogu | e AP Configu | ration Wiz |
| | Location + | AP Name + | Primary AC Name | Secondary AC Name | Working Mod | Associated Hotspot | Associated | Authenticat | Flow + |
| ✓ | [No Location Info] | ap130 | WS6008 | Access | | ruijienetwork 0 | | 0 | Normal |
| | [No Location Info] | ap520 | WS6008 | | Access | | 0 | 0 | Normal |
| | [No Location Info] | 5869.6c60.a511 | WS6008 | | Access | | 0 | 0 | Normal |

Enter the illegal AP configuration wizard page, you need to select the configuration mode, there are 2 kinds of configuration mode: simple configuration mode and user configuration mode, select the "*simple configuration mode*", the AP work mode will be configured as a mixed mode, the system is configured to config mode; click *OK* that is configured to equipment.

| Configuration Wizard | × |
|---|---|
| Simple Configuration Mode AP Working Mode: Hybrid Mode, Containment Mode: Config Mode | |
| 🧭 Enabled 🗾 Contained Area 📰 Permitted Area | |
| BlackList STA Rogue AP | |
| Hybrid Mode: The AP monitors rogue APs and offers wireless services Config Mode: Contain the rogue APs in the blacklist | |
| ◯ User Configuration Mode | |
| APYou can specify working and containment modes | |
| OK Cancel | |
| | |

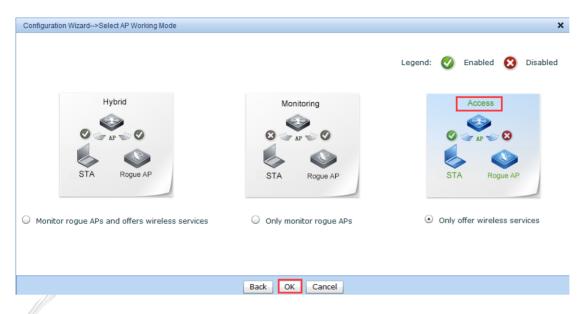
Select "user configuration mode", "OK" button will become "next" button, click "next", enter the configuration AP work mode page.

User Configuration Mode

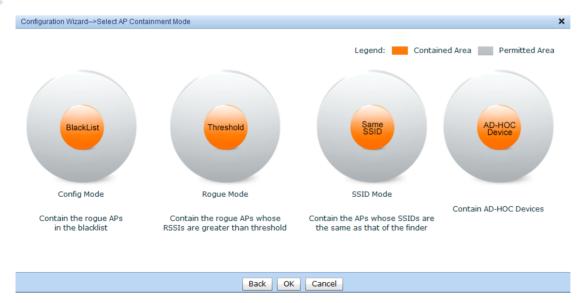
APYou can specify working and containment modes

| | | Next Cancel |
|---|------------------------|--|
| Configuration WizardSelect AP Working Mode | | × |
| | | Legend: 🥑 Enabled 😥 Disabled |
| Hybrid | Monitoring | Access Access Ap CO Ap CO |
| \bigcirc Monitor rogue APs and offers wireless services | Only monitor rogue APs | \bigcirc Only offer wireless services |
| | Back Next Cancel | |

AP can be configured in 3 kinds of work modes: mixed mode, listening mode, access mode; select "access mode", then click "OK button".

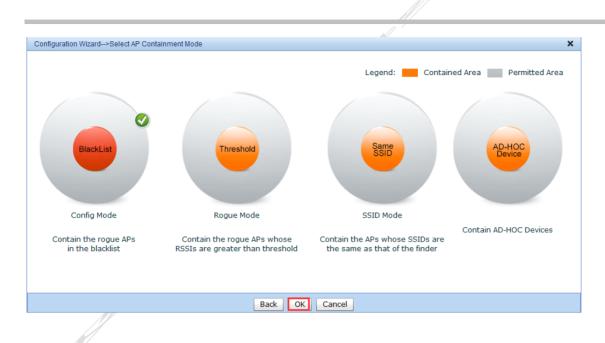


Select the mixed mode or monitor mode, click next, and then enter the AP counter mode page:



After entering the AP counter system mode configuration page, click "OK", meaning that only the AP configuration of the work mode, not to configure the counter model.

Four optional configure AP counter mode, including: config mode, rogue, SSID, ad-hoc mode; when a certain mode is selected, figure in the upper right corner will tick effect appears, as shown in Figure:



Click "**OK**" when complete setting.

