Netis VIEW Integrated Network Management System

Client Manual

Statement

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Preface

This preface includes the following：

Audience

Related conventions

Audience

This manual is mainly for the following readers：

Engineering staff

Device Developers

Equipment maintenance personnel

Use this manual requires prior knowledge to master the following

Data communication technology

Network Management Technology

Related conventions

Term agreement

Term	Meaning
Netis View	Netis VIEW Integrated Network Management System
Mysql	Netis View use Mysql database

Symbol Conventions

Icon	Tip Type	Tip matters
	Tip	Important features or instructions
	Note	Maybe interested in personal injury or damage to the system, or cause business interruption or loss
	Warning	May cause significant harm to human life
➔	Jump to pay	Steps to jump to the next steps
→	Cascading menu	Connecting multi-level menu items
↔	Two-way business	Direction for the two-way traffic signal
→	Individual business	Traffic signal direction for the individual

Directory

Chapter 1 Platform Introduction and Installation

1.1 Platform Introduction

The network management platform is a highly customizable and scalable network management platform. It is a comprehensive network management platform. According to the user's configuration, network management system can automatically discove:r a variety of data devices on the network and automatically draw the network topology. User-based network topology can be conveniently manage the entire monitoring network devices.

NMS platform includes the following features:

TOPO Management: Automatic discovery of network devices, display devices panel, update device status；

Configuration: Service configuration for the device,

routine maintenance to provide a friendly user interface；

Fault Management: Capture a variety of network events and alarms, and make the appropriate inquiries and management；

Performance Management: Relevant performance data network equipment for real-time or on a regular basis to monitor the statistics to facilitate user management；

Security Management: Users can add / delete / certification operations, assign user rights and groups, in order to ensure the safety of their data network equipment

1.2 Install Platform

Hardware requirement

The performance of the network management system depends on the operating platform for CPU and memory. The following minimum hardware configuration is configured as network management system requirements.

Server:Pentium IV 2.8G,1G RAM

Client:Pentium IV 1.6G,512M RAM

If the server and client running on the same machine, the hardware configuration require are higher as well.

Software requirement

Server:Windows Server 2003,Windows XP,Windows7

Client: Windows7,Windows XP,Vista

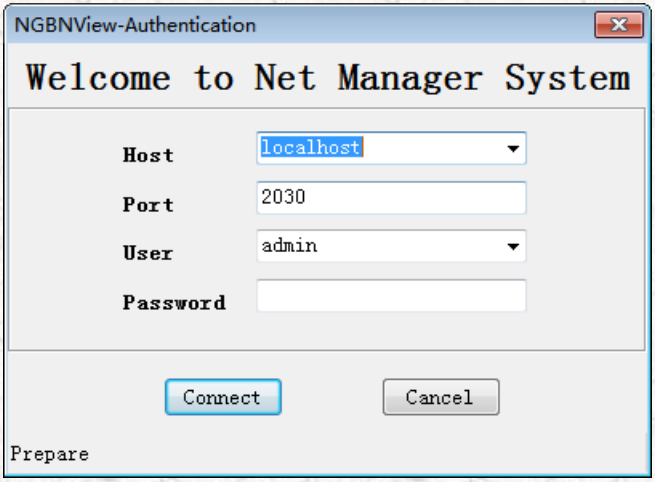
Database: Support MySQL database

Chapter 2 NMS

Client of System provides users with very friendly user interface, users can easily and intuitively perform various operations on network management interface.

2.1 Start NMS

Start server, open below login interface, as below :



Picture 2-1Start

Host: default host name is: localhost, If the server and client

application is not on the same machine, you should enter the IP address of the server's network management platform in the 'host' office.

Port: default port is 2030, this setting is related with the server and for communicating port, it can be connected through the server to see which one port, generally do not need to change.

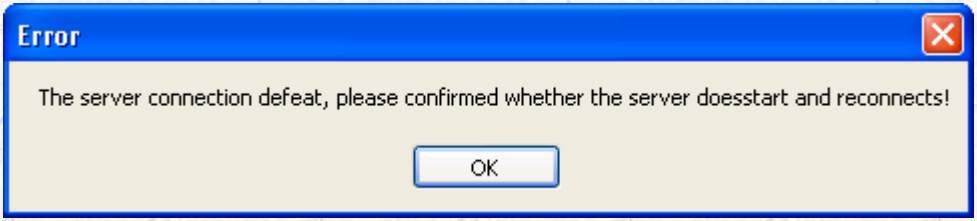
User: Login user name of the client, the default is admin, after entering the network management system, can add or delete users by security management configuration items.

Password: provide the key to login.

Notes: Network management system must be used after the user must log into the system installation. System is installed by default super administrator user admin, default password is 123456, it is strongly recommended to modify the network administrator admin user password management system installed.

The main reasons for the failure of client connections are as the following:

a. Server does not start, the host’s address and port number input error and prompt box will pop up as shown in Fig.

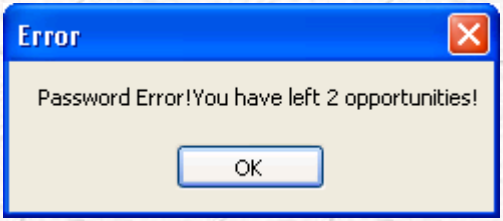


Picture 2-2Server connection failed - connection failed window

b. Enter your user name , error message box pops up as shown in Fig.

Picture 2-3User name - connection failed window

c. Enter the wrong password, the prompt box pops up as shown below.

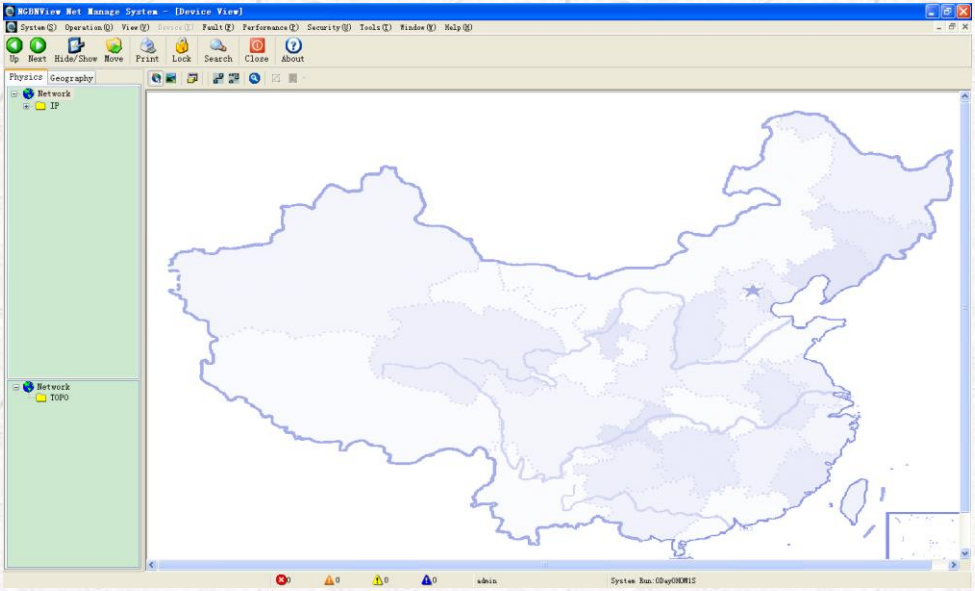


Picture 2-4Password - connection failed window

Notes: By default there are three chances to enter, if you enter the wrong password three times, you automatically exit.

2.2 NMS Main Interface

The main interface is divided into the following sections: the menu bar, toolbar, view navigation window, TOPO navigation window, a small toolbar, view area, information, tips and status bar area. As show below :



Picture 2-5NMS main interface

Pop-up menu: Provide common functions for system menu items; This menu item will be described in subsequent chapters.

Toolbar:Common menu items provide convenient operation;

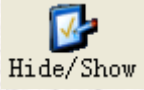
Each icon corresponds substantially with the corresponding menu item, toolbar system shown in below.

Picture 2-6Toolbar

The details of toolbar as below :

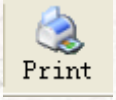
return to previous image.

go to next image.



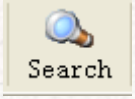
Hide/show navigation bar.

move to a previous one .

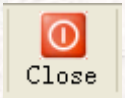


print network image or alarm lists

lock client interface.



search.



stop searching.

about

View :View of the device used to display the view or TOPO ; If you do not open, the area is empty.

Navigation bar:divided into geographical and physical views,Physical view provides access to the client from the server to the list of devices, the user can click on the list item to open the view of the device. Physical views is defined by the user generated list.

TOPO Navigation Window:TOPO chart provides a list, click on the list items, you can view the TOPO map.

Small toolbar:Provide some of the equipment operation; the detail view to see the menu.

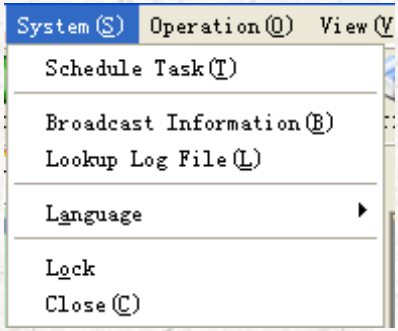
Information prompt area:Tips for displaying alarm system operation process information; alarm level from left to right:Critical、Major、Minor、Warning；

Status bar:Used to display the operational status of the system, such as running time, user name, etc..

Chapter 3 System

3.1 System Menu

The system menu as shown below, several following sections will introduce these menu features in details.



Picture 3-1System menu

3.2 Schedule Task System Menu

3.2.1 Schedule Task Summary

In the network management system platform, schedule task is to perform assigned tasks at a given point in time.

Schedule tasks can be used to control various operational tasks, such as backing up the database regularly, clearing tables and deleting the failed node and so on. Network administrators can configure a schedule task so that part of the network management system can automate routine maintenance work, reducing network management, network management makes many complex work becomes simple and easy.

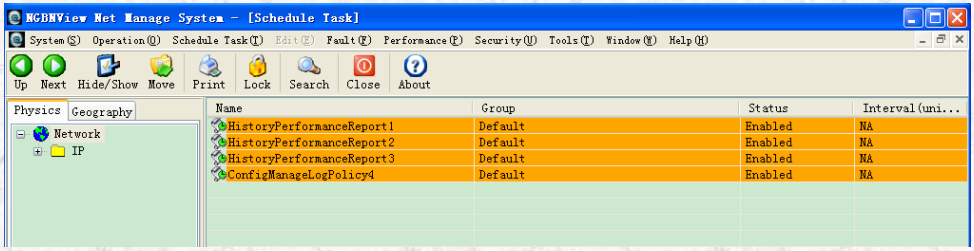
Network management system can provide two types of schedule tasks:

Periodic schedule tasks, the administrator can configure a task is performed periodically, for example, the configuration database backup task every Sunday 0:00. Such network management system will be in every Sunday 0:00 to start the backup database.

Non-Periodic schedule task, the administrator can configure a task to perform once at some point in time, you can specify the day, date and time (hours) to schedule a scheduled task. Delete the failed node configuration tasks such as running 2013-11-20 1:00. Such network management system will delete the failed node on

2013-11-20 1:00.

In the framework of network management systems via the menu: System Schedule Tasks to start the scheduled task configuration interface as below



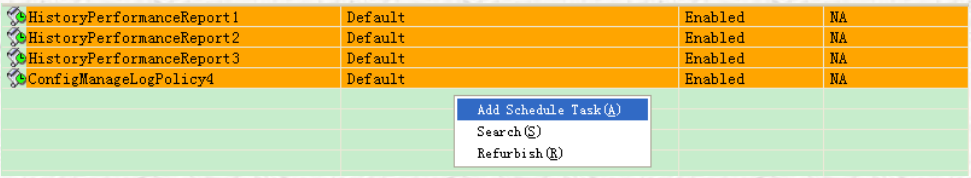
Picture 3-2Schedule task interface

In this interface, the user can view / delete / modify / execute / stop / check existing schedule tasks, add a new scheduled task. Based on the status of schedule tasks, task list items different programs may have different background colors, for example, the background color is valid but does not perform schedule tasks are orange, effective and planned tasks awaiting execution background colors are green, invalid program task color is gray and so on.

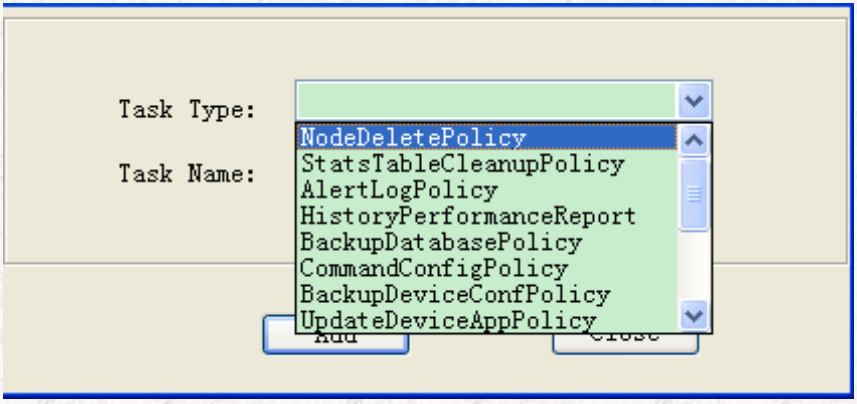
3.2.2 Add a Schedule Task

3.2.2.1 Add a Schedule Task Summary

In scheduled task configuration interface can add the new tasks, Select the menu: Schedule task → Add schedule task to add schedule task interface as the shown figure:



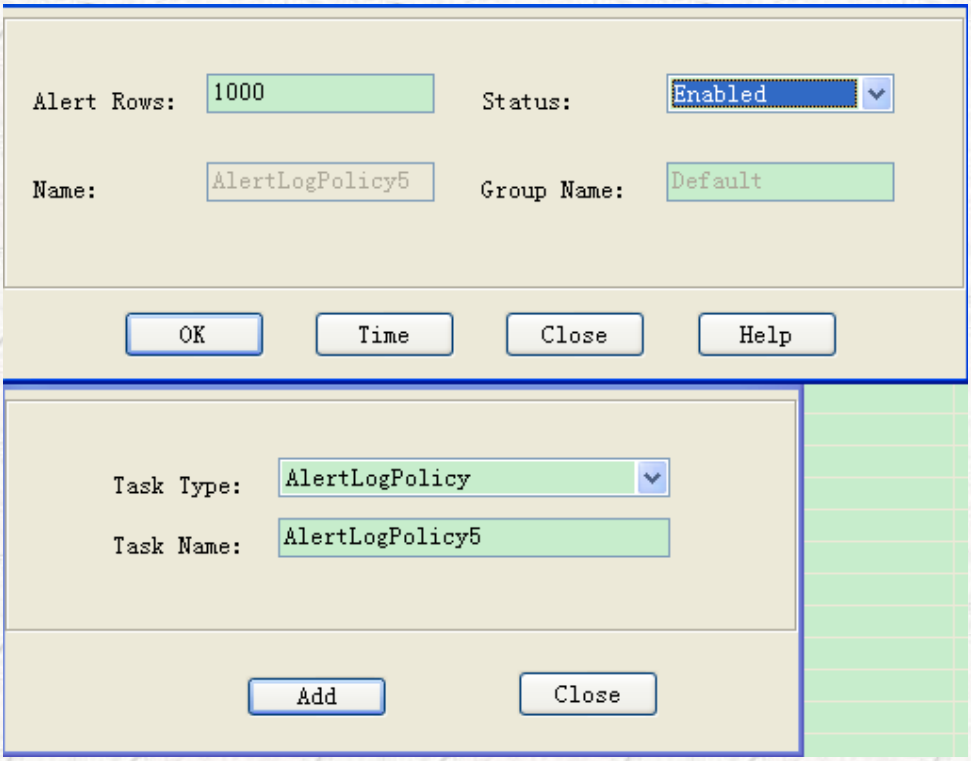
Picture 3-3Add a Schedule Task



Picture 3-4Add a Schedule Task interface

Choose the right type of schedule tasks. Such as the Alert

Log Policy, etc.; fill in the name of the schedule tasks. Click the Add button, the system will pop up a new schedule task attributes configuration according to dialog according to the task type of user-selected, for example, selecting 'Alert Log Policy' Type pop-up dialog box shown in Figure, click 'OK' button to add a new scheduled task.

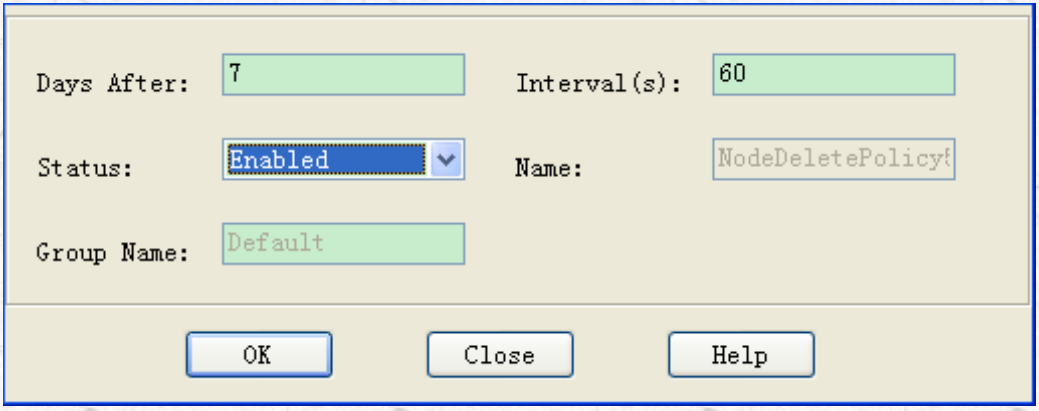


Picture 3-5Alert log policy configuration interface

Network management system provides users with sixteen types of schedule tasks, provide detailed functions and configuration instructions in the following subsections.

3.2.2.2 Node Delete Policy

Node Delete Policy allows you to delete the database has been in existence for more than a specified number of days （User configuration）, State as' Major' and' Critical' node. But only those with only one interface of the node to be deleted, and has a number of interface node is retained in the database. Add a node delete policy task, or schedule tasks panel double-click a failure node delete a schedule task, or select a menu edit - > modify the schedule tasks, or from a failure node delete right-click menu modification plan task can pop up failure node delete a schedule task.



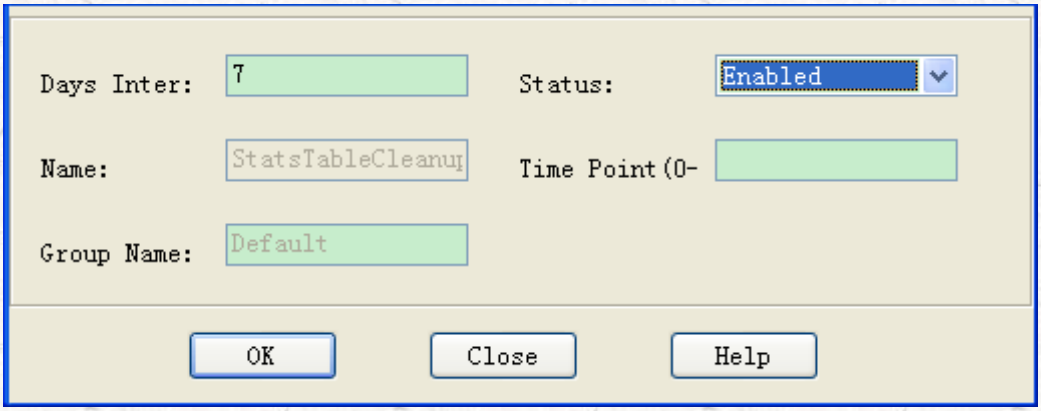
Picture 3-6Node Delete Policy

Table 3-1 Attribute table of Node Delete Policy

Attribute	Description
Days after	The specified node in the database in the storage time, the default is 7 days.
Interval	The default is 60seconds.
name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
State	Selection of scheduled tasks effective.
Group name	Plan task group name.

3.2.2.3 Statistical Table Cleanup Policy

Statistical table cleanup policy allows you to clean up the database statistics. It can make the database not because the data were collected daily become too large. Through the program tasks, Administrator can decide how many days in the database data retention. The program will automatically delete existing task time exceeds the specified number of days of data.



Picture 3-7Statistical table cleanup Policy

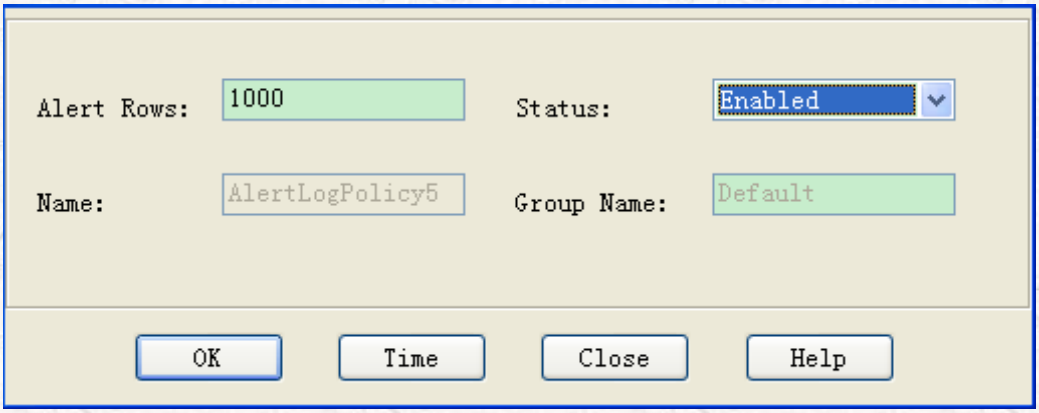
Table 3-2 Attribute table of Statistical table cleanup Policy

Attribute	Description
Data inter (day)	Specifies the data stored in the database of the time . The default is 7days.
Time(0-23)	Specifies clean up statistical data time, The default is 0, In between twelve midnight and the morning of 1 o'clockconduct. Unable to determine the specific time of a hour.
Status	Select an available scheduled task.
Name	Scheduled task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group name	Scheduled task group name.

3.2.2.4 Altert Log Policy

Alert log policy is to control the alarm items in the database. You can specify the number of alarms and alarm

once the database more than a specified number, then the system will delete the old alarm. The alarm time can reference resources following sections policy chapters.



Picture 3-8Alert log Policy

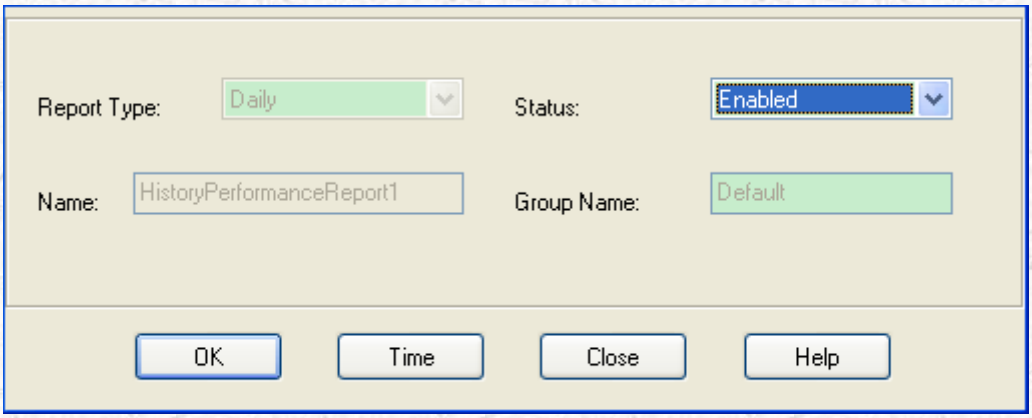
Table 3-3 Attribute table of Alert log policy

Attribute	Description
Alert Rows	Specifies the maximum number of alerts data stored in a database.
Status	Selection of scheduled tasks effective.
Name	Scheduled task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group name	Scheduled task group name.

3.2.2.5 History Performance Report Form

History Performance Report Form is related with performance management - collection configuration settings stored in the

device to create a daily report, create weekly reports and monthly statements to save the collected data of creating a daily report, equipment or monthly reports weekly report as below figure.



Picture 3-9History Performance Report Form

Table 3-4 Attribute table of History Performance Report Form

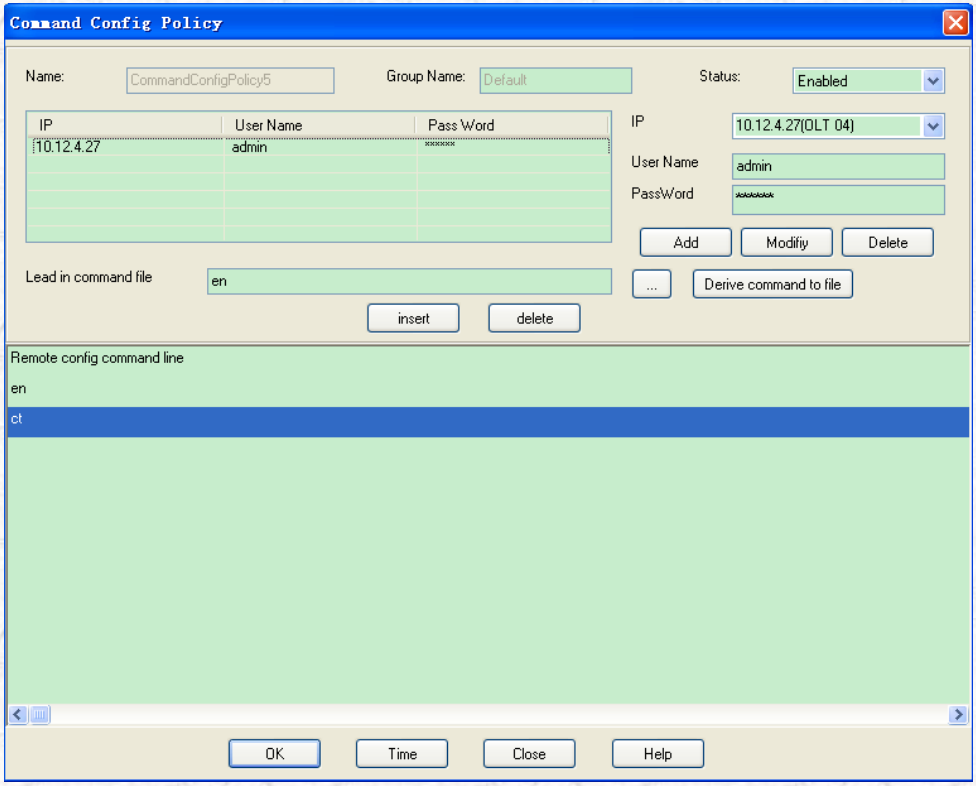
Attribute	Description
Alert Rows	The default system has 3 kindis of performance reports scheduled task which divided into the type of monthly, weekly, day.
Status	Selection of scheduled tasks effective.
Name	Name schedule task instance, used to identify the list of scheduled tasks scheduled tasks, and only in the new time to modify.
Group name	Scheduled task group name. normally in default.

Notes:History Performance Report Form must set in “ Performance

Management '➔ “Adopt configuration '➔ “Add adoption' to click “ Create daily report ',“Create weekly report'and“Create monthly report', then in the historical report will show the executed result.

3.2.2.6 Command Config Policy

Command config policy is used to cofig the switch at the specified time.The alarm time can reference resources following sections policy chapters.



Picture 3-10Conmand config Policy

Table 3-5Command Configuration Schedule task Property

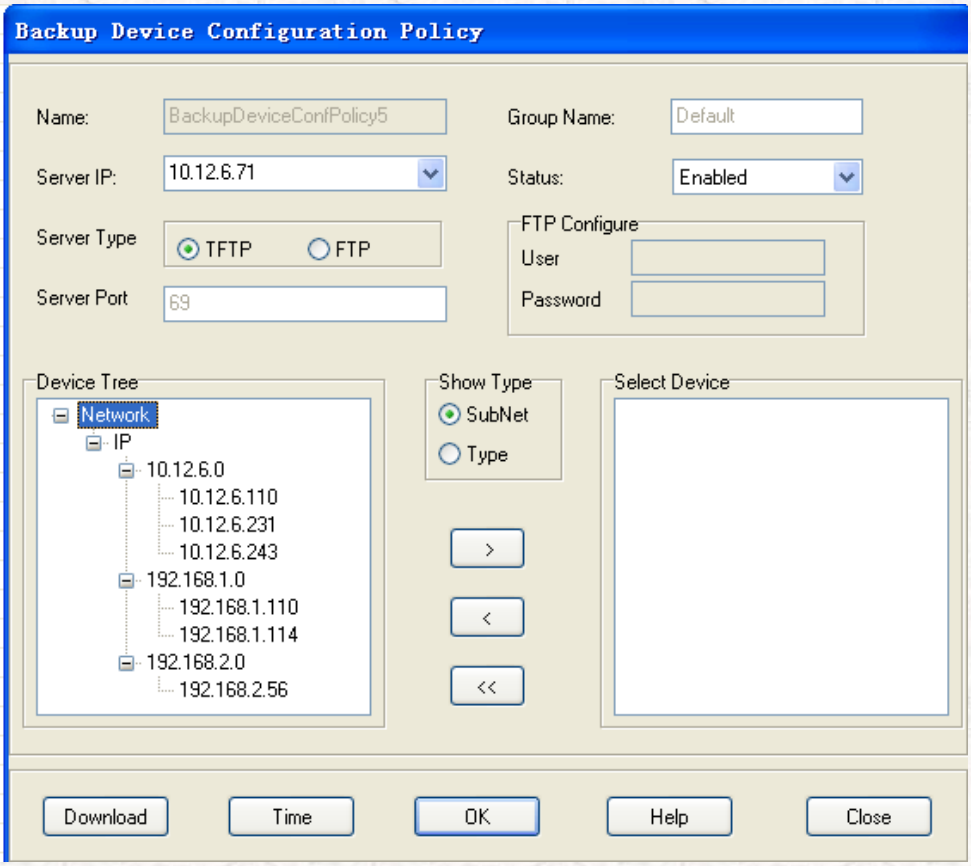
Property	Description
Name	Scheduled task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group name	Scheduled task group name.
Status	Select an available scheduled task.
Device IP	Choose the device,select the IP through the drop-down box.The name and password is the name and password using login the device through Telnet.Add,Modify and delete button are used to config the specield device.
Conmand	Specific command line can be imported from a file, you can also 'Add' set. When landing device input format consistent telnet command line.

3.2.2.7 Configuration file Backup

Configuration file Backup is used to back up configuration file of device using TFTP or FTP at the schedule time,and save the file into the specailied Directory.When necessary, the configuration file is downloaded to the local client. It must ensure that the back-end server has a TFTP server or FTP server is running when performingThe alarm time can reference resources following sections policy chapters.

Filename device configuration file backup time + (device IP). Saved gbn way.

The interface is shown as below:



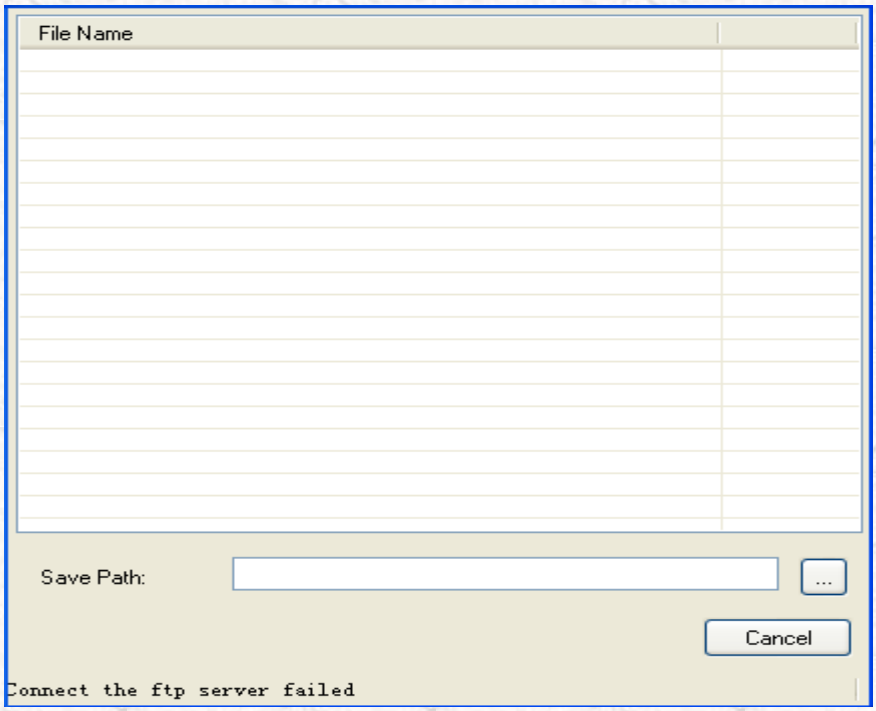
Picture 3-11Configuration File Backup Interface

Table 3-6Configuration File Backup Attribute

Attribute	Description
Name	Scheduled task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group name	Scheduled task group name.
Status	Select an available scheduled task.
Server Type	Specify the path to the backup file is placed, must be a relative path to

	the root directory of the TFTP server and real.
Port	Port used to transfer files using FTP or TFTP configuration
FTP Parameter	When using the FTP server, FTP username and password
Download	The device backup configuration file downloaded from the server to the client
Device Tree	The current network management system management device navigation tree.
Show Type	Switch display device tree structure to the subnet to the device type grouping or grouping.
Select Device	Save the currently selected device name to be backed up, not more than 10.

Click the 'Download' button, the file download window appears, as shown:



Picture 3-12File Download Interface

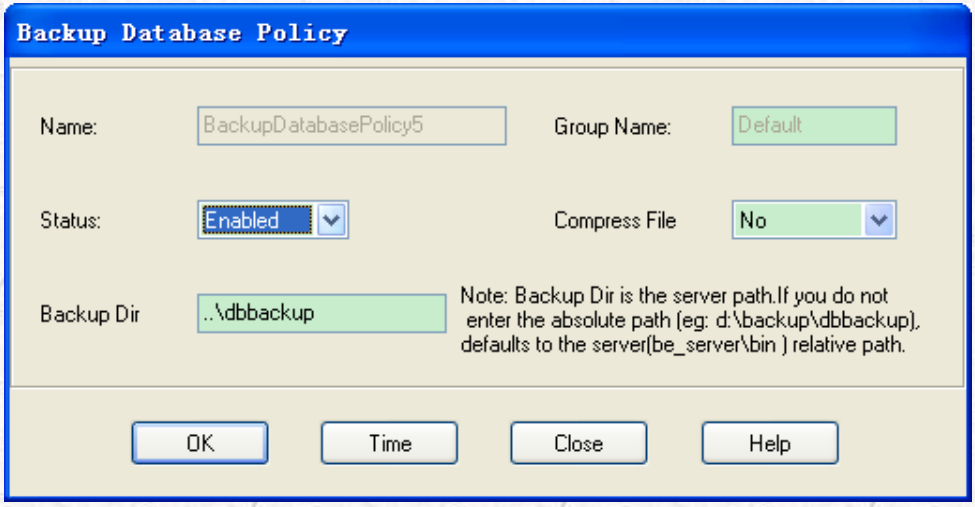
By selecting the configuration file you want to download, select the appropriate download option, the configuration file is downloaded from the server to the local preservation.

3.2.2.8 Backup DateBase

Backup DateBase is used to backup datebase at regular time fot avoid the question whitch is made by error datebase.Backup DateBase Content and structure for the

specified time backup database management system.See subsequent sections of its schedule task scheduling.Database backup file name to DB + time saved sql way. When you select needs to be compressed, the file will be compressed into a zip file sql package and remove the sql file.

Task configuration interface is shown below.



Picture 3-13Device configuration file backup tasks

Table 3-7 Device configuration file backup tasks Property

Attribute	description
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify..
Group Name	Plan task group name.

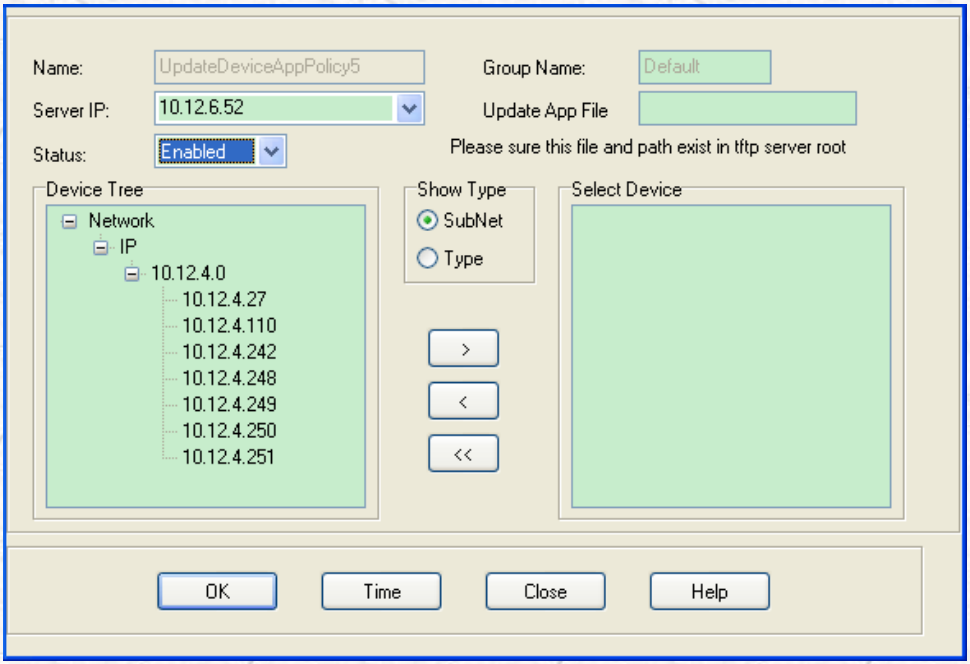
Status	Selection of scheduled tasks effective.
Backup DIr	Specify the path to the backup file is placed, must be the path to the back-end server, can be absolute or relative path.
Compress File	If you choose yes, the backup file will be compressed into zip package, otherwise sql file.

3.2.2.9 Update Device App

Device software upgrade tasks by specifying the device and its corresponding device software, at a specified time for equipment upgrades, unattended upgrade the device functions. You can set a low peak morning and other services for automatic operation, reducing the intensity of the work of maintenance personnel. See subsequent sections of its schedule task scheduling.

It must ensure that the server has a TFTP server running execution.

The interface is as shown below:



Picture 3-14Update Device App

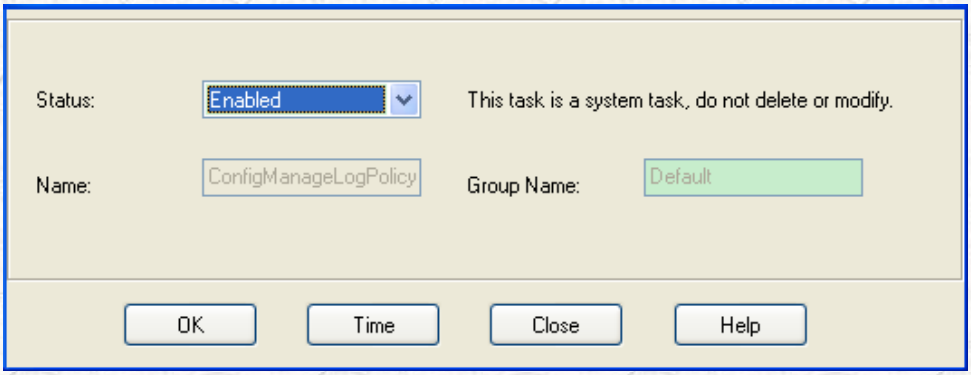
Table 3-8 Update Device App Property

Attribute	Description
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group Name	Plan task group name.
Status	Selection of scheduled tasks effective.
Update App File	Specify the path to the backup file is placed, must be a relative path to the back-end server bin directory.
Device Tree	The current network management system management device navigation tree.
Show Type	Switch display device tree structure to the subnet to the device type grouping or grouping.

Select Device	Save the currently selected device name needs to be upgraded, not more than 10.

3.2.2.10Config Management Log

Log backup configuration management, this task for the system tasks without modification and deletion.



Picture 3-15Config Manage Log

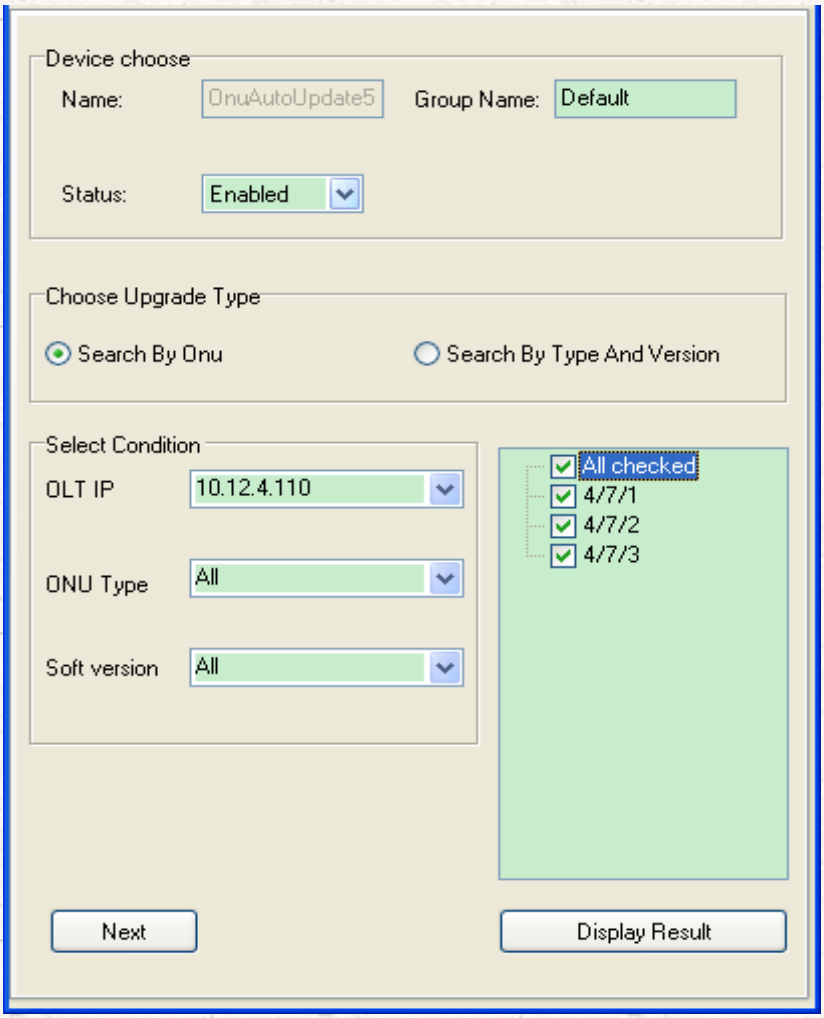
Table 3-9 Config Management Log Properply

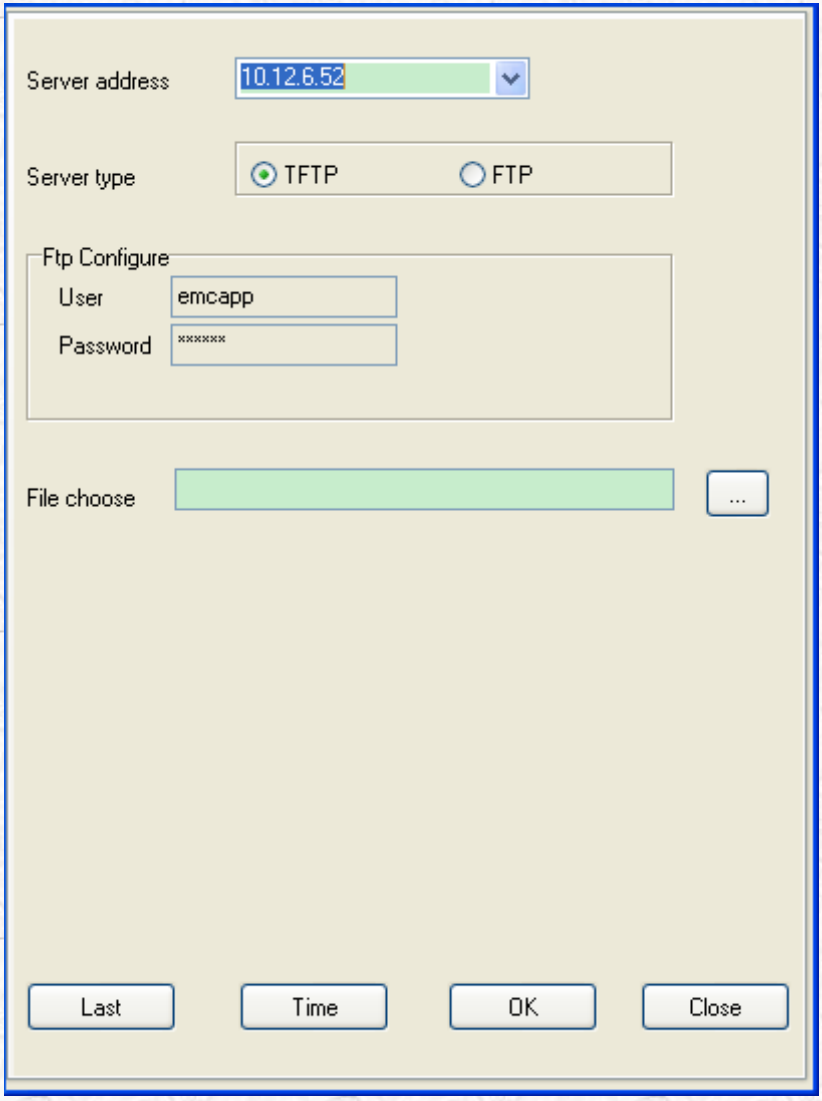
Properply	Description
Status	Selection of scheduled tasks effective.
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group Name	Plan task group name

3.2.2.11ONU Auto Upgrade

ONU software upgrade tasks by selecting a specific

device and its corresponding ONU ONU device software, at a specified time for equipment upgrades, unattended upgrade the device functions. You can set a low peak morning and other services for automatic operation, reducing the intensity of the work of maintenance personnel. See subsequent sections of its schedule task scheduling


Device choose
Name:
OnuAutoUpdate5
Group Name:
Default
Status:
Enabled
Choose Upgrade Type
Search By Onu
Search By Type And Version
Select Condition
OLT IP
10.12.4.110
ONU Type
All
Soft version
All
All checked
4/7/1
4/7/2
4/7/3
Next
Display Result



Picture 3-16ONU Auto Upgrade

Table 3-10 ONU Auto Upgrade Properply

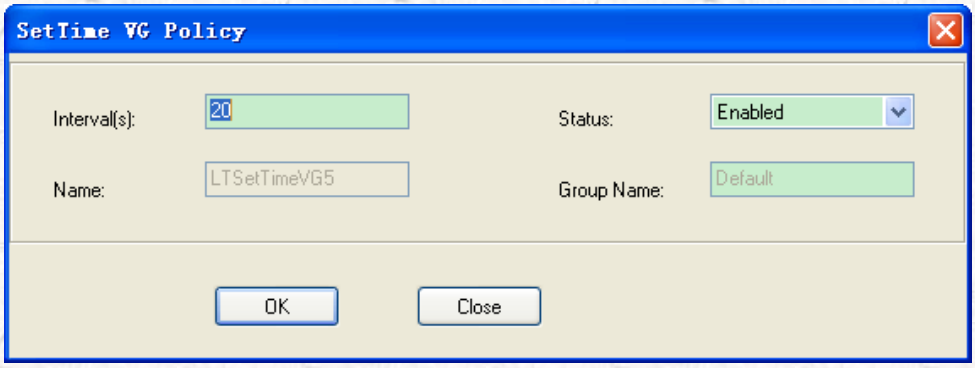
Attribute	Description

Status	Selection of scheduled tasks effective.
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group Name	Plan task group name.
Choose Upgrade Type	Two ways, according to the specified ONU or upgrade version by Type
Select Conditions	There are three conditions can be screened, OLT IP address, ONU type, software version
Server Address	Server address for the device upgrade

3.2.2.12LT Set time VG

Provide time alignment equipment for the LT VG board.

The default is 20s refresh..



Picture 3-17LT Set Time VG

Table 3-11 LT Set Time VG Properply

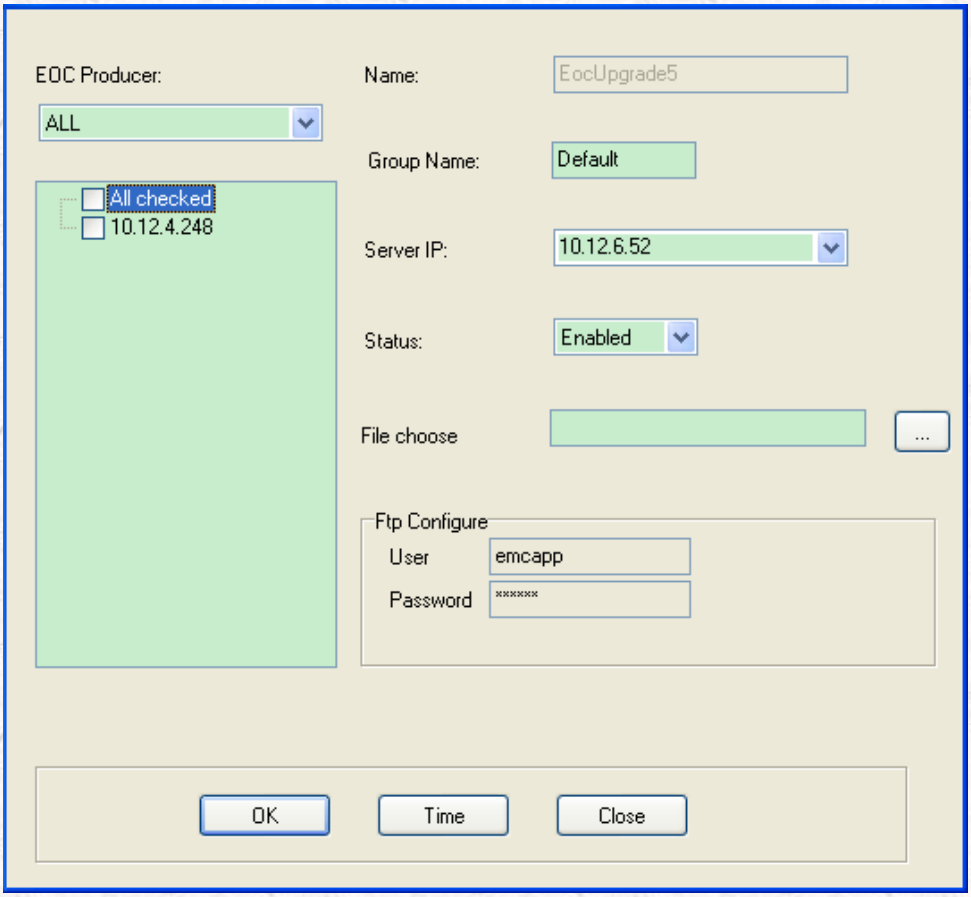
Properply	Description
Interval	Specified time interval, the default is 20 seconds.

Status	Select an available scheduled task..
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group Name	Plan task group name..

3.2.2.13EOC Upgrade

The task is at the specified time on the EOC central office equipment for automatic upgrades, unattended upgrade equipment capabilities. You can set a low peak morning and other services for automatic operation, reducing the intensity of the work of maintenance personnel. See subsequent sections of its schedule task scheduling.

It must ensure that the server has a TFTP server is running when performing.