6.8.2 Illegal AP List

Go to *WLAN > Rogue AP >List of Rogue APs,* then view the information of illegal AP.

| RU | īje | Smart | Netwo | ork Comm | nander | | | 1 0 | 0 | 📩 Favorite | 🔒 Online Cust | omer Service | 🔋 Change Password 🛛 🕄 |
|---------------|-------------------------|-------|-------|--|-------------|-------|---------|-----------------------------|----------|------------|-------------------|-----------------|------------------------|
| | | | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | | | |
| Summary | Hotspo | | | | | Ala | rm | Rogue AP | Assistan | t Topo | ology | | Last Synchronizati |
| Configuration | gue APs and Blacklis | st | AP | Working Mode | Statistics | | 3 | Access Monitor Hybrid | - | Rogue | AP Containment St | atus Statistics | - |
| | | | | t of Rogue APs 3SSID: Rogue AP t | SSI | | engtRog | AP Na | | Query | Reset | | list + Add to WhiteLis |

6.8.3 Black and White Lists

Go to *WLAN > Rogue AP >WhiteList and Blacklist >Select an AC*, then you can see the black and white list information on the current AC.

| | | | | | // | |
|--------------------------|-------------------|-----------------|-----------------|--------------------|-----------------------------|------------------------------|
| | | | | | | |
| ummary Hotspot | AP AC | STA Alarm | Rogue AP | Assistant Topology | Last Synchi | onization Time: Within 1 Mir |
| Configuration Navigation | Select an AC: WS6 | 008(172.29.3.1) | | | t) Synchro | nize WhiteList and Blacklis |
| List of Rogue APs | Blacklist(BSSID) | | × Delete | WhiteList(BSSID) | | × Delete |
| WhiteList and Blacklist | BSSID: | Add | | BSSID: | Add | |
| Operation Log | | Blacklist | | | WhiteList | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | N N N N TotalOReco | ords 1/0Page Per Page 20 Re | cords 1 Page 🚽 |
| | WhiteList(SSID) | X Dolato | Blacklist(SSID) | | | x Delete |

You can manually enter BSSID, click "*add*", as shown below:

| × Delete | lacklist(BSSID) | | | | | | | | |
|----------|----------------------|--------|--|--|--|--|--|--|--|
| b7 Add | D: f2:87:c1:61:12:b7 | BSSID: | | | | | | | |
| acklist | Blackli | | | | | | | | |
| | | | | | | | | | |

Can also be in the last chapter of the illegal AP list in the AP to add the black list,

| List | of Rogue APs | | | | | Add to BSSID Bla | cklist 🛛 🕂 Add t | + Add to SSID Blacklist + Add to WhiteList 🚯 Synchron | | | |
|------|----------------|------------|----------------|-----------------|--------|------------------|------------------|---|------------------|-----------|---------|
| В | SSID: | SSID | : | AP Na | | Query F | Reset | | | | |
| | Rogue AP BSSID | Rogue AP (| Signal Strengt | Rogue AP SSID 🗧 | Vendor | Finder AP 🕈 | Finder AP Loca | t Discovery Time | Associated Hotsp | Containme | Contain |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Check the black list and click "delete".

| Bla | icklist(BSSID) | × Delete |
|--------------|-------------------------|----------|
| BS | SID: 22:22:22:22:22 Add | |
| \checkmark | Blacklist | |
| ✓ | 22:22:22:22:22 | |
| | | |
| | | |

6.8.4 Running Log

Go to WLAN > Rogue AP > Operation Log, then Select Query beginning and ending time, click on "Query",

| Configuration Navigation | Operation Log | | | |
|--|------------------------|---------------------------|-------------------------|---------------------|
| List of Rogue APs WhiteList and Blacklist | Query Time: 2016-05-12 | 00:00 to 2016-05-1 | 2 23:59 Query | Reset |
| | Rogue AP BSSID/SSID | Operation Description | Rogue AP Discovery Time | Log Generation Time |
| Operation Log | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

6.9 Troubleshooting Assistant

6.9.1 How to search for equipment

Go to *WLAN > Assistant*, then enter search terms, such as "18", click on "*Query*", you can search for the following five aspects with "18".

| | Â | Asset | Device | Performance | Alarm | WLAN | Report | Advanced | System | | |
|------------|---------------|-----------|---------|-------------|---------|--------|--------|-----------------|-------------|----------|---------------------|
| | | | | | | | | Assistan | t Topo | | |
| 18 | | | | | | Query | Reset | | | | |
| Query List | | | | | | | | | | | |
| (0) STAs | (0) Authentic | ated STAs | (0) APs | (0) ACs | (0) Rog | ue APs | | | | | |
| Online/Off | | Roaming | r | ▼ Que | ery Res | set | | | | | • MAC 🔾 SSID 🔾 AP I |
| MAC + | SS | ID 🕈 | AP Na | me • | AP IP 🔹 | | RSSI + | Online/Offlir O | nline Perio | Uplink + | Downlink + |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