Picture 3-18EOC Upgrade

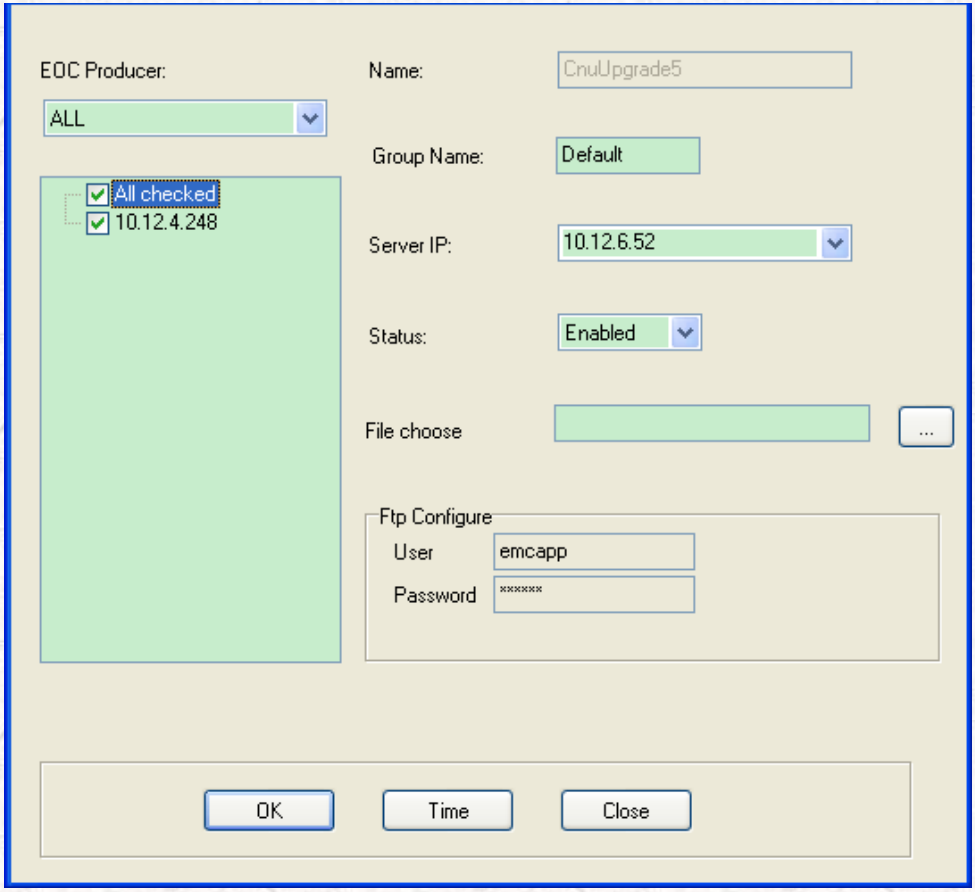
Table 3-12 EOC Upgrade Properply

Attribute	Description
EOC Producer	Select the device according to the different equipment manufacturers
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.

Group Name	Plan task group name..
Server Address	Server address for the device upgrade
Status	Select an available scheduled task..
File Choose	

3.2.2.14CNU Upgrade

The task is at the specified time on the EOC terminal equipment for automatic upgrades, unattended upgrade equipment capabilities. You can set a low peak morning and other services for automatic operation, reducing the intensity of the work of maintenance personnel. See subsequent sections of its schedule task scheduling.



Picture 3-19CNU Upgrade

Table 3-13 CNU Upgrade Properply

Attribute	Description
EOC Producer	Select the device according to the different equipment manufacturers
Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group Name	Plan task group name..

Server Address	Server address for the device upgrade
Status	Select an available scheduled task..
Choose File	

3.2.2.15EOC Config

The task is within the specified time for automatic configuration of the central office EOC issued, such as whether to enable valn, whether loop detection, whether the authentication management, and so on to set the threshold, upgrade the device function unattended. You can set a low peak morning and other services for automatic operation, reducing the intensity of the work of maintenance personnel. See subsequent sections of its schedule task scheduling.

EOC Producer: GSD

Name: EocConfig5

GroupBox3

Config By Network

Config By Type

Network

Netmask 255.255.255.0

System Name eoc

VLAN Enabled Enabled

VLAN ID 0 (1-4094)

Loop Check Enabled

Storm Limit Enabled

Storm Limit Value 0 0-256KBps

Authen Manage Enabled

Syslog Setting Enabled

Server Ip 127.0.0.1

Terminal Limit 253

Warn Check

attenuation largered than 0 dB

SNR less than 0 dB

CPU rate more than largered than 90 %

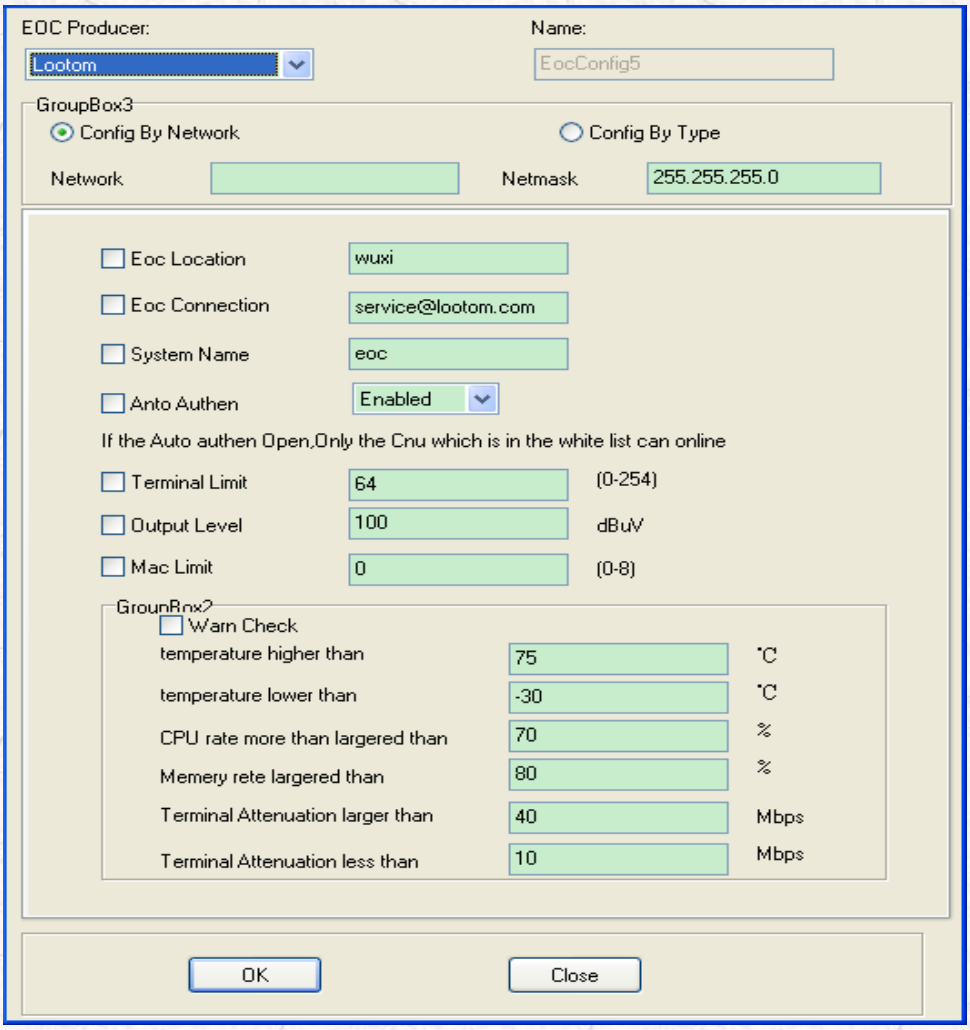
cpu temperature largered than 80 ℃

uplink band less than 100 Mbps

downlink band less than 10 Mbps

OK

Close

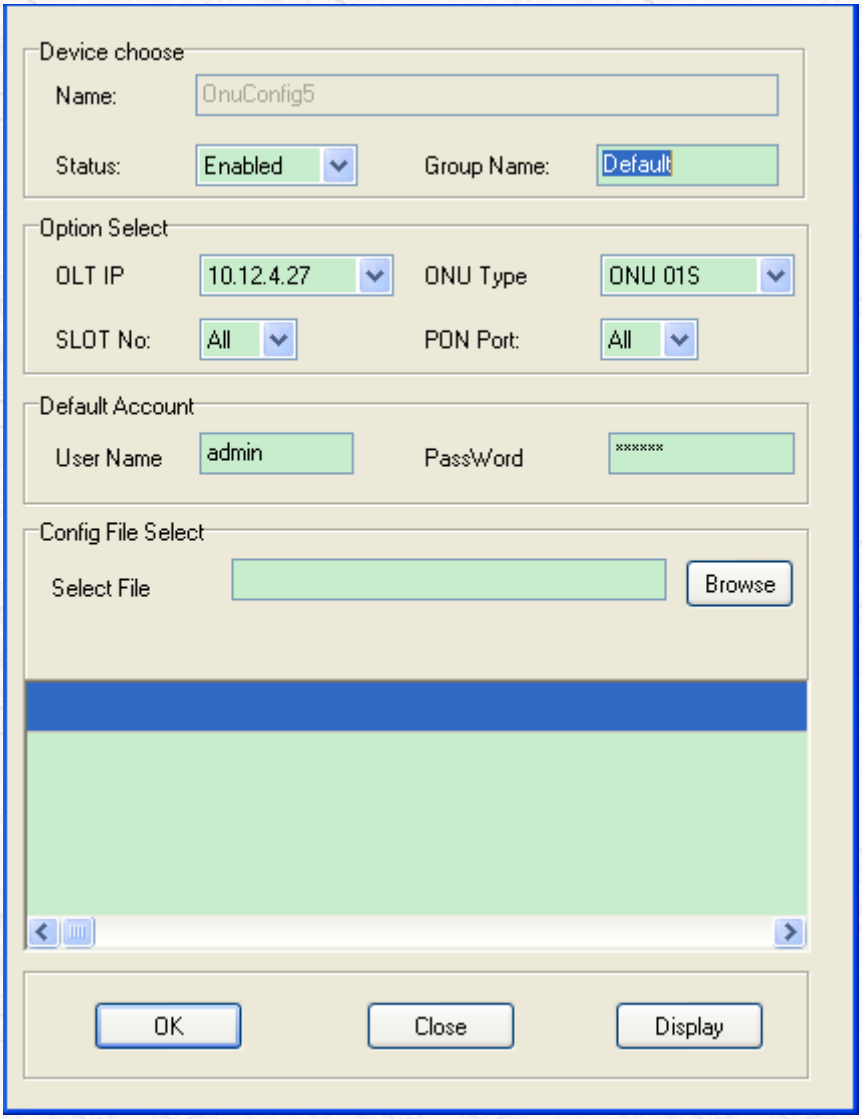


Picture 3-20EOC Config

3.2.2.16ONU Config

ONU device configuration register at the specified time, unattended upgrade the device functions. You can set a low

peak morning and other services for automatic operation, reducing the intensity of the work of maintenance personnel. See subsequent sections of its planned schedule task scheduling.



Picture 3-21ONU Config Attribute

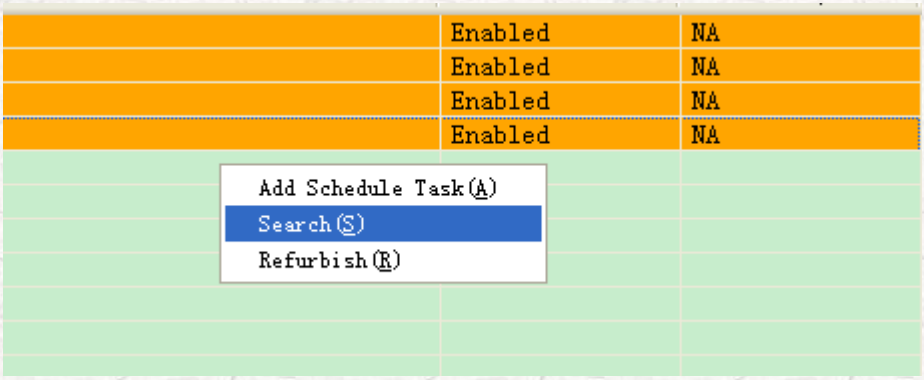
Table 3-14 ONU Config Attribute Table

Attribute	Description

Name	Plan task instance name, Used in the scheduled task list identification scheduled task, only in the new time can modify.
Group Name	Plan task group name.
Status	Select an available scheduled task..
Option Select	Divided according to the type selection device
Config File Select	Select the configuration file

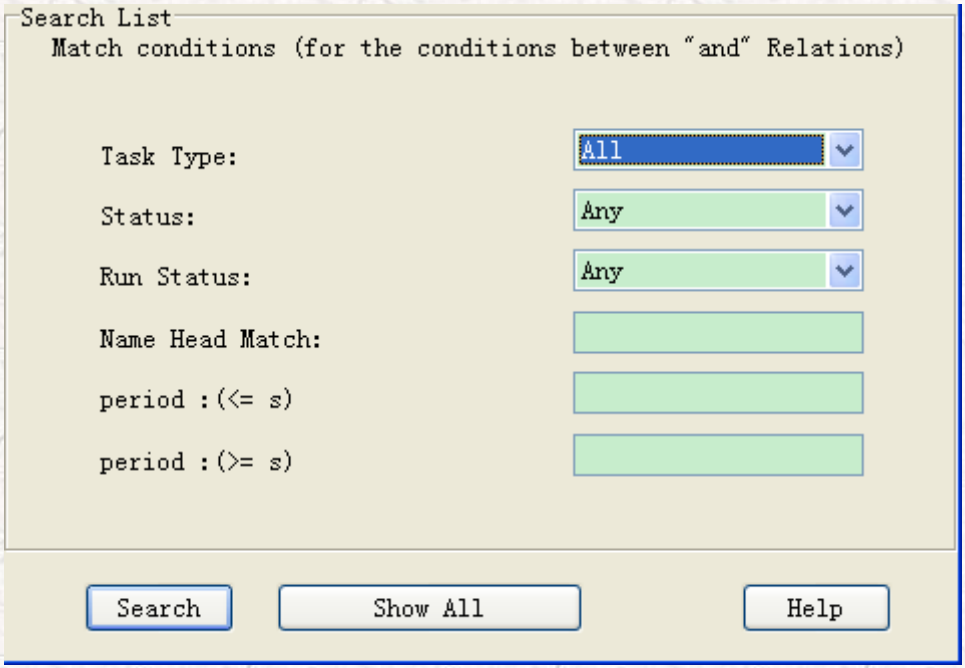
3.2.3 Search

In the task page, right-click the following interface.



Picture 3-22Search

Click to '**Search**' later, appears below



Picture 3-23Search

Fill in the lookup interface matching conditions, select query button to display the matching task in the task configuration interface. 'Show All' button in the task configuration interface displays all tasks.

3.2.4 Schedule Task Color Configuration

Each task instance is displayed in the client panel uses a color to highlight said. These colors mean different task status, through these colors, we can easily understand the current

status of the task. The default state of the corresponding color and as shown in the table below.

Table 3-15 Color Status

Color	Status
Yellow	Stop task
Green	Tasks to be performed
Cyan	The task being performed
Grey	Disable task
Orange	Available tasks

3.2.5 Task scheduling

Aperiodic task execution time can be set through the program interface. Select 'Edit Task' from the context menu of the selected task or double-click the selected task, the pop-up screen, click on the 'schedule' to call the task scheduler. This program gives a method of how to arrange the operation aperiodic tasks. It has two modes, 'date' mode and 'day' mode.

3.2.5.1 Date

'**Date**' mode is the default task mobilization program. It will appear in the upper part of the program interface, a 'schedule tasks based on the' table, this table shows all the

days of the month (from 1 to 31). In the lower part of the program interface, it is 'choose the schedule (hours)' table, which shows from 0:00 to 23:00 for all hours.

Picture 3-24“Date' Mod

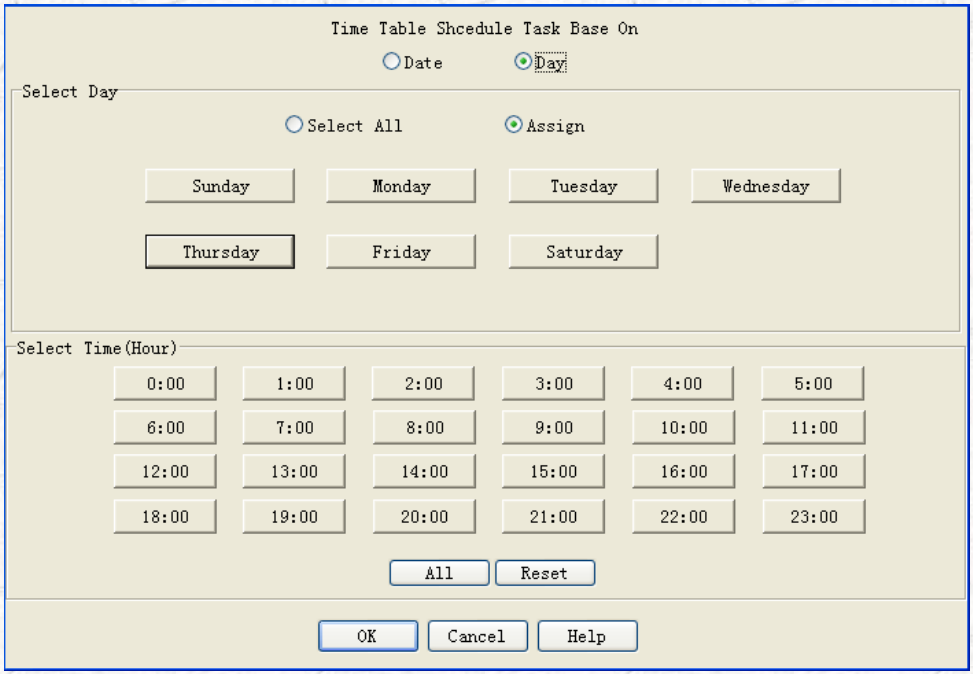
Under 'Date' mode setting of task execution time, will make the task performed once per month. You can choose from these two tables the date and time of task execution. For example, if you want the task to run every month at 3:00 on the 2nd and 7:00, then you click on the date of the table labeled '2' button, click '3:00' and '7 in the schedule: 00

'button.

Note: If you choose to not have a date date each month, then the month in the absence of this date, the task will not be executed. That is, if you choose the 31st mission, the task will be executed in January, February is not executed, will run again in March.

If you want to modify the date and time of your choice, you just need to select the date or the time you click the button, and then re-select your desired value.

3.2.5.2 Day Mode



Picture 3-25‘Day’ Mod

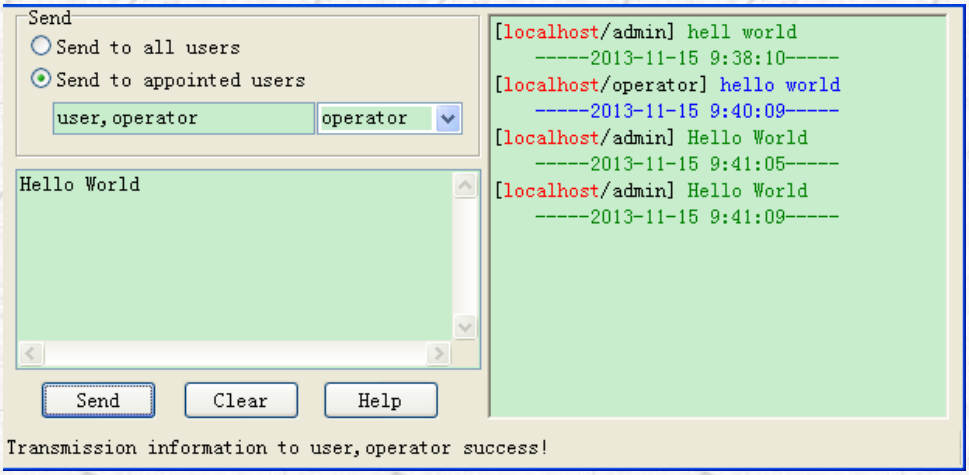
If your last run time using the specified task is 'day' mode, then you reopen the task of mobilizing the task program will default display 'day' mode.

In selecting 'day' mode will allow the upper program interface displays 'schedule tasks based on the' table contains all from Sunday to Saturday week date, the lower is still 'choose the schedule (hours)' table.

Under 'day' mode setting will make the task execution time of the task performed once a week, and there is no weekend dates different conditions. Its mode of operation is the same as the date.

3.3 Broadcast Information

Broadcast messages sent to the user, as shown below.



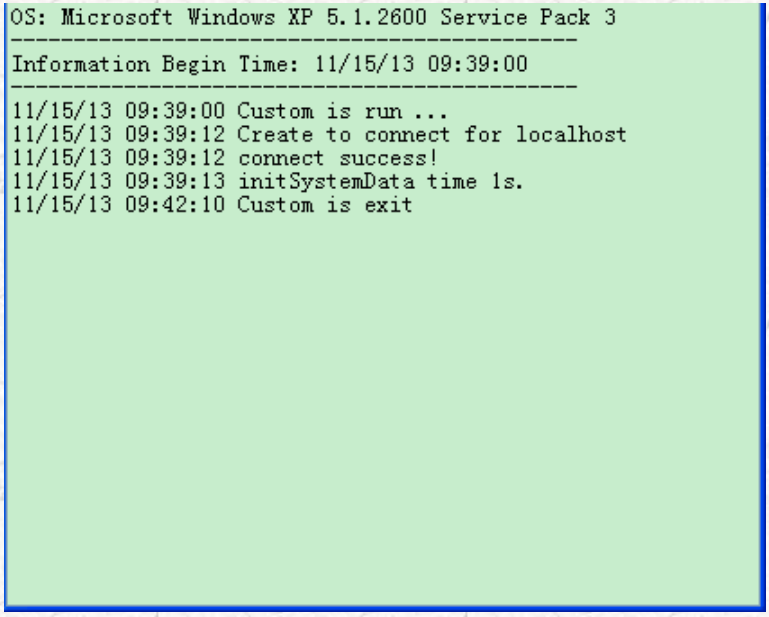
Picture 3-26Broadcast Send Dialog

Select 'Send to all users' and then enter the information you want to send, then click 'Send' button, then send the information to all the client interface, as shown below.

Picture 3-27Recieve Broadcast Dialog

3.4 Lookup Log File

Open the client log interface that displays the current client running log. Below.



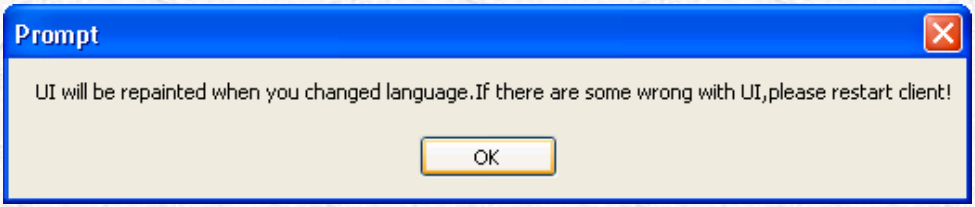
Picture 3-28Log Dialog Interface

3.5 Language

Select the system language, the system temporarily to support Chinese and English versions

Picture 3-29System Language Choose Interface

When switching languages, the screen may appear abnormal phenomenon, just click on it to reload, the following prompt will appear when you switch.

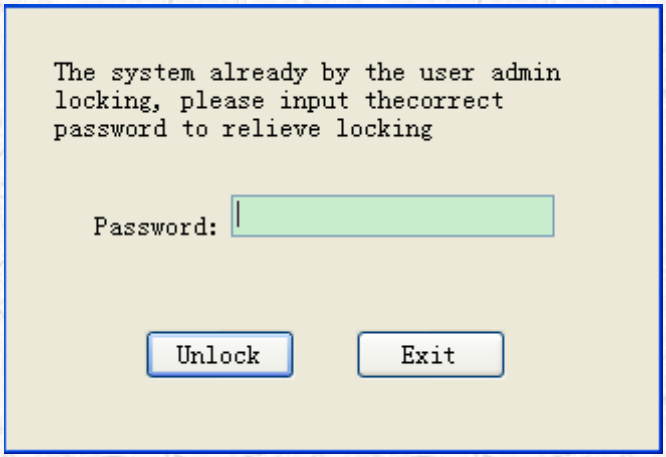


Picture 3-30Language Switch Information

3.6 Lock

NMS enables the client to exit the main interface, enter the following figure lock screen. Enter the correct password, click on the 'Unlock' to return to the main interface of the

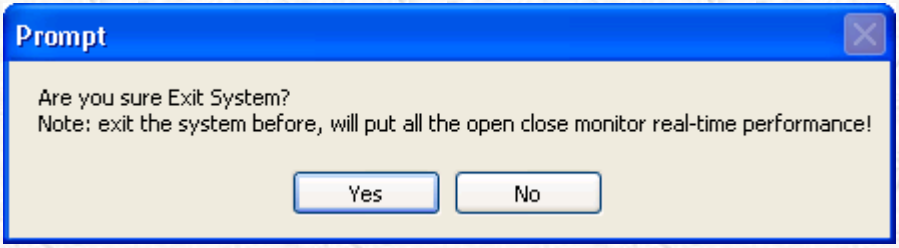
network management system.



Picture 3-31Lock Interface

3.7 Close

Click the 'Close ', there will be the drawing of a dialog box pops up. Click 'Yes' to exit the application client; otherwise, is still in the main interface of the network management system..

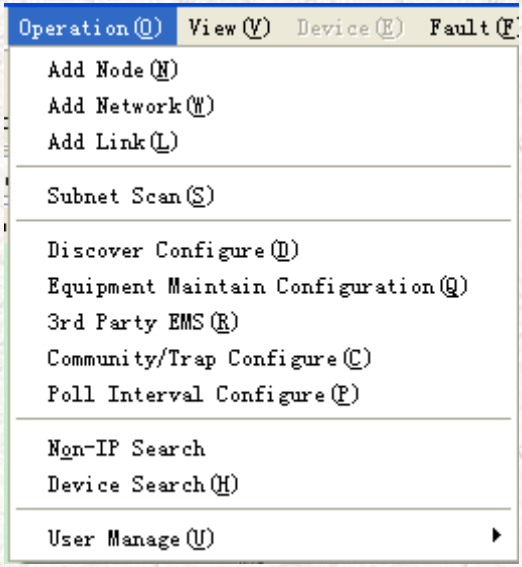


Picture 3-32Close Client Dialog

Chapter 4 Operation

4.1 Operation Menu

The operation menu as shown below, followed by a few bars each of these menu features a detailed description.

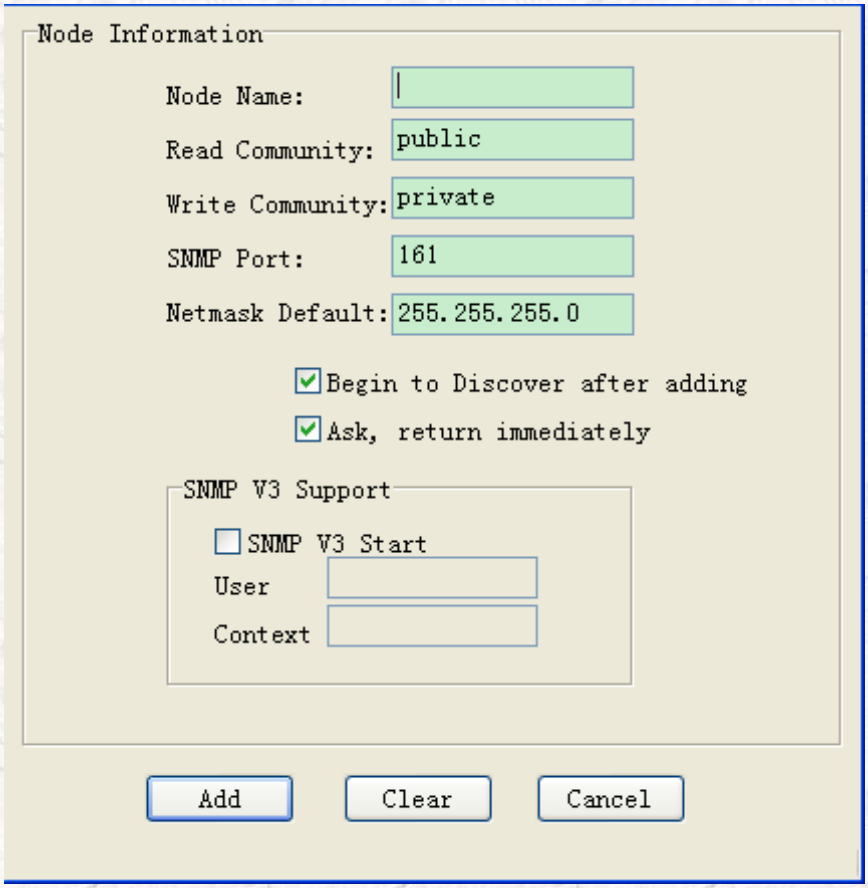


Picture 4-1Operation Menu

4.2 Add Node

For adding nodes in the network but found already exists.

As shown below.



Picture 4-2Add Node Interface

Each item as follows:

Node Name:Specify the IP address of the node to be added.

Read Community:Managed objects read public body string corresponding to the specified node. If not specified, the system uses seed.file file READ_COMMUNITY value to substitute.

Write Community:Write community of public bodies specified node corresponding managed objects

SNMP Port:Port of the SNMP of the device which is added.

Begin to Discover after Adding: After adding the specified node, the system began to discover this node devices.

Ask,return immediately: Select the device regardless of whether there will be added to exit this screen; If not selected, the display will have to wait for the results processed and then exit this screen.

SNMP3 Start: Select the node will be added as SNMPv3 nodes added to the database, otherwise it will be treated as non-SNMPv3 node add nodes added to the

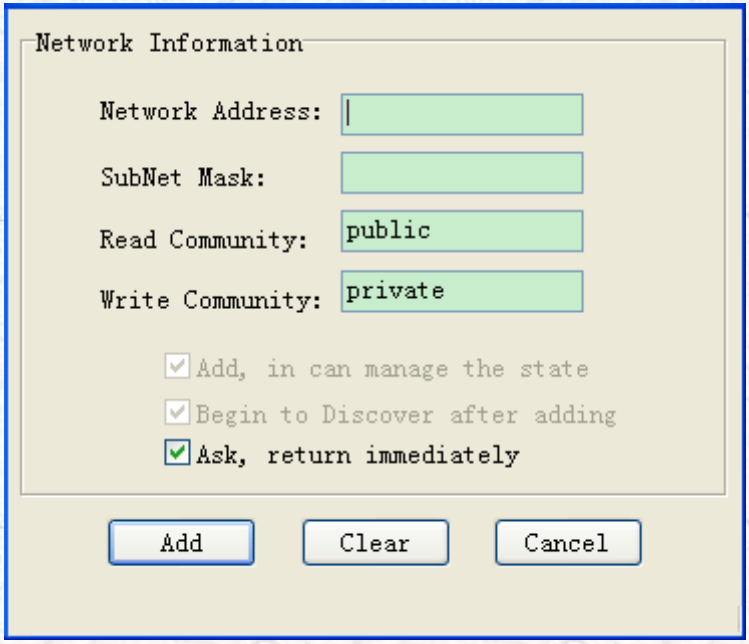
database.

User:Specify the name of the user to add nodes.

Context:Context of SNMPV3.

4.3 Add Network

Users can add the network to the topology database, display interface is shown below.



Picture 4-3Add Network Interface

Each item as follows:

Network Address:Specifies the network IP address to be added.

Subnet Mask: Subnet mask specifies the network.

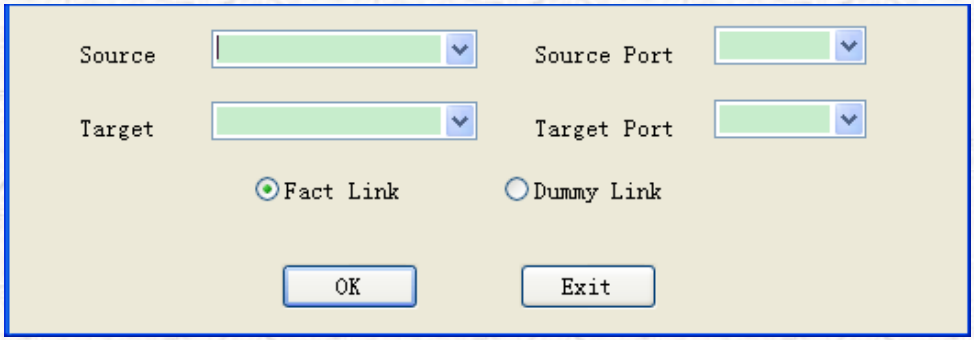
After adding in the management of state: managed attribute specifies the network, the default is the choice. If you select this, the network is added to the database and displays the corresponding network elements on the network topology. System is also beginning to discover the network; If you do not select this, the network is added to the database, but appear on the network topology diagram corresponding network elements is gray. The system will not begin to find the network.

Begin to discover after Adding:Began probing the network nodes.

Ask,return immediately: Select this to exit this screen is added after; do not select this, you want to wait for the results processed and displayed again to exit this screen.

4.4 Add Link

Users can add a connection to the topology database, display interface is shown below.



Picture 4-4Add Link Interface

Each item as follows:

Source:IP address (or name) of the starting point of the connection device.

Source Port:Starting port number to connect devices.

Target:IP address (or name) of the connection end of the device.

Target Port:Connection endpoint device port number.

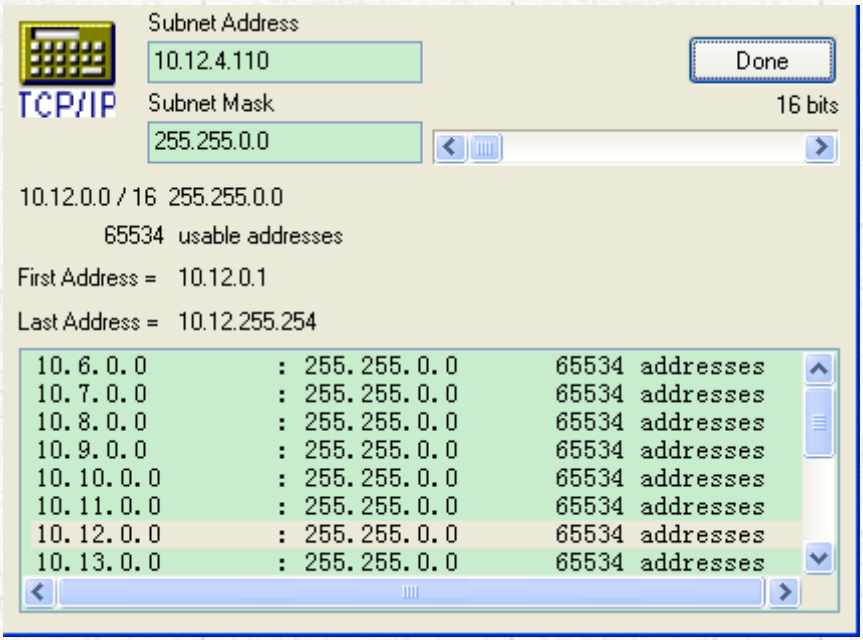
Fact Link:The actual existence of a connection between the device and the device relationship.

Dummy Link:No real connection between the device and the device.

4.5 Subnet Scan

4.5.1 Subnet Calculator

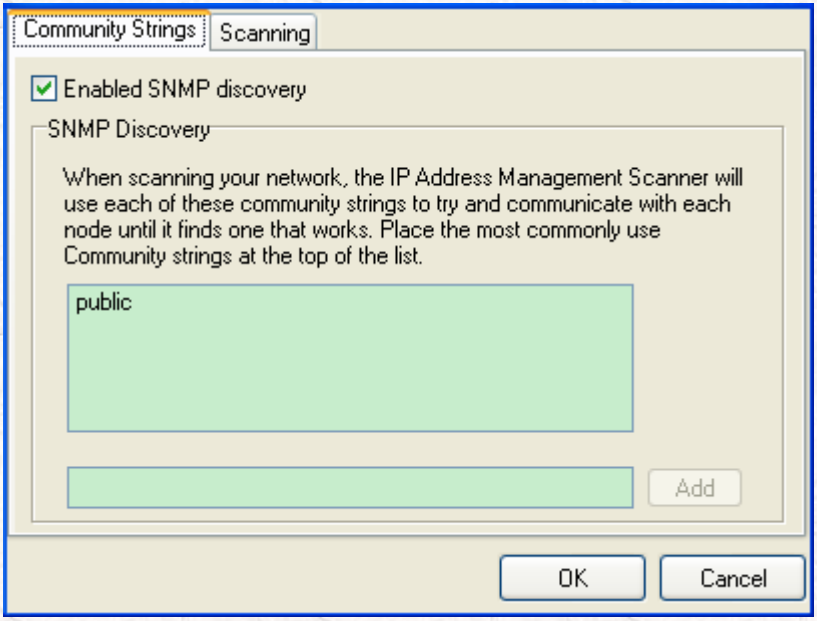
Enter the subnet address, subnet mask, you can not enter, click on the 'calculate subnet' will display the number of available addresses. By the subnet mask on the right scroll bar to change the subnet mask bits used to represent the network number, adjust the number of available addresses within the subnet, as shown below.



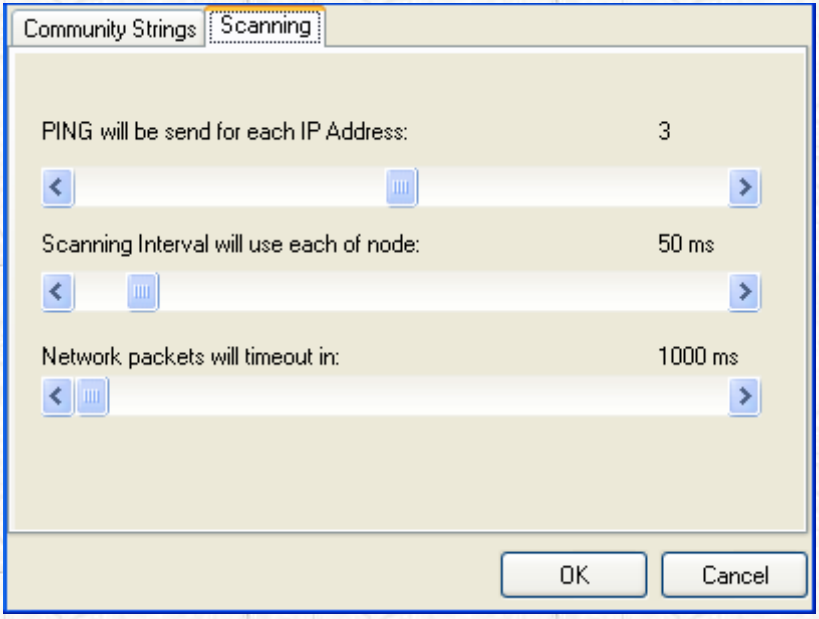
Picture 4-5Subnet Calculator Interface

4.5.2 Param Settings

Scan parameter settings include snmp find available public body and scan settings ‘ping will be sent for each IP Address,’ ‘scan interval between nodes’and ‘network packets will timeout in ‘ three parameters. As shown in FIG..

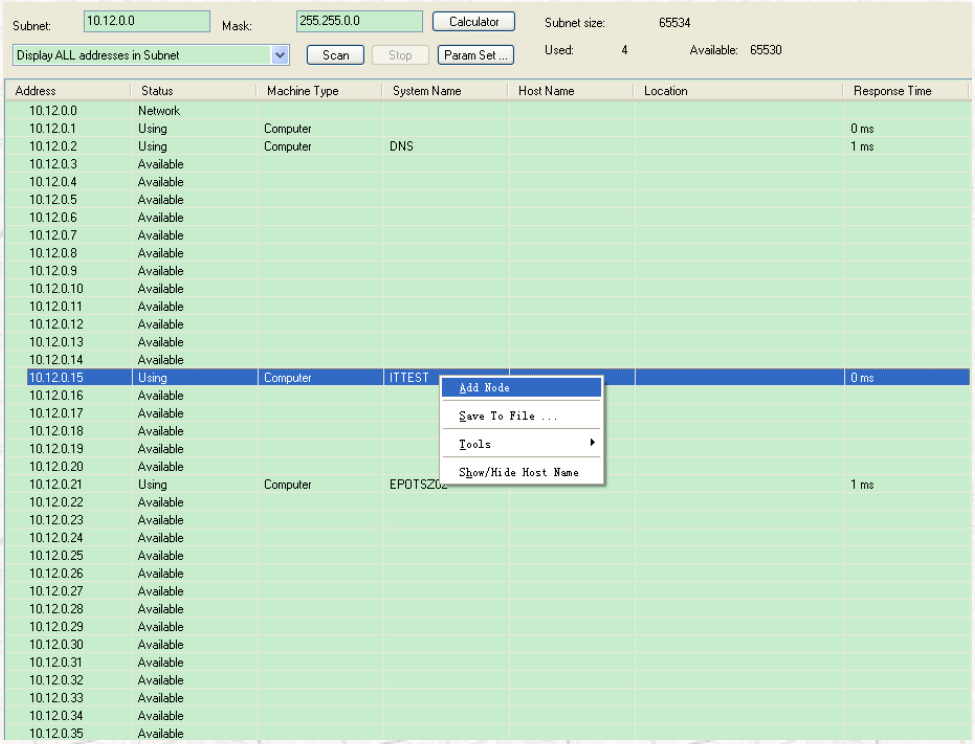


Picture 4-6Param Settings-Community Strings



Picture 4-7Param-Settings-Scaning

For the result,you can filter it by’Display all address in Subnet’、“Display USED address only'和“Display available address only'.as shown below.



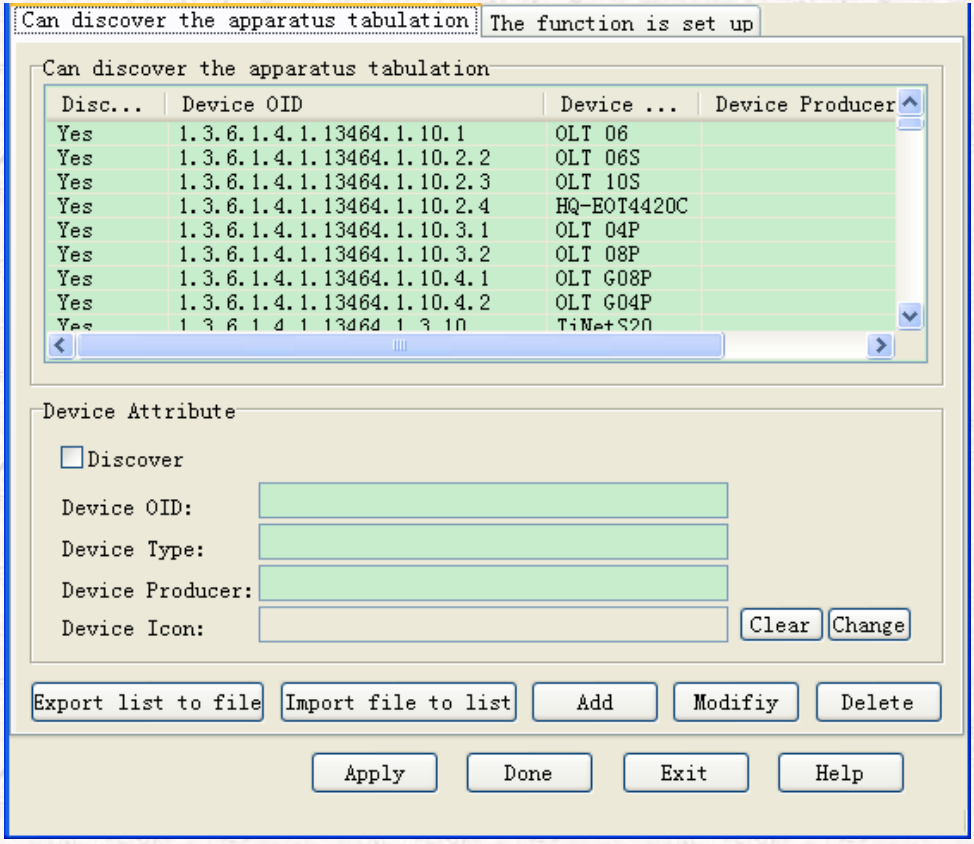
Picture 4-8Subnet Scaning Interface

4.6 Discover Configure

4.6.1 Device OID

Device OID configuration feature is mainly used to

increase the real-time platform to manage devices through the 'Operation' ➔ ‘Discovery Configure’ Open discovery configuration interface, the default display is the device OID configuration capabilities, as shown below.



Picture 4-9Device OID Configure Interface

The parameters are described below;

Discover:The follow subsequently used to determine

whether the OID to discover devices;

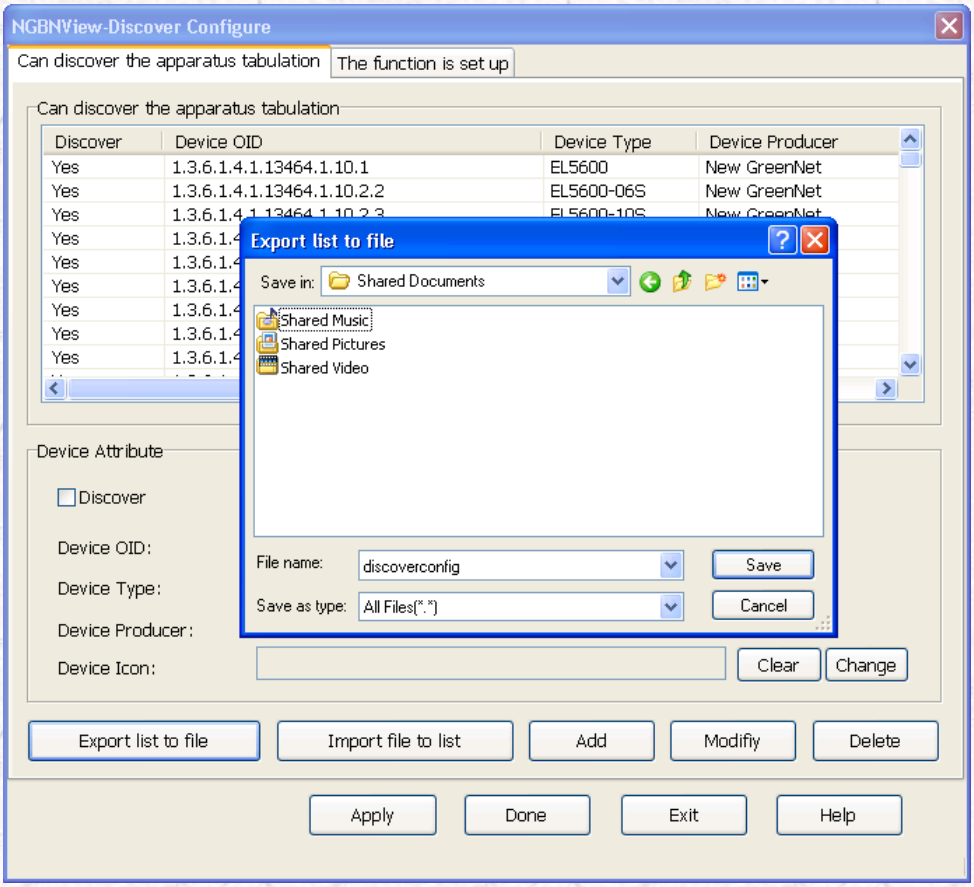
Device OID:System OID values need to find equipment for different vendors' devices, this value is unique.

Device Type:Need to find the type of device, in accordance with the manufacturers to provide the name or specify your own. **Device Prodecer**:Display equipment manufacturers names.

Device Icon:Icon for display device.

Operating instructions as follow below:

Export list to File:Click on this button will open the Save dialog box, as shown below. Select Save as type, enter the file name, click 'Save' to complete the export list to a file operation.



Picture 4-10Export list to file Interface

Import file to list:Click this button, the Open dialog box opens. Select the file you want to open, click 'Open' to complete the import file to the operation of the list.

Add:Direct input devices and device types in the lower OID interface, and select whether the device was found, and then click the Add button to add this to the list of

equipment and OID.

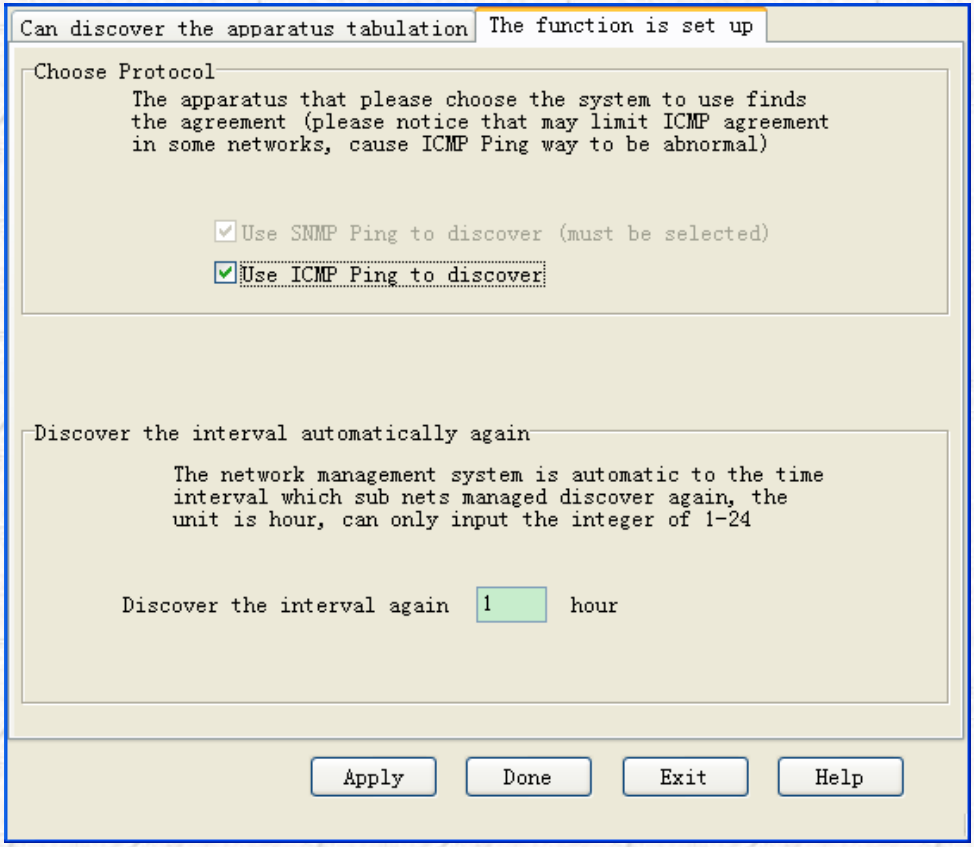
Modify:Select the list a record, modify its contents, and then click the Modify button, you can update the..

Delete:Select a record in the list, click the Delete button, then remove it from the list.

Apply:After completion of the above three operations, need to click the Apply button to save the changes made to make to the server, and found the impact of real-time server.

4.6.2 Discover Configure

Through 'Operation' ➔ 'Discovery Configuration' open discovery configuration function, select Settings page, as shown in Figure.



Picture 4-11Discover Configure

Choose Protocol:Platform when the device polling, you can use SNMP or ICMP protocol, the default protocol using ICMP. However, due to some network structure, in order to prevent virus affecting network stability, while the ICMP packets blocked, in this case the failure polling platform that can be configured to enable SNMP polling mode here.

Discover the interval again:For managed subnets polling interval re-discovered.