6.9.2 How to instantly search network

Go to *WLAN > Assistant, then* enter search terms, such as SSID for the "Vlan11", click on "Query", then see the details of the STA

| Summary I | lotspot | AP | AC | STA Alarm | Rogue AP | Assista | int Topo | ology | Last Syn | chronization Tim |
|----------------|------------|------------------------------|-------------|-------------------|-------------|--------------|--------------|-------------|-------------------|------------------|
| vlan11 | | | | Que | ry Reset | | | | | |
| Query List | | | | | | | | | | |
| (1) STAs | (0) Authen | ticated STAs | (1) APs (1) | ACs (0) Rogue APs | | | | | | |
| Online/Off | | Roaming: | • | Query Reset | | | | C |) MAC 💿 SSID 🔵 AP | IP 🔘 AP MAC |
| MAC + | | SSID + | AP Name + | AP IP + | RSSI + | Online/Offli | Online Perio | Uplink + | Downlink + | A |
| 14:75:90:f9:42 | :bd | vlan11 | ap520 | 10.10.10.100 | Strong(-47) | Online | 3Hour(s)4 | 5.52 (Kbps) | 733.00 (bps) | |
| | | | | | | | | | | |

| | | 1 | | | | |
|-------------------|------------------|----------------------|---------------|-----------------|--------------------|-----------|
| Summary Hotsp | ot AP | AC | STA | Alarm | Roaue AP | Assistant |
| | STA Details | | | | | |
| vlan11 | 🚯 Synchronize S | STA Info 🛛 🕅 Real | -Time Perform | ance Monitoring | | |
| Query List | STA Info(SMP, ES | SS, or SAM Server Co | orelation) | | | |
| (1) STAs (0) | User Name: | | | User ID: | | |
| | User Group: | | | ID Number: | | |
| Online/Off | Landline Tel | | | Mobile Phone: | | |
| MAC + | Address: | | | | | |
| 14:75:90:f9:42:bd | Basic STA Info | | | | | |
| | IP: | 0.0.0.0 | | MAC: | 14:75:90:f9:42:bd | |
| | Online/Offli | Online | | Online Period: | 3Hour(s)49Minute(s | s)27Sec |
| | Energy Savi | active | | Operating S | Win7 | |
| | Hardware T | Computer | | Product Type: | Others | |
| | SSID: | vlan11 | | WLAN ID: | 11 | |
| | VLAN ID: | 11 | | Channel: | 1 | |
| | Radio: | 1 | | Connection | dot11n | |
| | Access Band: | 2.4G | | Negotiated | 54.00(Mbps) | |

Other real-time query methods, such as user MAC, the input query terms "00:08:ca:54:86:23"

| | | | | | Rogue AP | Assista | | logy | |
|-------------|----------|------------------|----------------|------------------|-------------|---------------|--------------|-------------|----------------|
| 14:75:90: | f9:42:bd | | | Quer | ry Reset | | | | |
| Query List | | | | | | | | | |
| (1) STAs | (0) Au | thenticated STAs | (0) APs (0) AC | Cs (0) Rogue APs | | | | | |
| Online/Off | | Roaming: | | Query Reset | | | | | MAC SSID AP IP |
| MAC | • | SSID + | AP Name + | AP IP 🕈 | RSSI + | Online/Offlir | Online Perio | Uplink + | Downlink + |
| 14:75:90:f9 | 9:42:bd | vlan11 | ap520 | 10.10.10.100 | Strong(-45) | Online | 3Hour(s)5 | 5.52 (Kbps) | 733.00 (bps) |
| | | | | | | | | | |
| | | | | | | | | | |

6.10 View Hot Spot

The function is used to view the logical relationship between the wireless network hotspot, AC, AP, and STA. Go to *WLAN* > *Topology* >*Hotspot View,* click the AP icon to show the hot AP

| ▼ Hotspot View AC Vie | w | | | |
|------------------------|--------------------|--------|--------|--|
| 💼 RuijienetworksFujian | | AP: 1 | STA: 0 | |
| 🚡 Lab | Hotspot | ap130 | | |
| a once | (((•))) | STA: 0 | | |
| | Lab | | | |
| | | | | |
| | Hotspot (((•))) | | | |
| | | | | |
| | Office | | | |
| | \frown | | | |
| | (((•))) | | | |
| | ruijienetw | | | |
| | | | | |
| | | | | |

Click the terminal icon, terminal information may be presented under the hot spot.



Click "AC View" to see the logical relationships between AC, AP, and STA,

| Summary | Hotspot | AP | AC | STA | Alarm | Rogue AP | Assistant | Topology | |
|--------------|--------------|--------------|----|-----|-------|----------|-----------|----------|--|
| Hotspot | View 🔻 AC Vi | ew | | | | | | | |
| | | AC WS6008 | AP | | ት) | | | | |
| All Devic | 85 | | | | | | | | |