4.7 Equipment Maintain Configuration

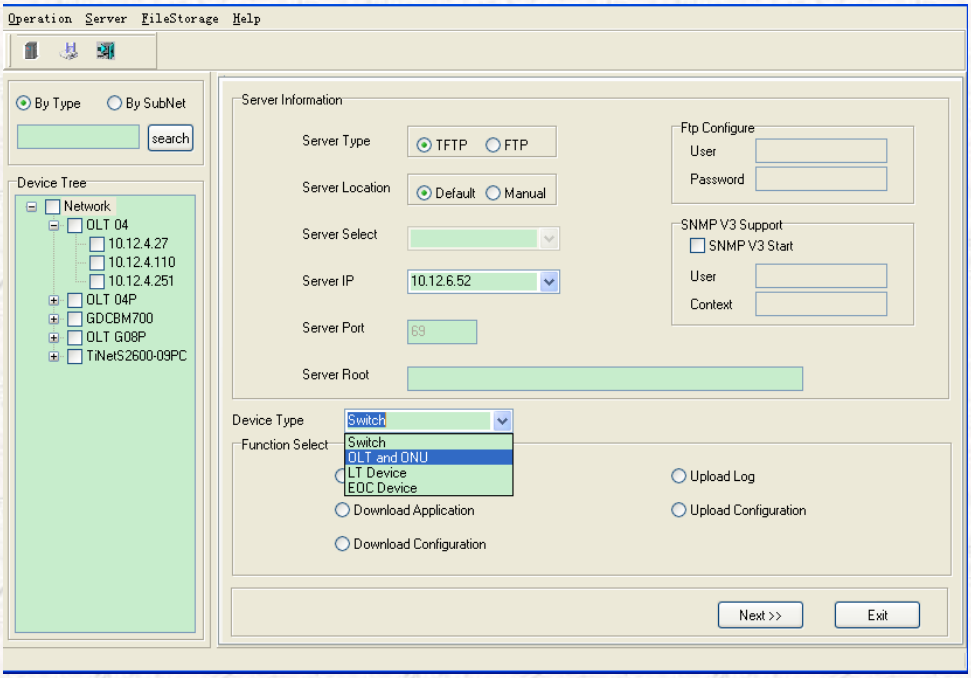
Firmware for download from the server to the device (update the device embedded software), download configuration files from the server to the device, save the log files uploaded from the device to the server, upload the configuration file from the device to the server to store other equipment related to maintenance operations.

Equipment maintenance module via TFTP protocol (Trivial File Transfer Protocol) or FTP protocol (File Transfer Protocol), between the client, server, and equipment required for maintenance of various file transfer.

4.7.1 Equipment Maintain Configuration View

Equipment Maintenance main interface as shown below, the interface is the top of the main menu and action bar, the

left side of the lower part of the device tree, the right to maintain the user interface.



Picture 4-12Equipment maintain Configuration Interface

By Type/By Subnet:Different options for the device to search. The display device appears in the device tree.

Server Type:The choice of server type FTP or TFTP, FTP server when used, the need for FTP configuration, there has been a default default.

Server Location:The default is the local server, you can

select the following custom server.

Server Select: Choose a different server, add, delete, modify operation can view the server menu..

Server IP:Selected IP address of the server.

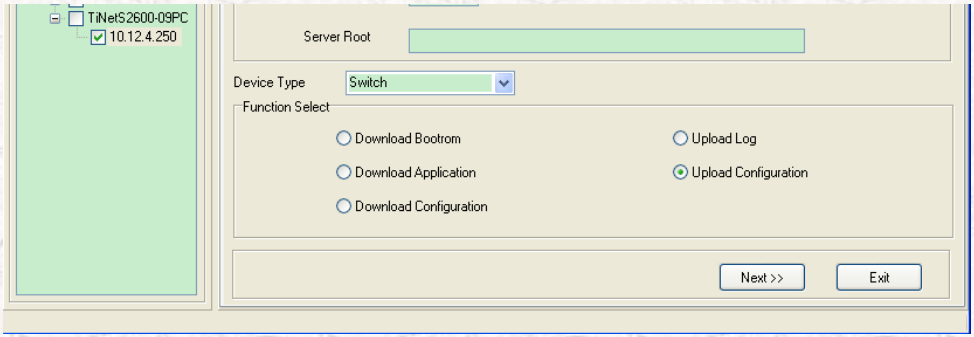
Server Port:The default FTP is 21, TFTP 69.

Server Root:File server storage path.

SNMPV3 Support:Whether support SNMPV3.

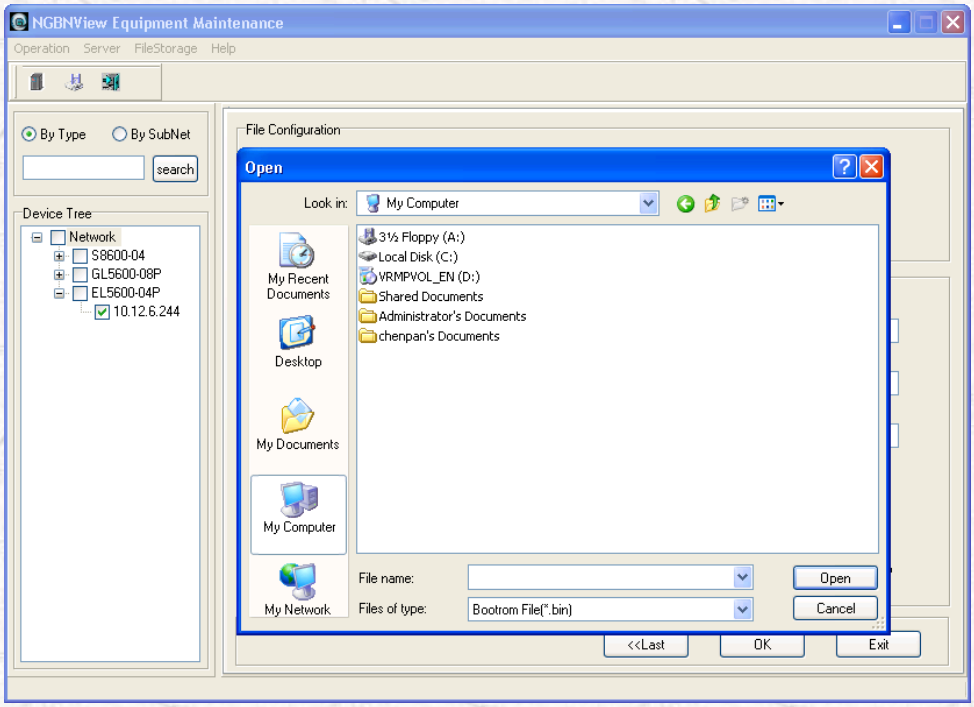
Here's how to upload files to the device configuration instructions.

1、 First select the device type, select Add device configuration. Click Next, as shown below.

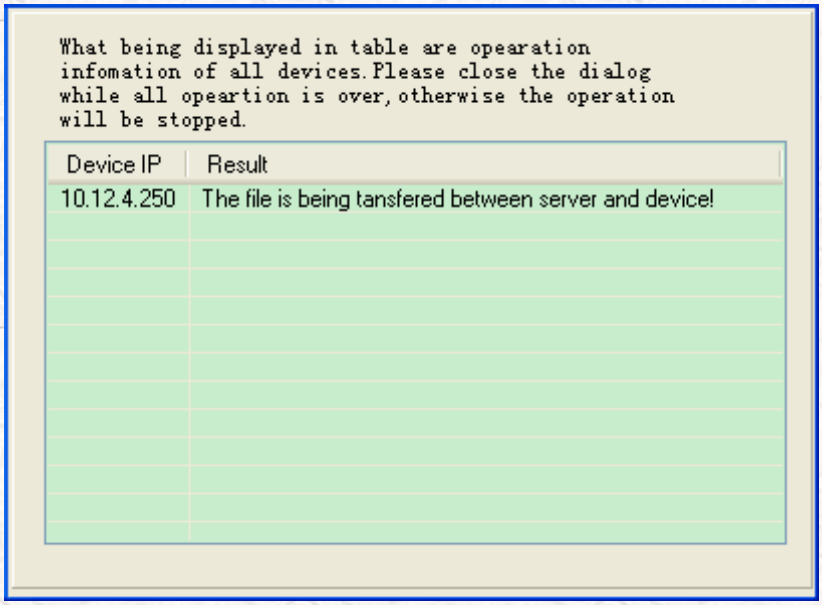


Picture 4-13Upload Device Configuration（1）

2、Following dialog box appears, click Browse, select the file path and name the file storage.



Picture 4-14Upload Device Configuration（2）



Picture 4-15Upload Device Configuration（3）

At this point, the configuration file upload is complete, open the appropriate directory, view files just.

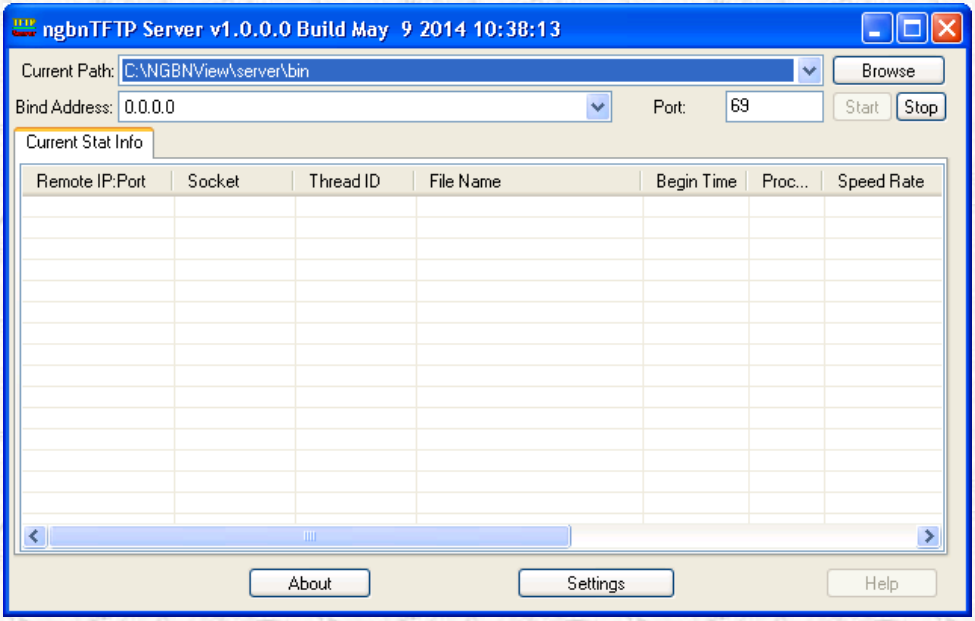
4.7.2 Default File Server

Equipment maintenance system is based TFTP or FTP protocol operation, so before use, you must start the server related agreements (the server opens the corresponding service).

Currently, the equipment maintenance system also only

supports TFTP protocol, this section focuses on how to start the system comes with a default TFTP server.

TFTP server on the server is started, as shown below.



Picture 4-16TFTPServer Interface

Note: When the need for equipment maintenance operations remain TFTP server is running.

4.7.3 Equipment Maintain Menu

4.7.3.1 Operation

4.7.3.1.1Exit

Click on the menu item, the device will exit maintenance interface.

In addition, the button on the action bar Also the exit operation.

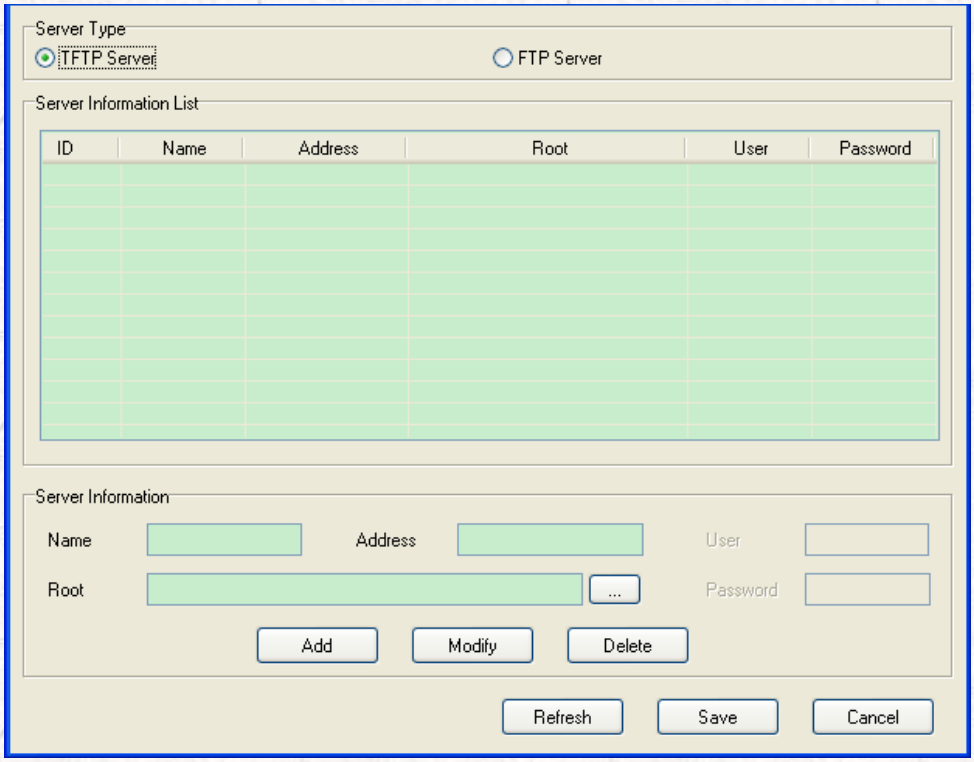
4.7.3.2 Server

Server menu contains a menu item configuration, this menu item is mainly used to set up equipment maintenance module uses the file server information, as shown below.

Picture 4-17Server Menu

In addition, the button on the action bar Also the server configuration operations.

Click on the menu item will open the server configuration interface, as shown below.

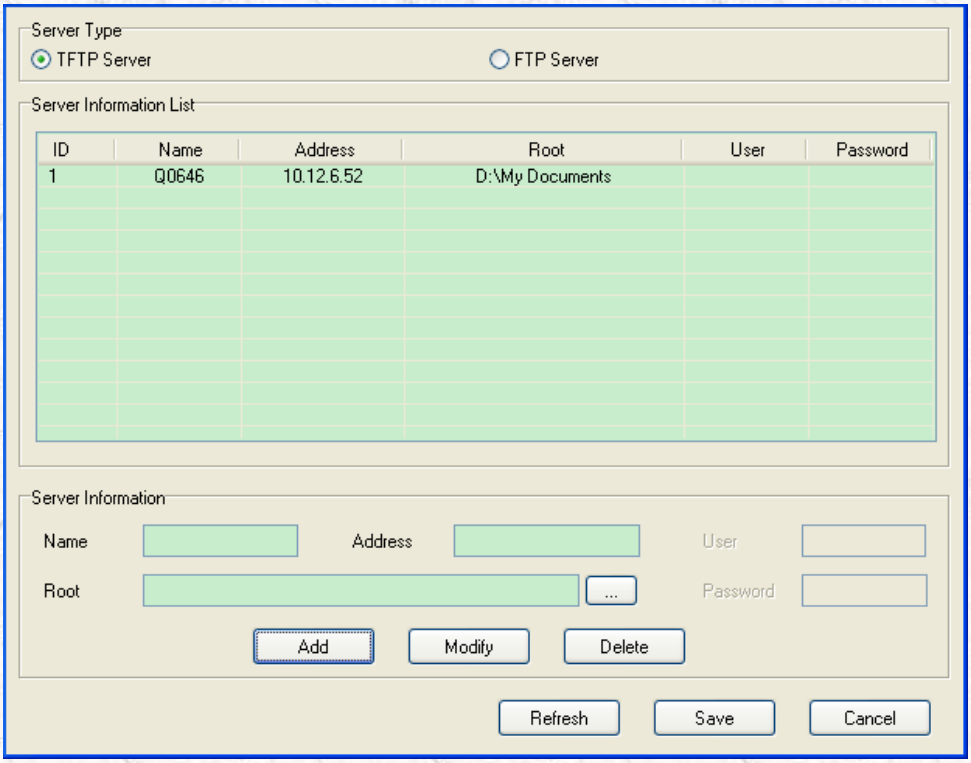


Picture 4-18Server Configuration Interface

You can choose the server upper interface protocol type, TFTP or FTP, depending on the selected server list screen central display is not the same.

Central display screen is a list of servers, including server ID, server name, server address and server root directory for the FTP server, but also display the user name and password. Where the password is displayed as encrypted coding.

The bottom of the interface is the server information display and operating parts, when you select a server in the server list records, records show that will put the information in this area, you can modify the information on these changes and to update the original recording by the Modify button, also the results can be altered by adding a button to post a new record is added to the server list. Click the Delete button server information removed from the list selected.



Picture 4-19Add TFTP Server Interface

After the server list, you need to click on the Save button below the action really saved, or else close the interface before the operation will be lost. As shown in Figure 5-19 Adding a TFTP server. Fill in the server name and server address and server storage directory, you can add the server. You can also modify and delete.

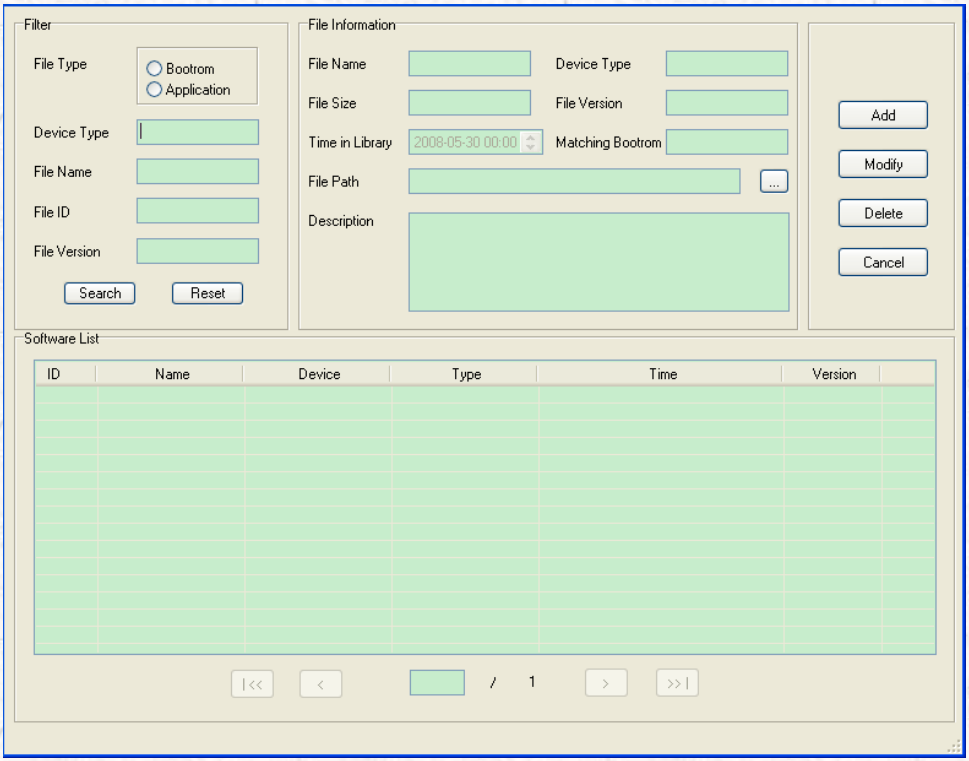
4.7.3.3 Software Library

File menu contains a library software menu item, the menu item is mainly used for equipment maintenance module to save the settings to all kinds of configurations, program-related file information, as shown below.

Picture 4-20Software library Interface

Button on the action bar  Equivalent to the menu item.

Click on the menu item will open the device software library interface, as shown below.



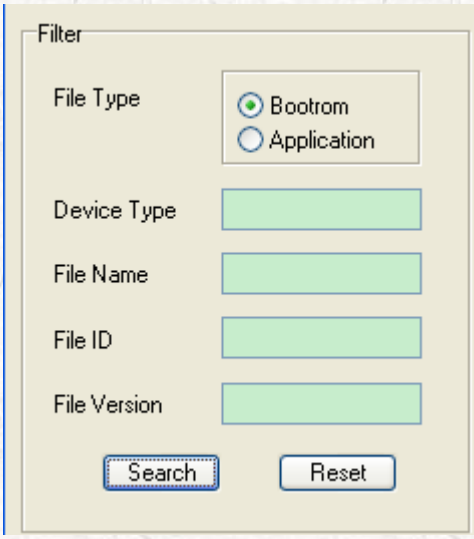
Picture 4-21Software library Interface

Interface is divided into three regions, left for the query area, upper right information for the software operation area, below is a list of software information. You must first turn on the FTP server.

4.7.3.3.1Search

Query part of the software according to the information from multiple conditions recorded in the corresponding

information retrieval, as shown below.



Picture 4-22Software library search Interface

File Type,File is used to specify the scope of the search, and device software into BootRom；

Device type,Corresponding software device model；

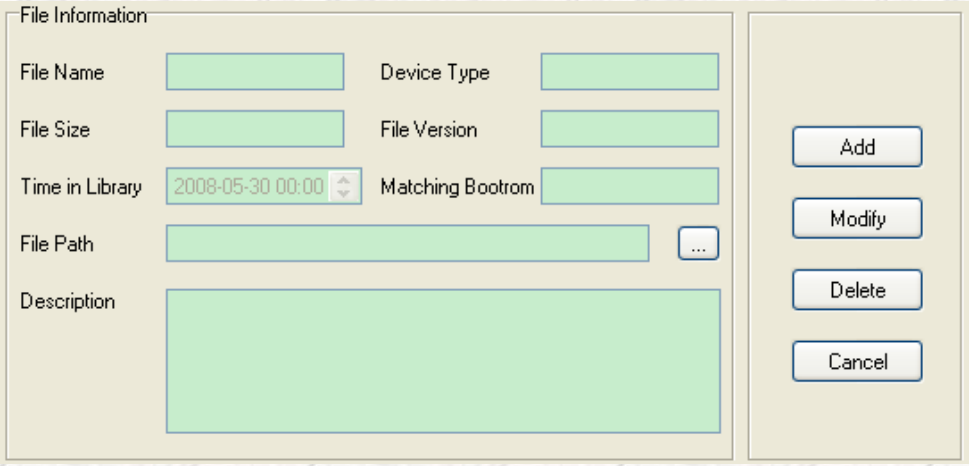
File Name,Software file name, the file path does not contain the；

File ID,Software refers to the number of records in the system；

File version,Software version.

4.7.3.3.2File Information Operation

Software Information operations are divided into information display input section and part of the operation buttons, as shown below.



Picture 4-23File Information Operation Interface

File Name,Software file name, file path does not contain not more than 100 characters;

Device type,Corresponding software device model, can not be empty；

File Size,When set up the correct file path and file name, it will automatically calculate the file size in bytes；

File Version,Software version；

Time In Library,Added to the system time, not editable；

Matching Bootrom,When the project is in the file type of the input device software, you need to fill in order to clear Bootrom version of the device is based on software running to avoid version incompatibility problems. The system will be confirmed this input file types, such as correspondence Bootrom is empty, it means that the file type is Bootrom this input according to the input box contents, and vice versa for the device software；

File Path,By the Browse button after the input box, you can set the directory where the file；

Description,Here you can add a description of the document.

When you select a row in the lower part of the list interface software information, the relevant information about the log file will be automatically displayed in the information display area of each input box, it can be add, modify, and delete buttons on the right side.

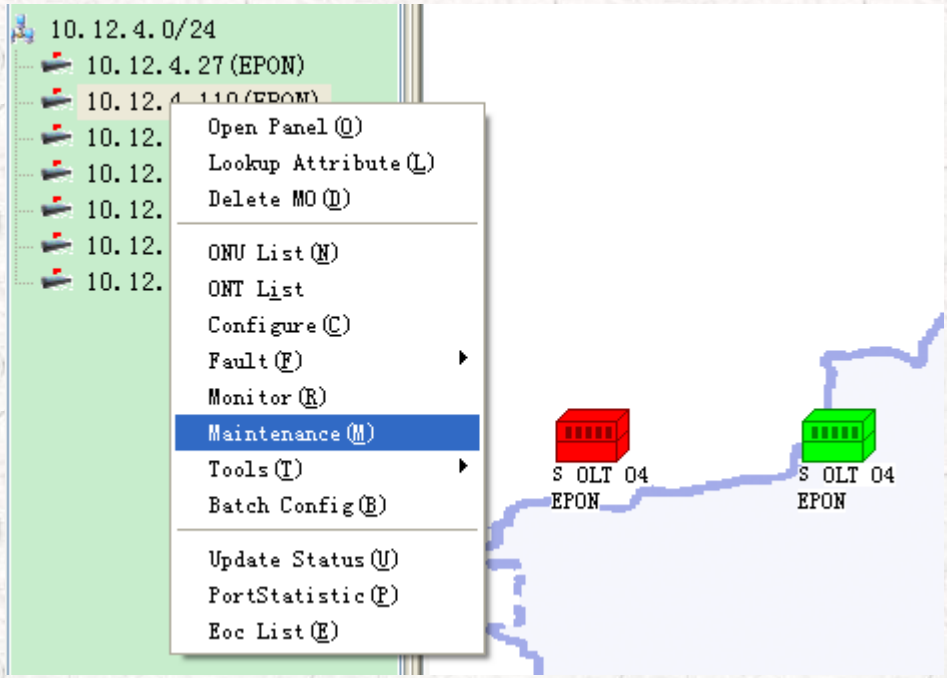
4.7.4 Operator

Equipment maintenance operation includes five steps, namely to select the equipment, select the server, select the type of operation, select the operation file, the file transfer operation, of which the first four operations require the user to manually perform the fifth run side automatically by the operating system.

4.7.4.1 Select Equipment

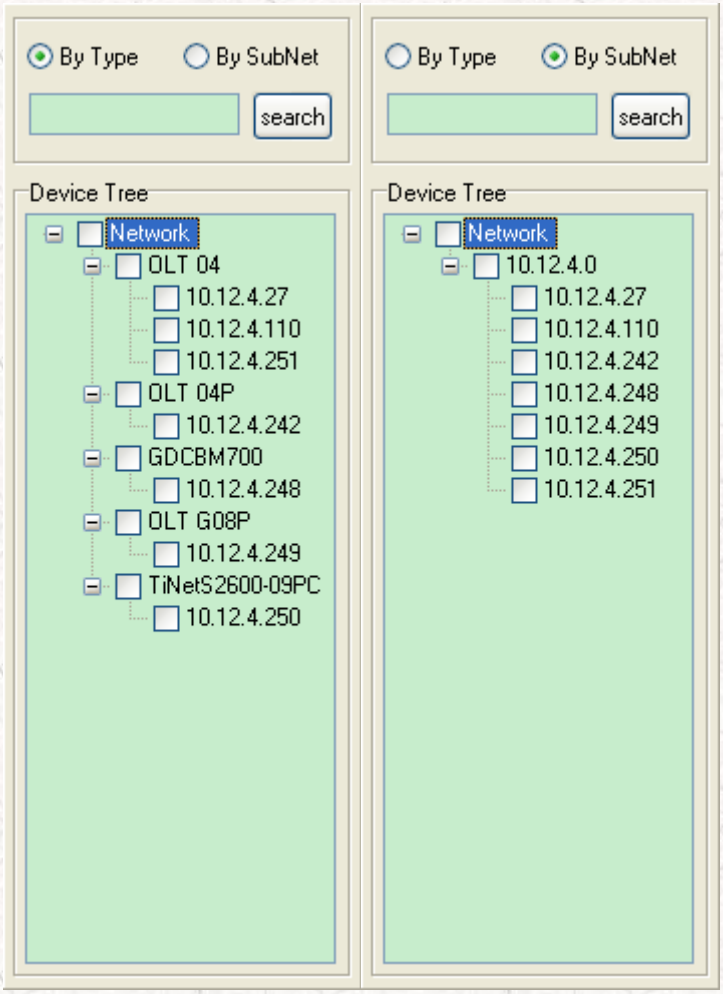
Open the maintenance interface device selection tree can be seen in the bottom right, select a tree to specify the device through the device object maintenance operations.

Open through the main interface menu interface equipment maintenance, equipment maintenance, equipment will have been selected trees, and if you open the equipment maintenance interface through the device menu, select the current default device, as shown below.



Picture 4-24Open the maintain interface through device menu

Through the device tree by type or by subnet to update the device tree is organized as shown below.



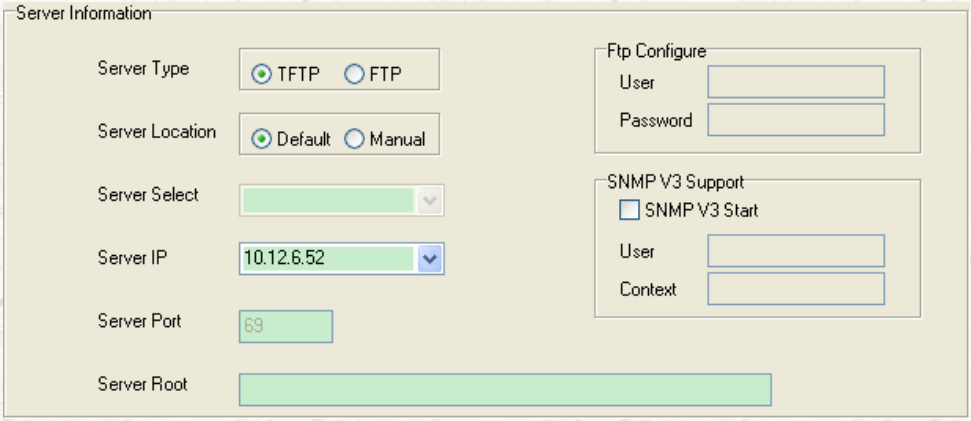
Picture 4-25Organized in different ways according to the device tree

In the device tree, select a high-level nodes will automatically select all the child nodes under it.

4.7.4.2 Select Server

Select the server refers to the file transfer server choice,

including the choice of protocol service type, set the server address and other related operations, as shown below.



Picture 4-26Select server

Server types are divided into two types, namely, TFTP and FTP, the current maintenance system only supports TFTP protocol；

Server location is also divided into two categories, one is the default, if you choose, the equipment maintenance operation will default TFTP server running on the network management system server, its address, the path are the default content management system；

If you choose the default server location, the server selection, server address, server path 3 is not editable state,

only to switch to a custom location, in order to make it 3 available.

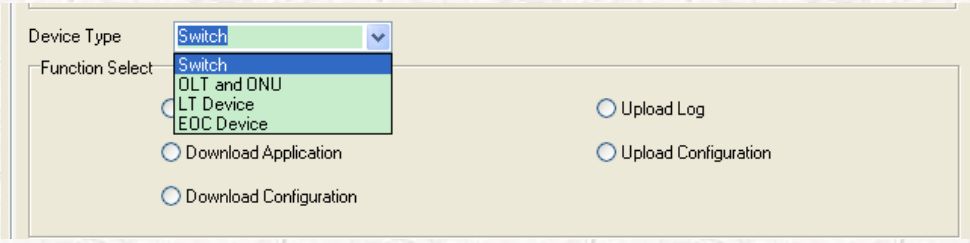
When a custom location option is in effect, you can select the drop-down box server option to select a predefined server name, information about the selected server will automatically fill. Custom Server Server menu operations, see Introduction.

TFTP server information if no suitable predefined server or servers in the server address and manually enter the root path need to use.

When you use the server root path sure to enter, otherwise the client and server can not be correct for file transfer, the operation fails.

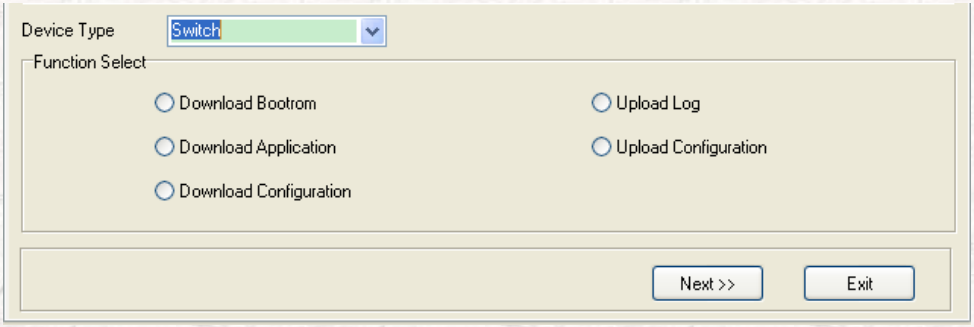
4.7.4.3 Device Type

Device type:Including four types,Switch、OLT and ONU、lt device、EOC Device,Corresponding to different device types to select different functions.



Picture 4-27Maintain Operator Select

4.7.4.3.1Swicth



Picture 4-28Switch Function Select

Download Bootrom:Refers to Bootrom document issued from the client to the device, the device firmware upgrade；

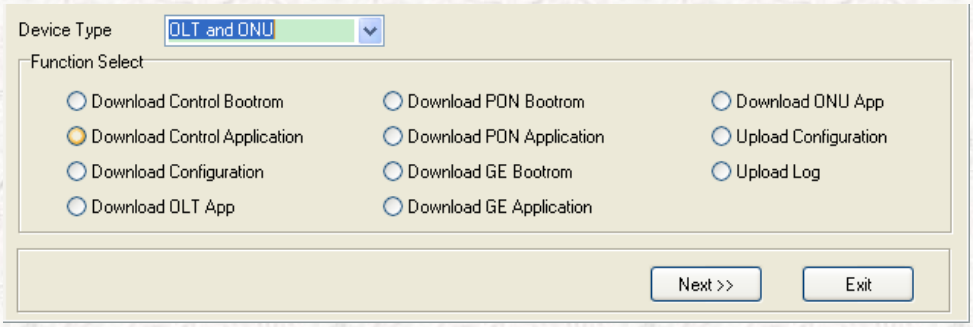
Upload Log:Refers to the current log information acquisition device from the device and stored in the form of a file on the specified path.

Download Application:Refers to the device from the client software is sent to the device, the device software upgrade；

Upload Configurarion:Refers to obtain the device's current configuration from the device and stored in the form of a file on the specified path;

Download Configuration:Refers to the end of the configuration file is sent from the client device to the device, update the device configuration parameters;

4.7.4.3.2OLT and ONU



Picture 4-29OLT and ONU

Download Control Bootrom:Refers to Bootrom document issued from the client to the device, the device firmware upgrade；

Download PON Bootrom:Means from the client will be sent to the PON board Bootrom equipment, equipment for PON board firmware upgrade；

Download ONU App:Refers to the ONU software from the client will be sent to the device, the device ONU software upgrade；

Download Control Application:Refers to the master from the client software will be sent to the device, the device master software upgrade；

Download Pon Application:Refers to the PON plate from the client software sends to the device, the device software upgrade；

Upload Configuation:Refers to the current log information acquisition device from the device and stored in the form of a file on the specified path.

Download Configuration:Refers to the end of the configuration file is sent from the client device to the device, update the device configuration parameters；

Downlod GE Bootrom:Refers to the end of the GE board Bootron sent from the client file to the device, the GE board device firmware upgrade；

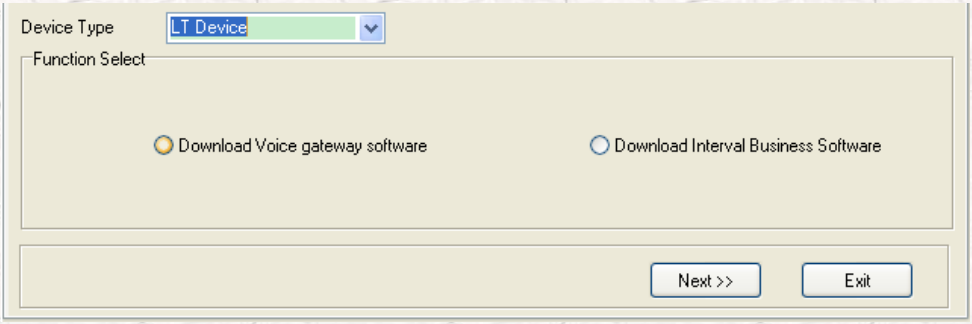
Upload Log:Refers to the current log information acquisition device from the device and stored in the form of a file on the specified path.

Download OLT App:Refers to the software from the client will be sent to the OLT OLT equipment, software

upgrades OLT OLT equipment；

Download GE Application:Refers to the software from the client will be sent to GE GE board equipment, the GE board equipment software upgrades；

4.7.4.3.3LT Device

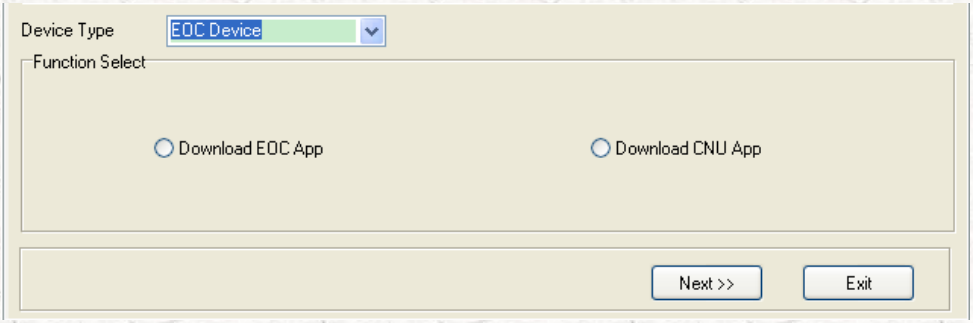


Picture 4-30LT Device

Download Voice gateway software:Refers to the voice gateway from the client software will be sent to the well-informed equipment, equipment for well-informed voice gateway software upgrade；

Download Interval Business Software:Refers to the interval from the client will be sent to the well-informed business software equipment, equipment for the range of well-informed business software upgrades;

4.7.4.3.4EOC Device



Picture 4-31DOC Device

DownloadEOC App:Refers to the end of the EOC central office software sent from the client to the equipment, central office equipment EOC software upgrade；

Download CNU App:Refers to the EOC from the client terminal software is sent to the device, terminal equipment for EOC software upgrade；

4.7.4.4 Select File

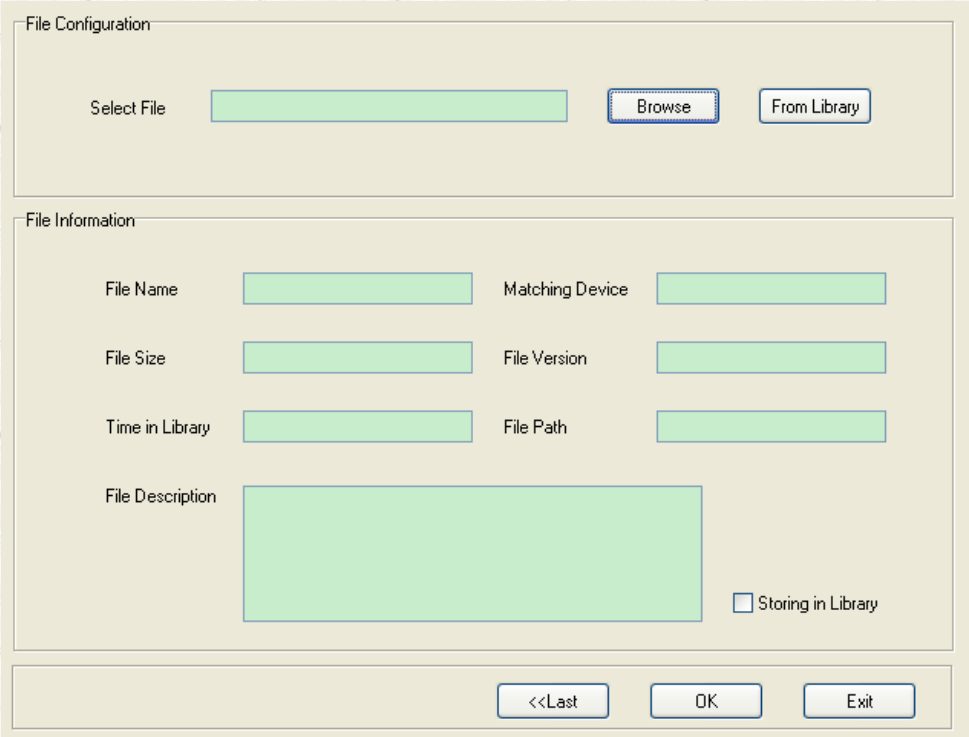
Set up server-related information and the type of operation, click the Next button beneath the screen, then enter the file selection interface.

File selection screen is divided into two types, one is a file download interface, different devices have different operating,

the other is the file upload interface, including device configuration upload and upload device logs two kinds of operations.

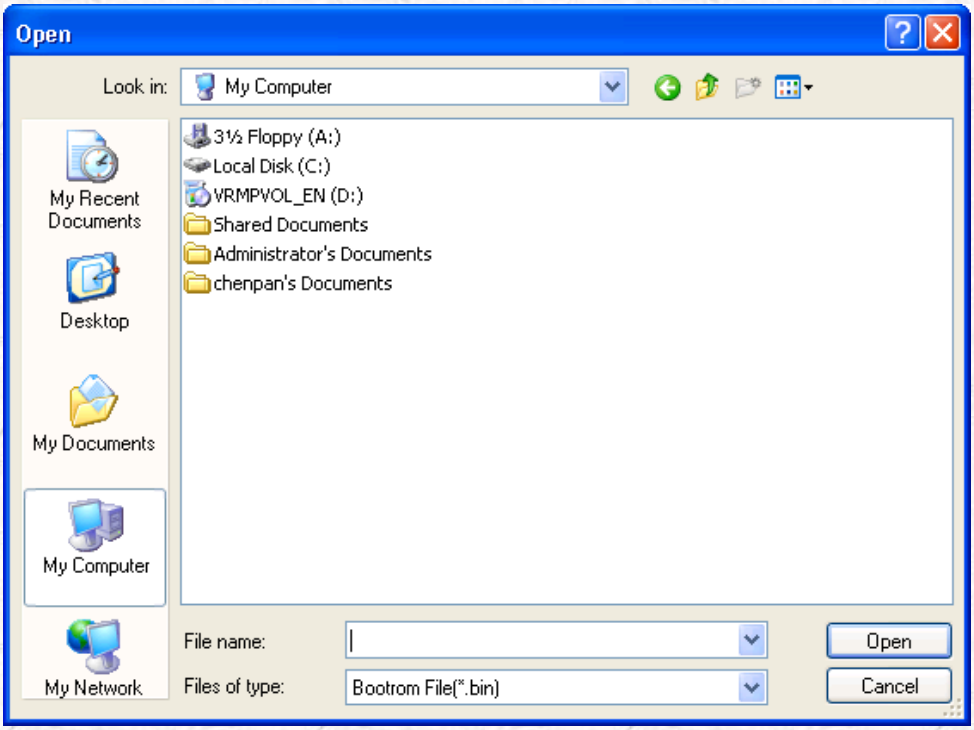
4.7.4.4.1 File Download Interface

Download interface is mainly used to select an existing file to be sent to the device, so you can browse the file manager to take direct way to select the file, select the file can also be taken from the device software library mode, the interface as shown in the top two button, browse and access from the library.

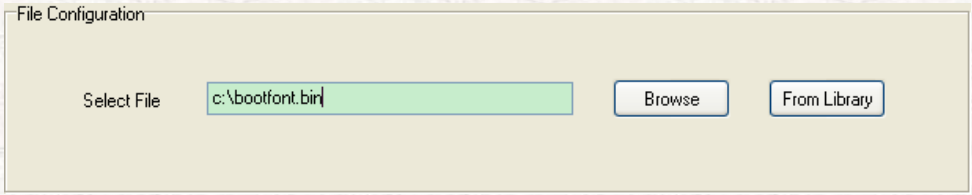


Picture 4-32File Download Interface

Click the Browse button to open the file selection screen, select the need to download files to the device, which will automatically open the file and click on the path to fill the file selection box.

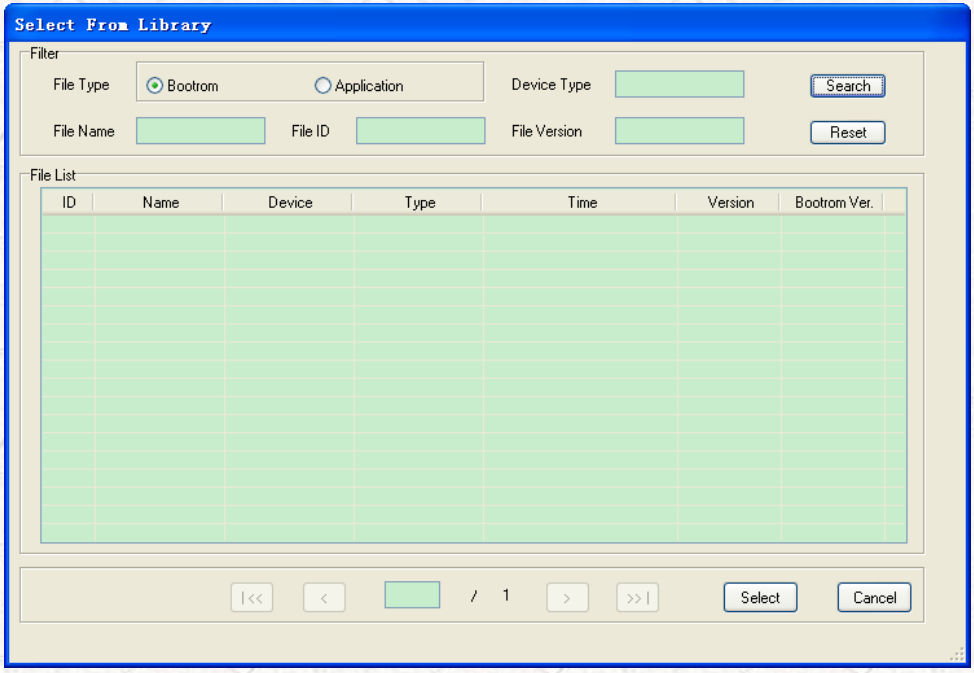


Picture 4-33Select FIle through File Management



Picture 4-34After selecting the file automatically fill in the box

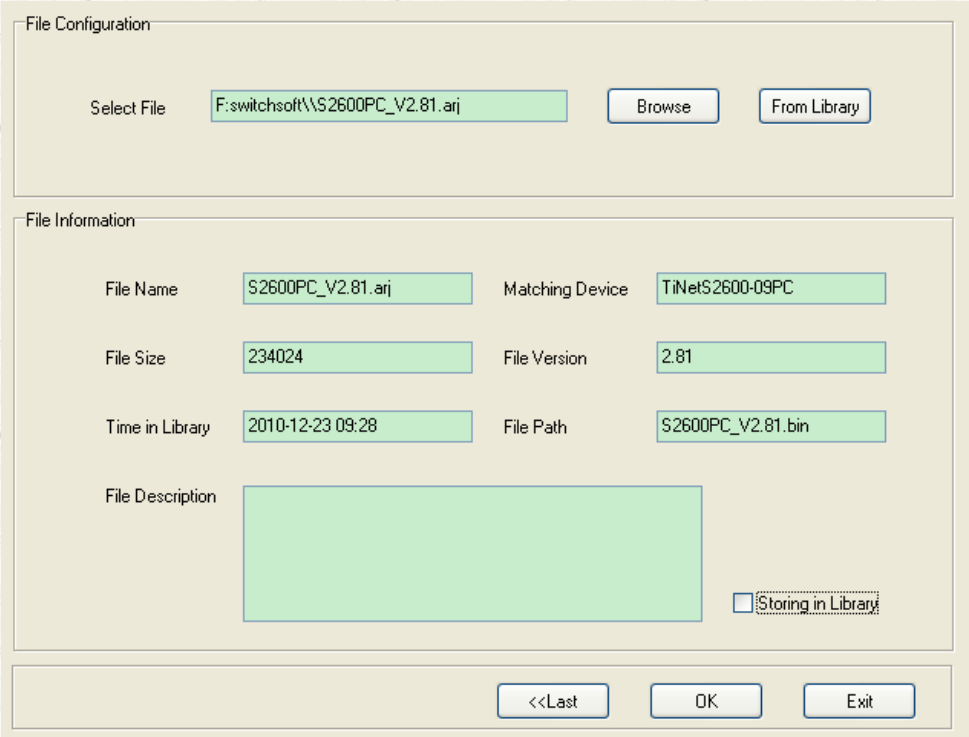
Click the button to get from the library, the library will open the file selection screen, as shown below.



Picture 4-35Select from Library Interface

The interface consists of the upper part of the lookup operation and the composition of the lower half of the list of files, locate the file you want to use, tap the file information, and then click the Select button to select the file, as shown

below.



Picture 4-36Select from Library

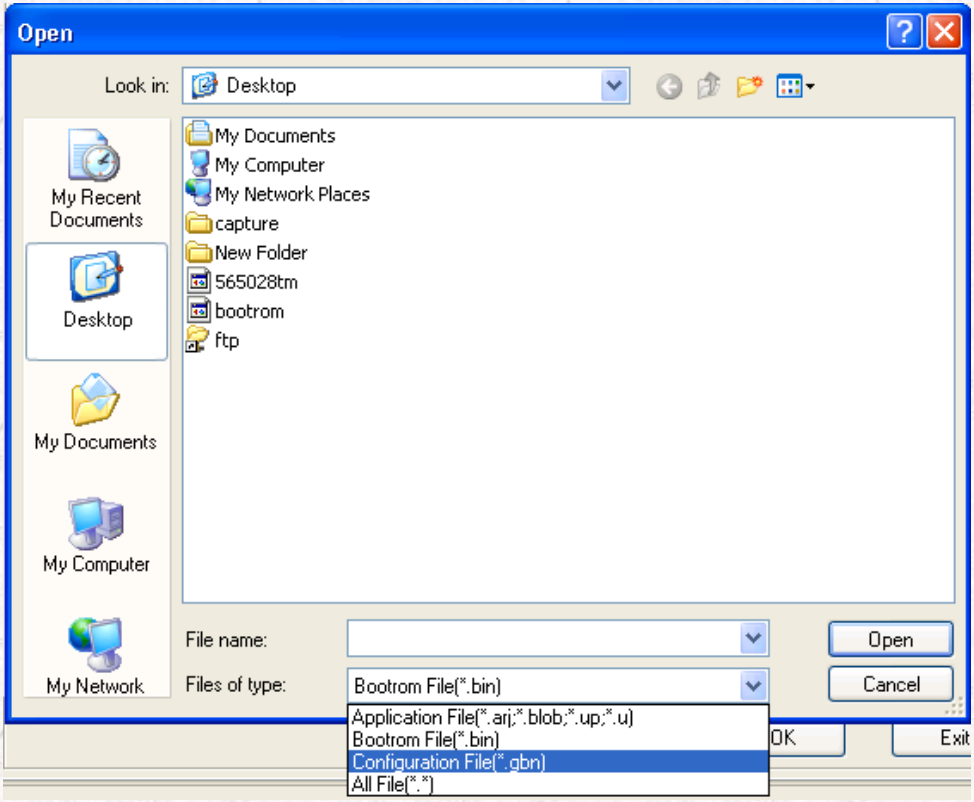
In the bottom of the screen displays information about the file, in order to facilitate the user to check the file, to avoid wrong operation.

4.7.4.4.2Upload File Interface

Download file upload interface interface should be simple compared to only one file selection box and the Browse button, as shown below.

Picture 4-37Upload FIle Interface

Click the Browse button interface similar to the file download will open a File Save dialog box, select the file you want to save a good path and name, click on the Save button as shown in the following figure.



Picture 4-38File Upload and Save Dialog

Upload the file name can be entered in the file name box, you can select an existing problem, such as selecting the file already exists, will have the file already exists in the prompt box.

Depending on the upload operation, the file extension will be different, upload configuration files have the extension.

Gbn, alarm log file extension. Txt, if you choose to save the file name does not correspond to the extension, will automatically be in the back plus the corresponding extension.

4.7.4.5 File Translation Operation

After selecting the relevant documents, click on the OK button interface, will begin the appropriate file transfer operations, and opens a file transfer interface shows the progress of the file transfer.

Operation of the device will display the address of the interface with the current operating conditions.

Depending on the upload or download operation, the operating results of the information displayed is not the same.

For the upload operation, the first is the operation of information between the device and the server, and allow the device to completely transfer the file to the server, the file transfer operation from the server to the client.

For the download operation, then the reverse order, the first client to the server for file transfer operations, then the server to the device file transfer operations.

Below is a brief introduction about the various elements operating results information.

Is to transfer files between the server and the device: that the current server is transmitted between devices to interact with files；

File transfer between server and device success: that transfer files between the server and the device successfully；

To transfer the file successfully:That the entire operation is completed successfully

SNMP trans error:TFTP operation between the device and server errors, and comes with error number

Operation Success:Between service and client file transfer success；

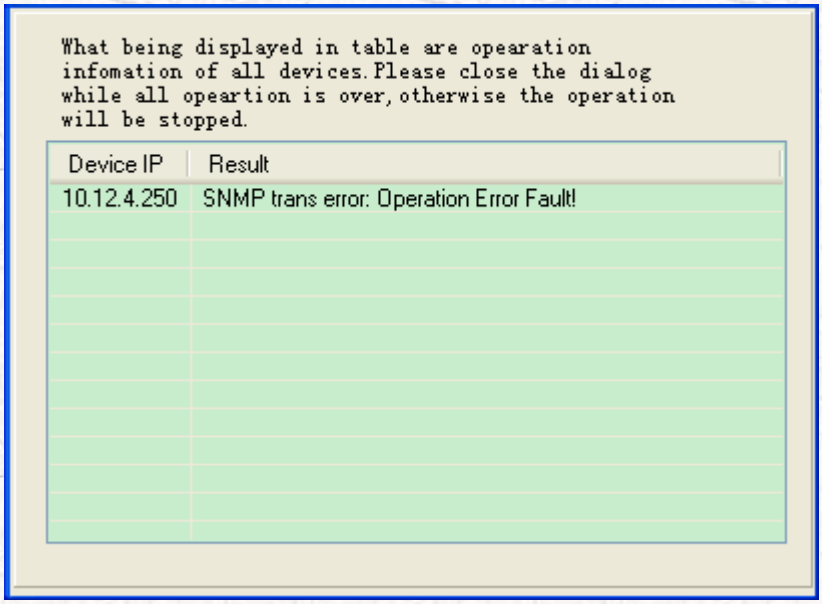
File not found:File not found when file transfer between server and client；

Timeout occurred:File transfer timeout error occurs between the service and client；

can't write to local file: File transfer files between appearance and client service can not write error, generally have multiple processes at the same file operations；

Other Error:Other unknown error.

Sometimes it may appear the following message error..



Picture 4-39Fault Message

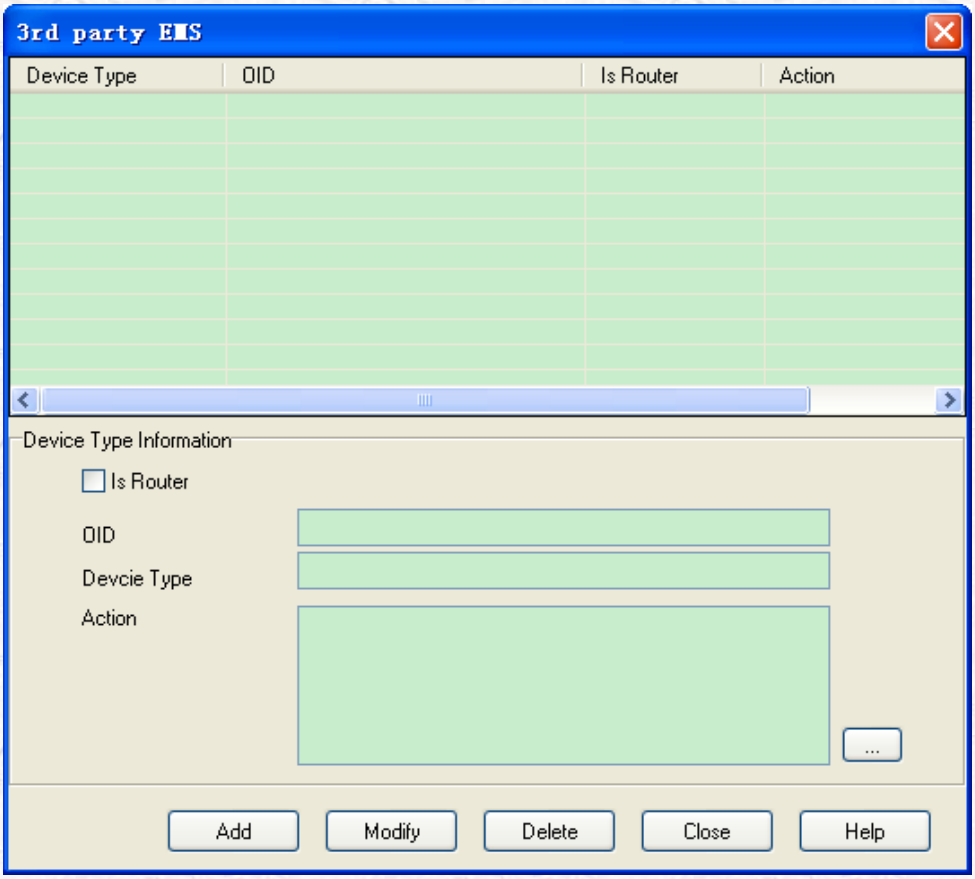
For this reason an error occurs, one device may not be connected, the second is on the NMS device to write the name of the public body does not properly saved, this time the need to open the device properties of the interface in the device menu, modify the public body called the right to write value.

4.8 3rd Party EMS

4.8.1 3rd party EMS View

Integration of third-party EMS main function is to facilitate the users to easily integrate third-party devices operate applications that can target OID, device type device to be set. To invoke the corresponding application through the 'configuration management' third-party devices.

EMS is integrated in the framework of a third party to open the menu interface shown below shows open.



Picture 4-40In the framework of the menu to open the third-party EMS integrated interface

At this point you can use the 'Add', 'Modify', 'Delete' to complete the operation, the main operation include:

Is Router:Whether the device is a three-tier equipment;

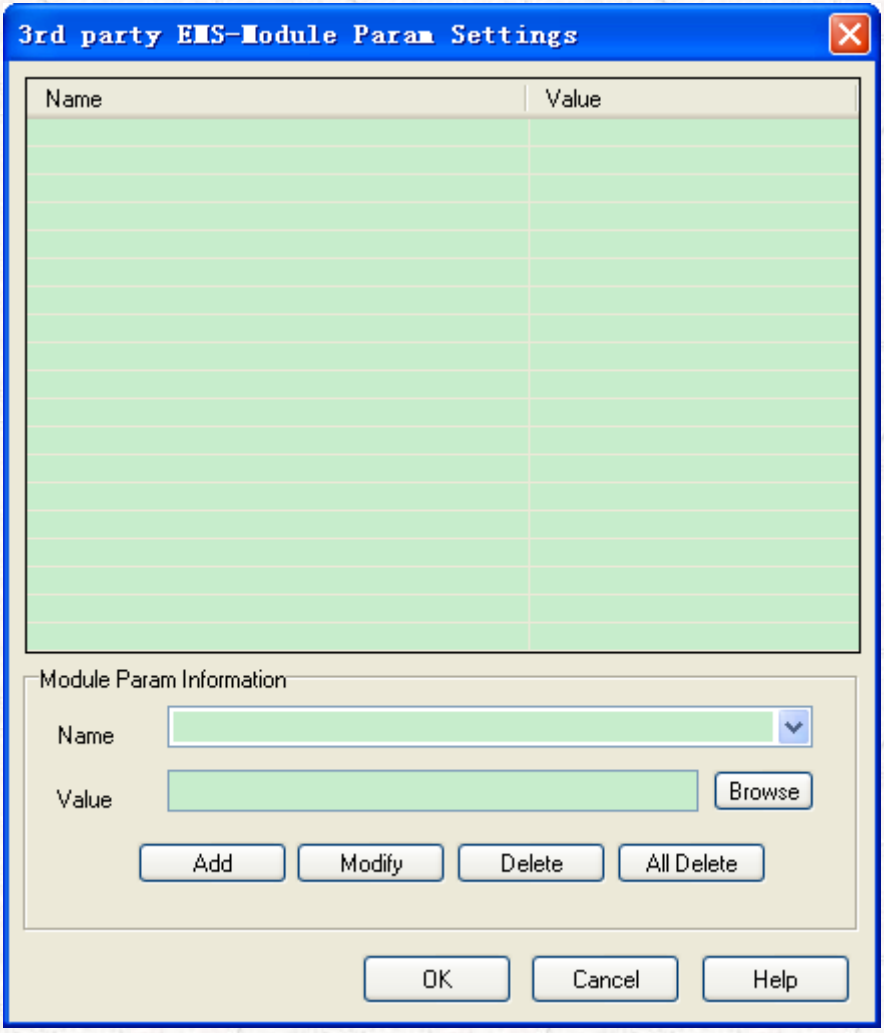
OID:Oid value equipment;

Device Type:Model of the device;

Action:Perform string operations.

4.8.2 Module Param Settings

Module parameter setting is mainly for the convenience of the user application parameters specified by the click of a button“ ... ”Open, open interface below shows the.



Picture 4-41Open the module parameter setting interface

At this point you can use the 'Add', 'Modify', 'Delete', 'Delete All' to complete the operation, including major operations:

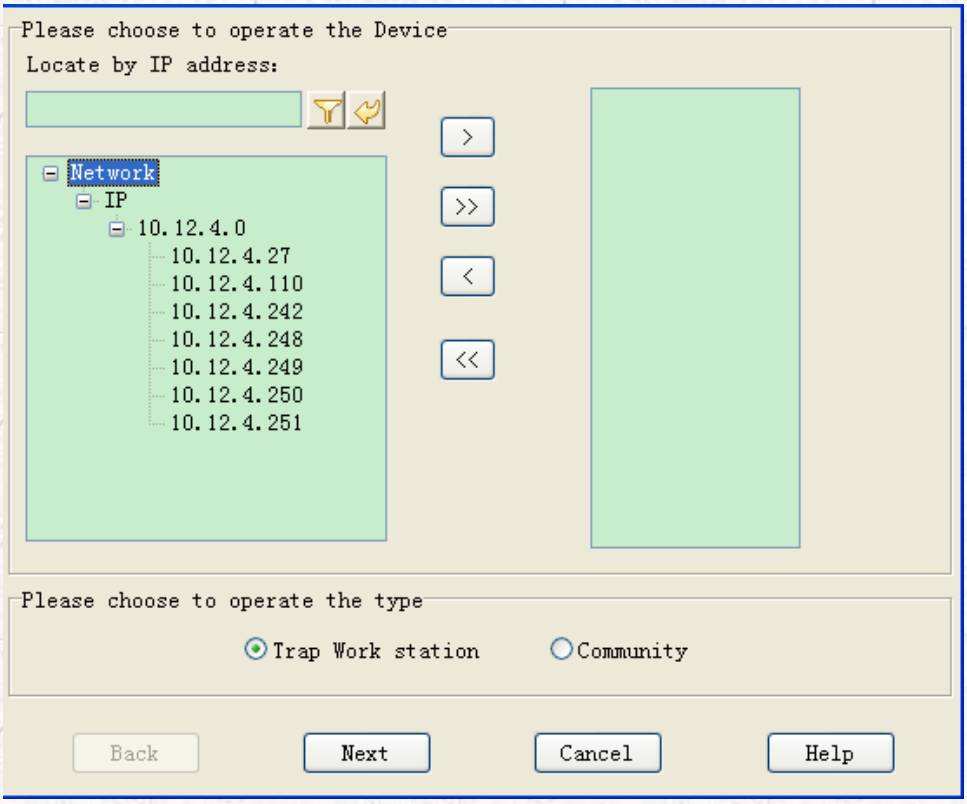
Name:name of parameter；

Value:value of Parameter；

4.9 Community/Trap Configure

Trap host of public bodies and other information equipment for bulk configuration.

By“**Operation'**➔ “**Community/Trap Configure'**,Trap workstations can open and public bodies were set up interface, as shown below.

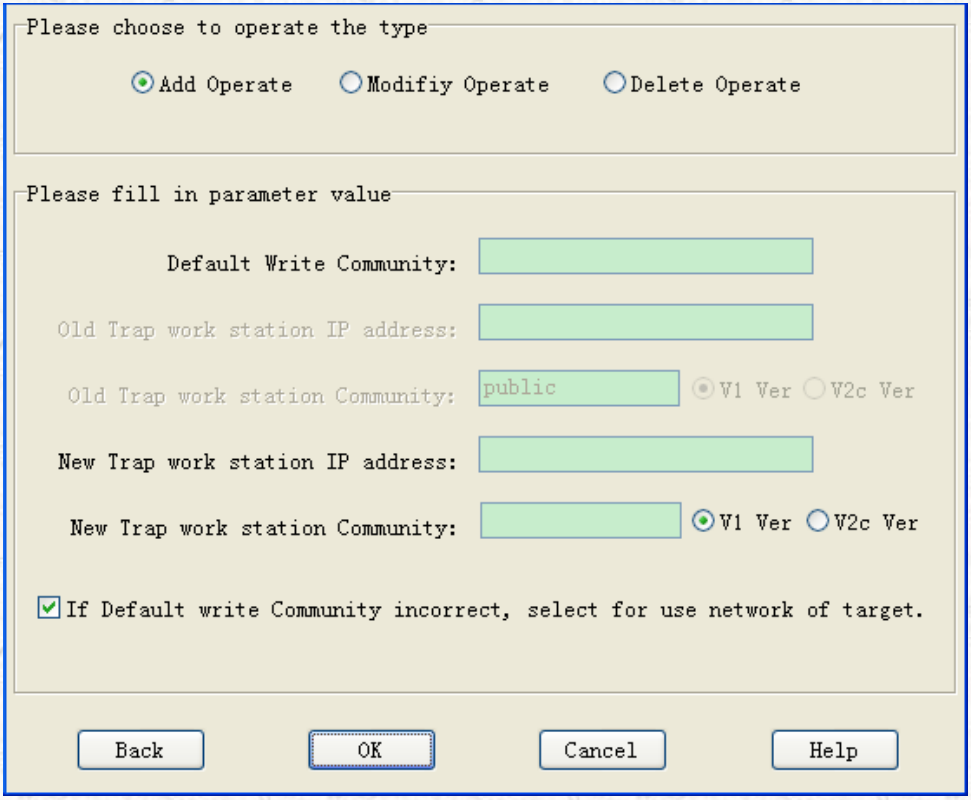


Picture 4-42Trap configure

This function is used to modify the device's bulk Trap workstation names and quantities of the public body set up equipment. First select the need to modify the (configured devices), select the type of operation (Trap workstation or public body name), and click the 'Next' button to configure.

Click the 'Next' button, Trap workstation configuration

interface is shown below.



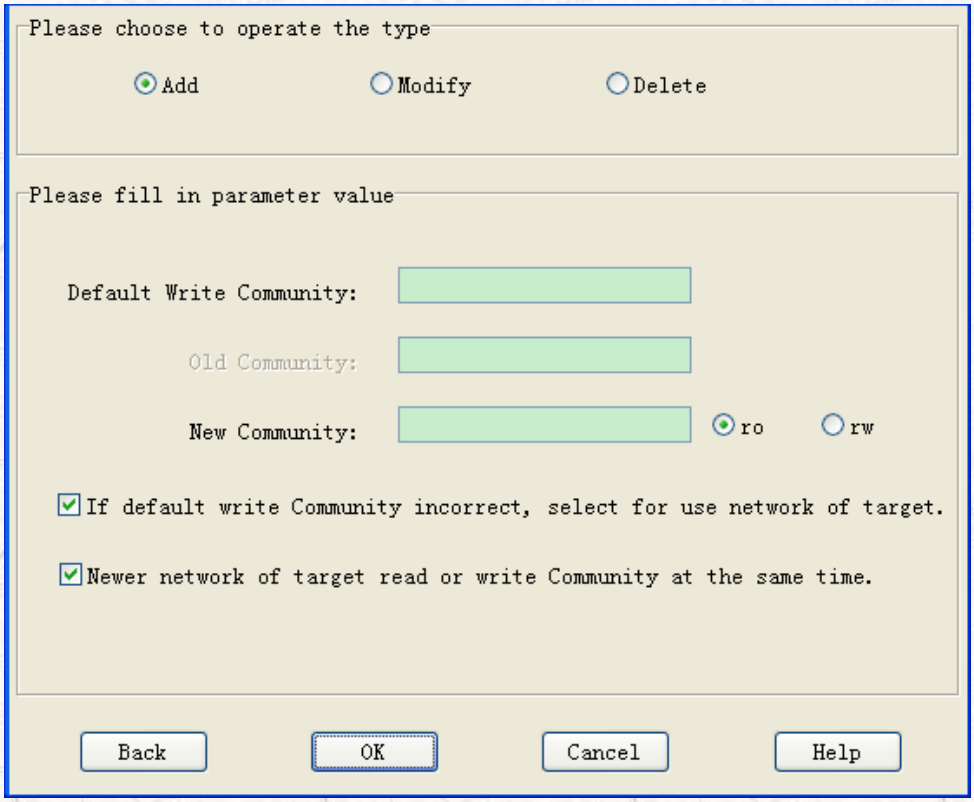
Picture 4-43Set Trap configure

In this interface, you can add, modify and delete Trap workstation configuration. When you add a Trap station, public bodies are required to complete writing the name of the device (all devices must be configured to have a public body to write the same name), fill Trap workstation address, fill

workstation Trap community name, select the version (recommended to choose V2c version), Finally, click 'OK' button to add.

Modify and delete operations with the add operation is similar.

Select 'Community' then click 'Next' button, modify the name of the interface as shown below Community.



Picture 4-44Modify the name of the public body interface

In this interface, you can add, modify and delete the selected device public body name. When you add the name of a public body, public bodies are required to complete writing the name of the device (all devices must be configured to have a public body to write the same name), a public body to enter a new name, select the name of the public body type (read-only or read-write) , recommended to choose 'while updating ...' item, and finally click 'OK' button to add.

Modify and delete operations with the add operation is similar.

4.10 Poll Interval Configure

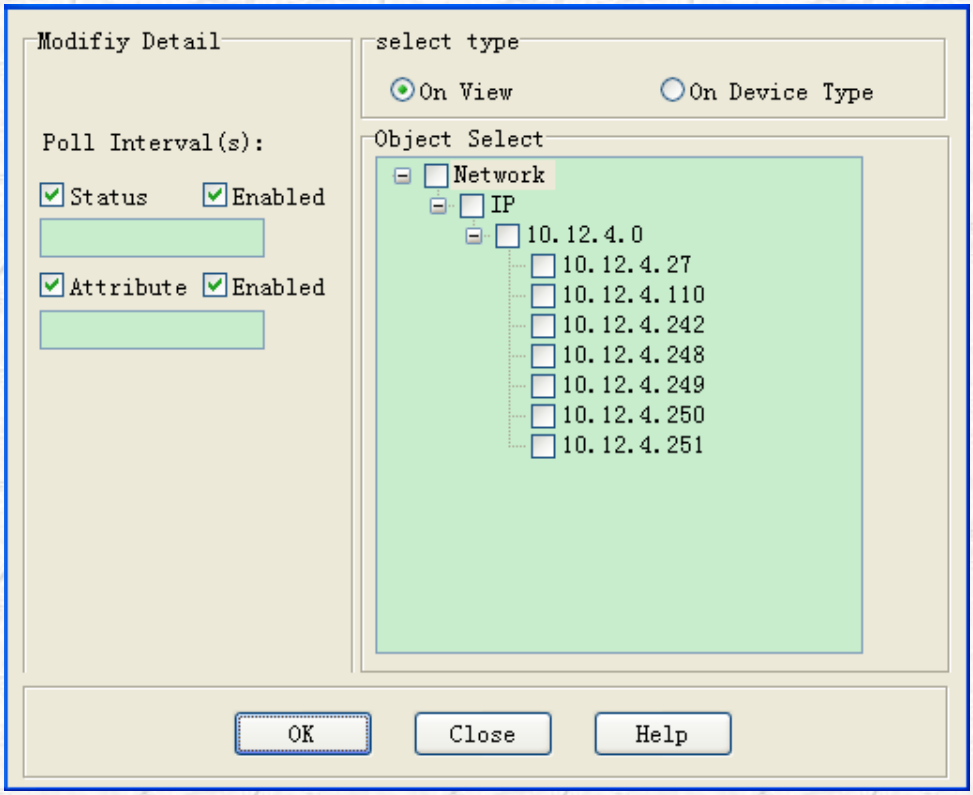
4.10.1 Poll Interval Configure View

Polling interval function is mainly to facilitate users to easily modify all objects accepted platform platform polling interval can target subnet, grouping, GN.Link module, device type to be set. Through the different devices set different polling intervals, can reduce the burden on the network to prevent a large number of devices at the same polling caused

a storm or network congestion.

4.10.2 Modify Poll Interval Configure

Interface to modify the polling interval can open the Object menu, the menu can also be opened in the frame, open at different locations, the interface is slightly different, the next picture shows the opening menu in the framework.

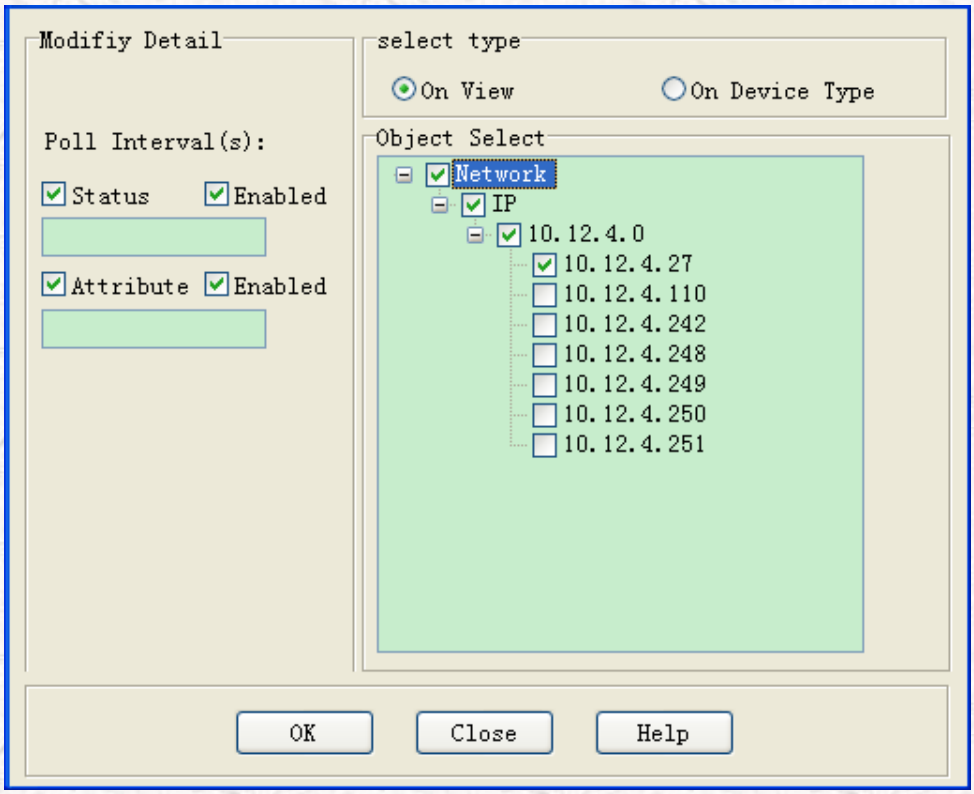


Picture 4-45In the framework of the menu to open the polling interval to modify the interface

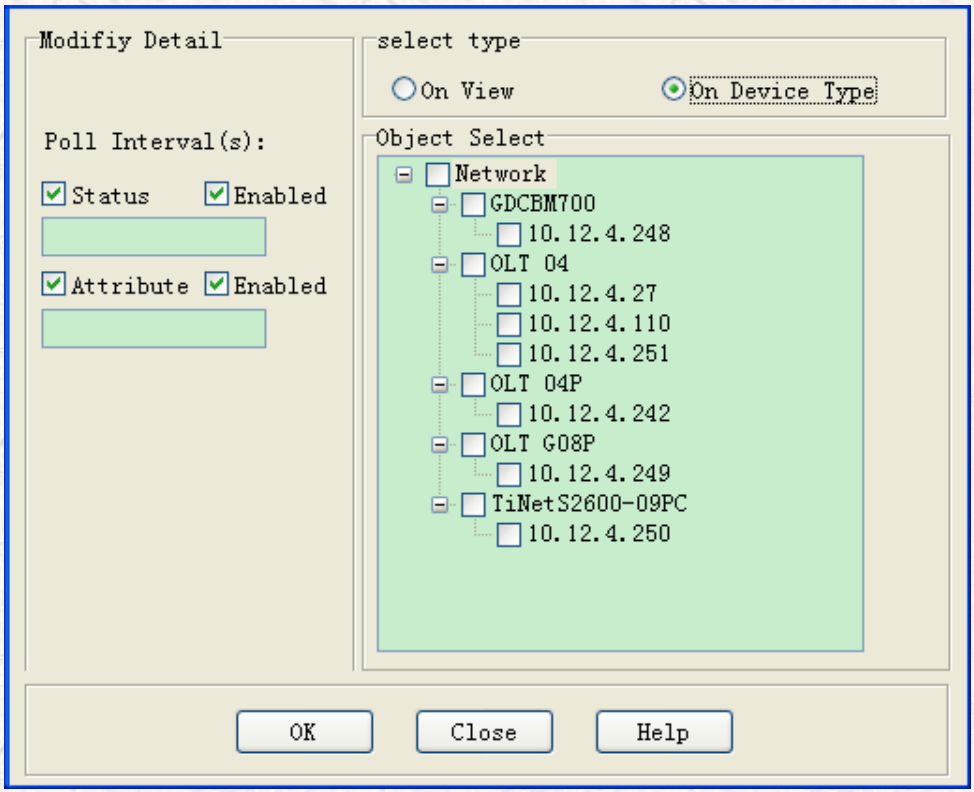
At this time only one type of device by selecting the device type to use modified content to complete the details of the changes, including major changes:

Poll Interval:To modify the polling interval value objects; has two attributes and status.

Open the object menu interface, the default chosen by the current selection tree changes and on the right shows the currently selected object and all child objects in the object tree by choice, either directly or by modifying the option to select the left needs node changes, click OK to complete the modification.

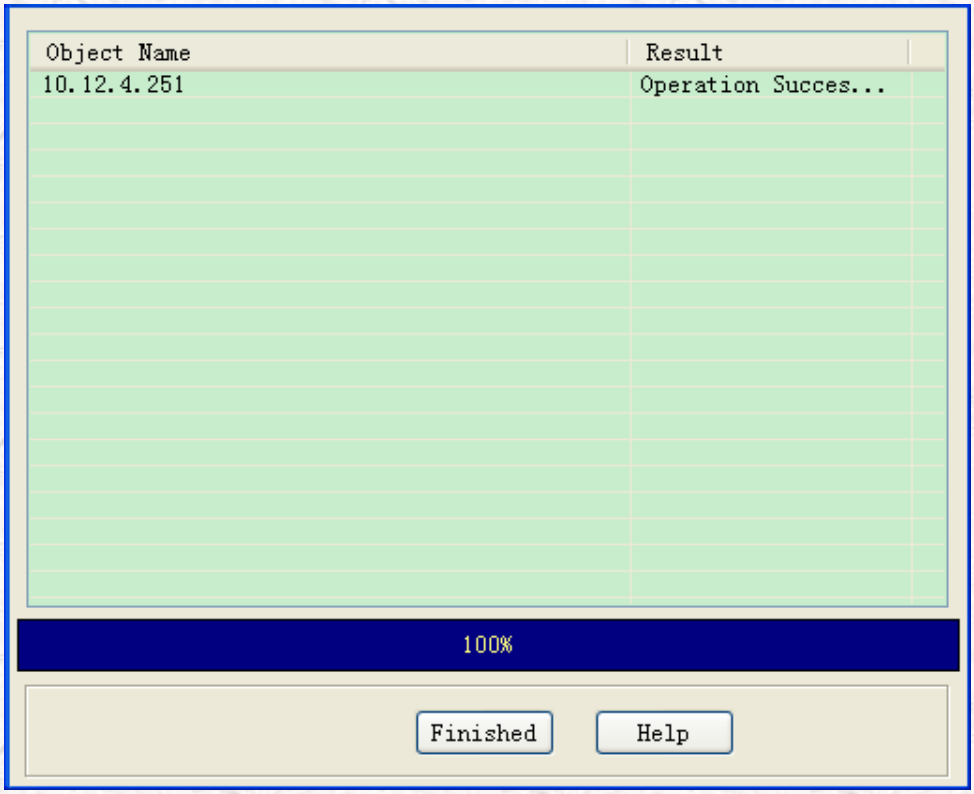


Picture 4-46IP addresses based on polling



Picture 4-47Based on the type of device polling

After the state and properties of the corresponding settings, click OK, the following screen appears

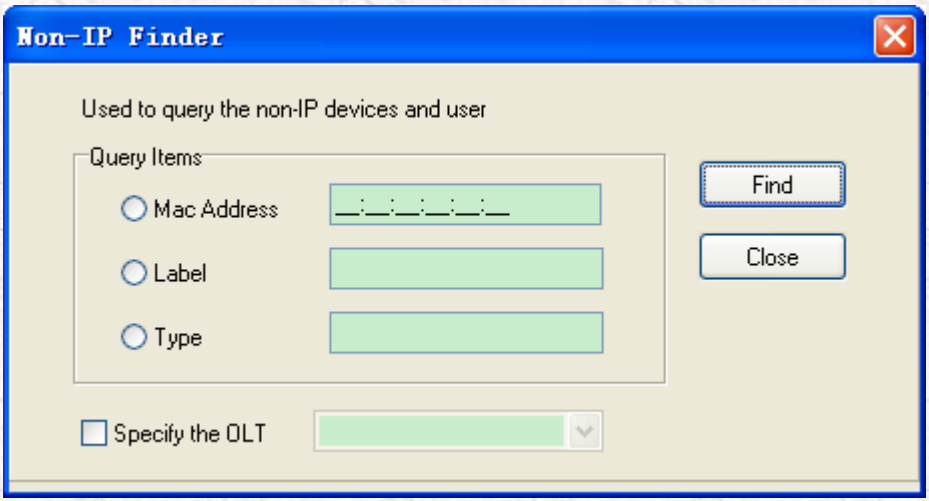


Picture 4-48Status of the device settings

Note: This modification will make all selected objects become consistent polling time, so try not to modify the operation of all nodes simultaneously.

4.11 Non-IP Search

Search for non-IP devices, generally used to query ONU, open interface is shown below.



Picture 4-49Non-IP Search

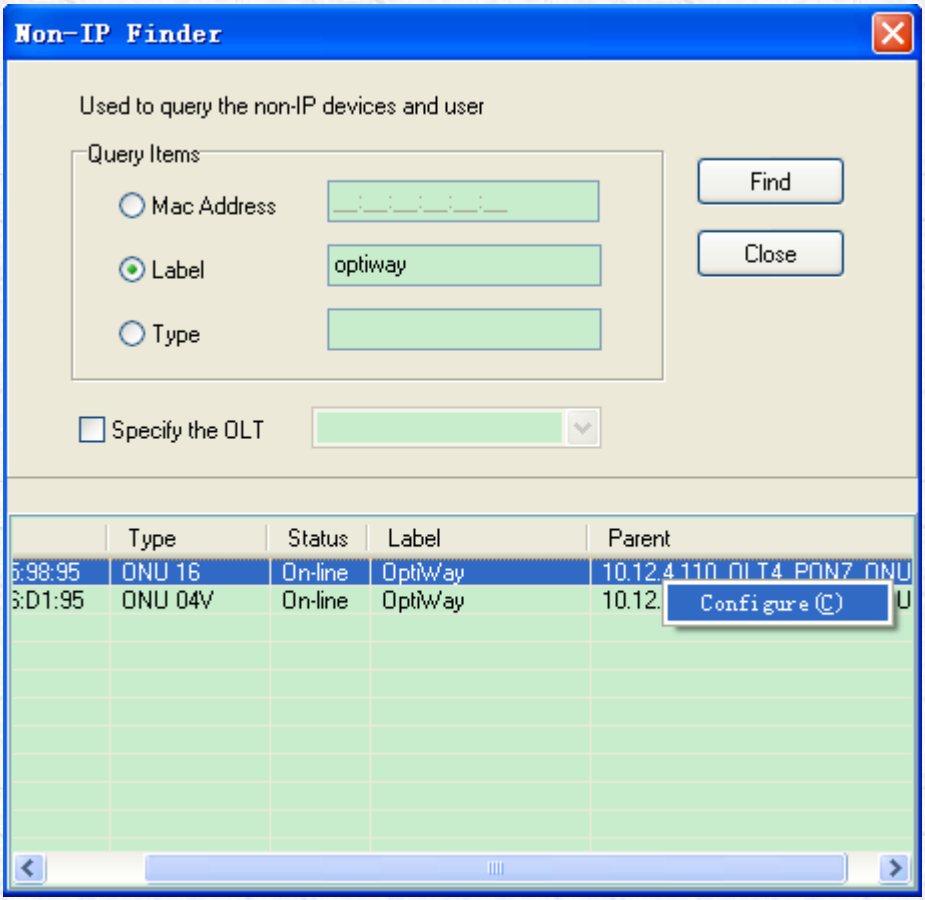
MAC Address:Search by MAC address.

Label:Search by Device Identifier.

Type:Search by device type.

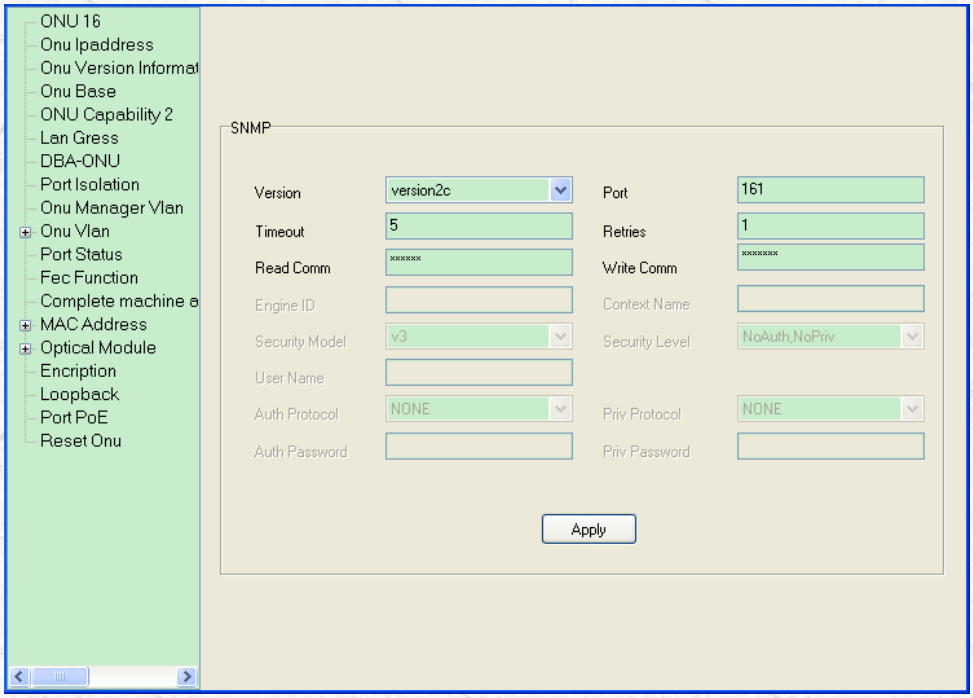
Specify the OLT:You can search by specifying the OLT.

For example, a query to select the device identification, as follows.



Picture 4-50Non-IP Device Query Interface

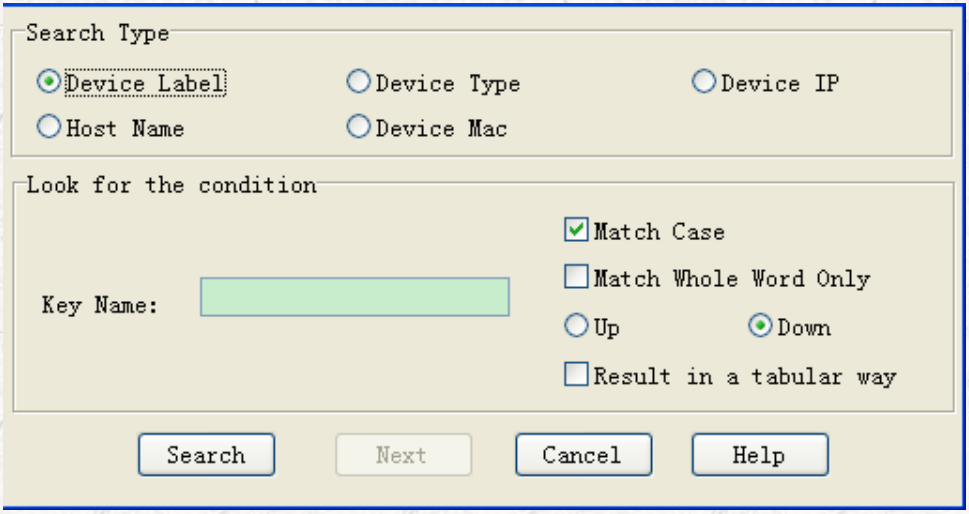
You can see the emergence of a device that matches the device identifier information displayed MAC address, device type, and so on, right configuration management appears, click on it to enter the configuration management interface of the device, as shown below.



Picture 4-51Configure Management Interface

4.12 Device Search

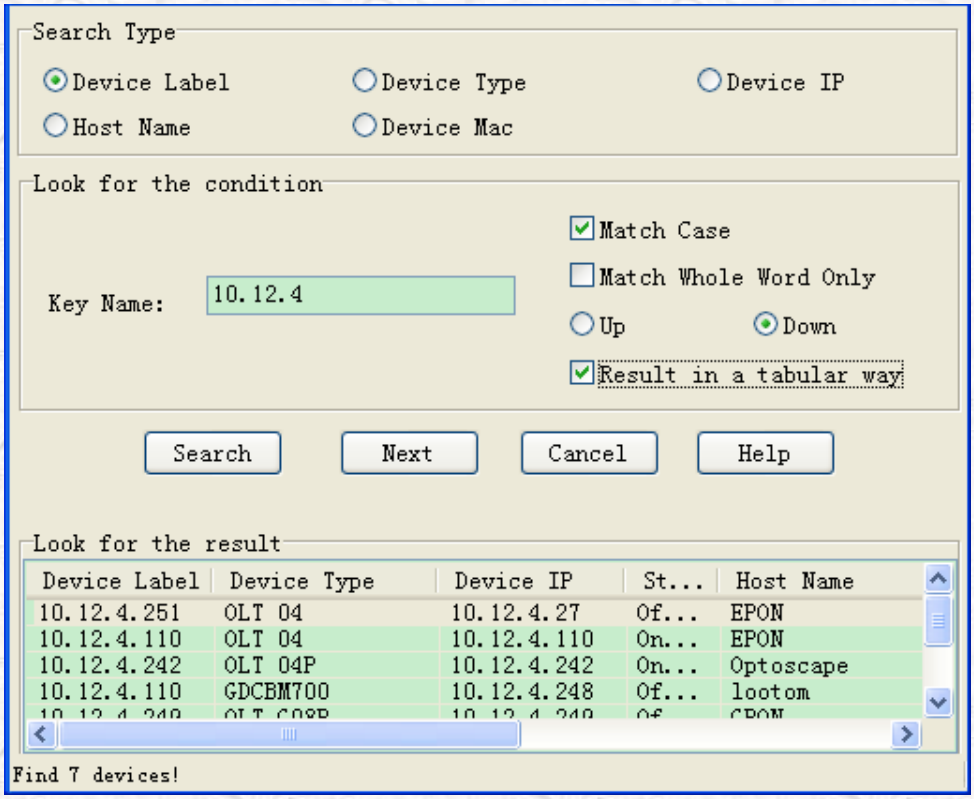
Equipment check is to look at the current node navigation tree, its interface is shown below.



Picture 4-52Device Search

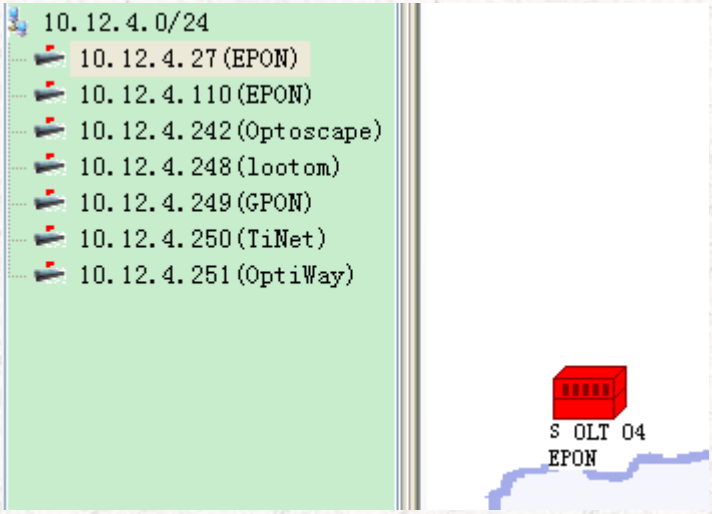
Query can be any combination, as with the operation. Device identification and device identification object properties consistent.

Display search results in list form is used to control the display position of the search results, if you select the item, then the interface becomes as shown below.



Picture 4-53Result of Search by List

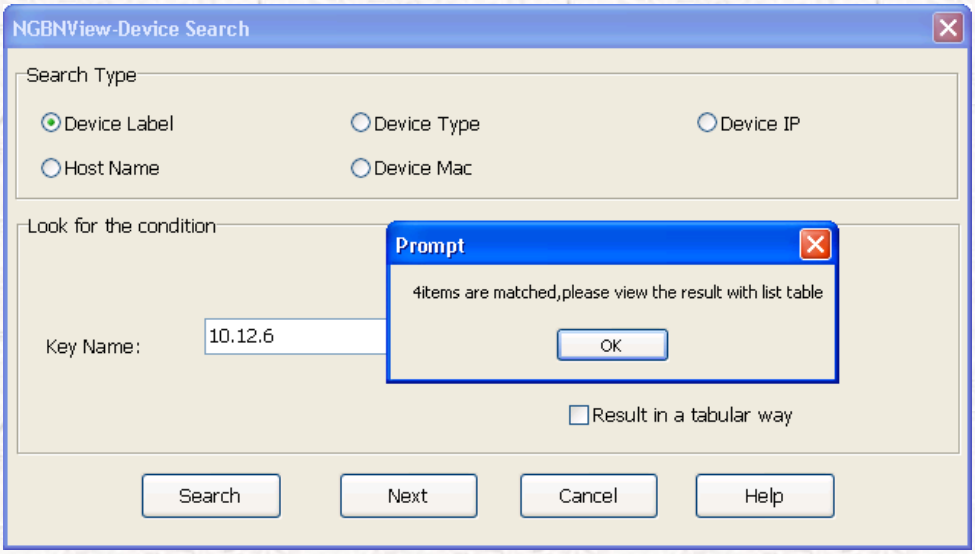
Double-click on the table at this time a node is shown in the navigation tree, select the node, as shown below.



Picture 4-54Select node on the tree

You can see, double '10.12.4.27' node in the table, will select the node in the navigation tree.

If you do not choose to display search results as a list, then select the search to the first node in the navigation tree, as shown below.



Picture 4-55Non-List Search

If you check out the multiple results, you can view by clicking on the next button, you can automatically select the next one, if the list is to display the results, it is both the list and the navigation tree selected. Up and down radio button control to see when the next traverse direction, traversing the last one will return to the top one.

4.13 User Manage

4.13.1 User Manage View

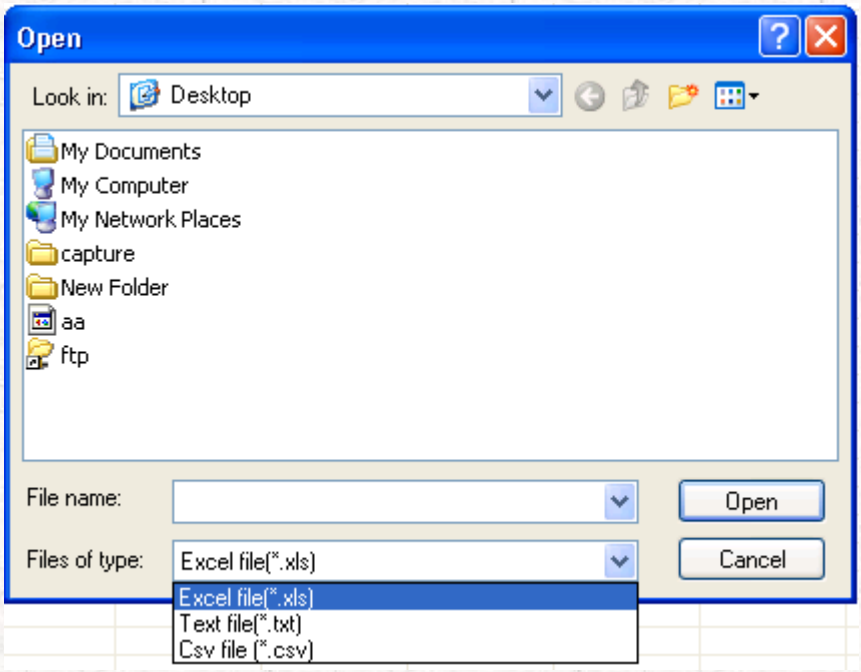
When the user management, often need to know the

name of the user account id and LAN, correspondence with vlan device port. By importing the relevant data sheet to the network management system and improve these data, the user can create a simple database management can turn the user, such as the user's account can be found in the user belongs fiber optic local area network, where switches and switches located ports. User Management Actions menu as shown below.

Picture 4-56User Manage Menu

4.13.2 Add User Info

“Import file to List',it can bulk import switch port descriptions and user accounts.Import file to List',as shown below

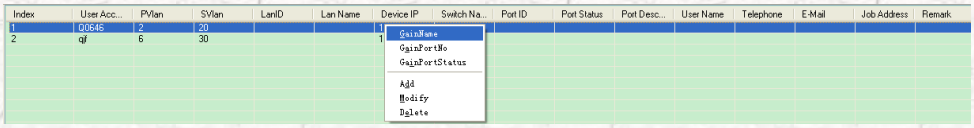


Picture 4-57Import file to List file path Interface

Imported files can be used xls, txt, and csv three file formats. Good to import selected files to import user information to the chart interface. In this interface, you can import the data to add, modify, and delete operations. Where the device IP, only increased during the operation to change. 'Import List to File' to import the data to a file in the list to save. Can choose to save the file type xls, txt, and csv three types.

Users performing 'Read Device Name' and 'port status

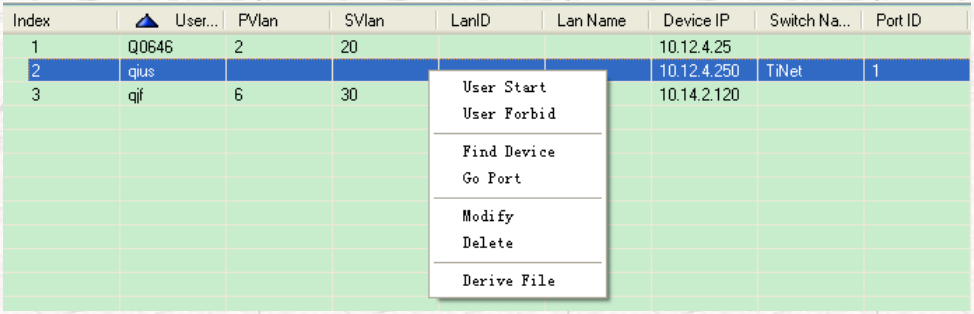
read', 'reading device port', make sure the device IP exists. Otherwise, the device can not read the information. And, during the 'read port status', but also to ensure the presence of the device port. In the data confirm that you want to import complete, click the 'Apply' button to complete the batch import user information.



Picture 4-58Import file to List file path Interface

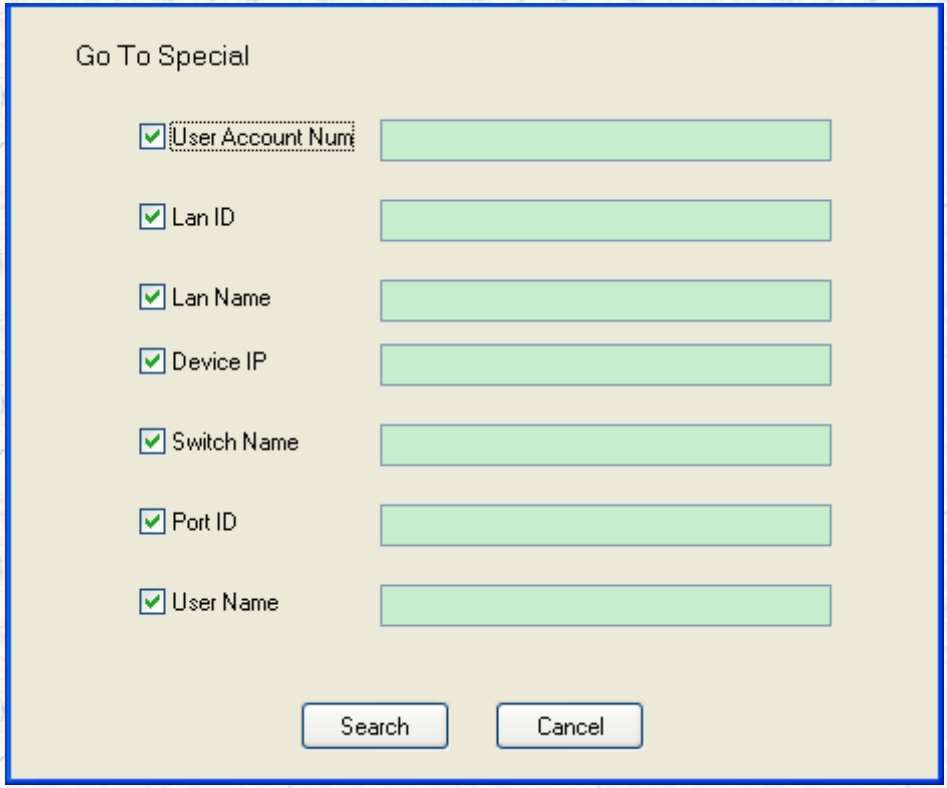
4.13.3 Manage User Info

User Information Management,including“User Start'、“User Forbid'、“find Device'、“Go port'、“Modify',’Delete’ and ‘derive File’,as shown below.



Picture 4-59User Information Management Menu

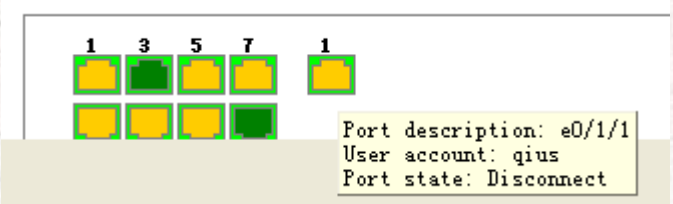
Among“Go to Special',it can be used to achieve the look of a particular user, the following figure shows the optional search criteria.



Picture 4-60Search User Information Management

First select the condition you want to find, enter the appropriate information in the subsequent input box, click on

the 'Find', the device can display a list of users to find the information in the list. Select the query results to a record, click on 'Positioning port device', then if they can find the device, the display of the device. Right-click, select 'Open Panel' menu. When the mouse is moved to a port, the port is displayed in the user information. Shown, user information port number, user ID and port states include the following diagram.



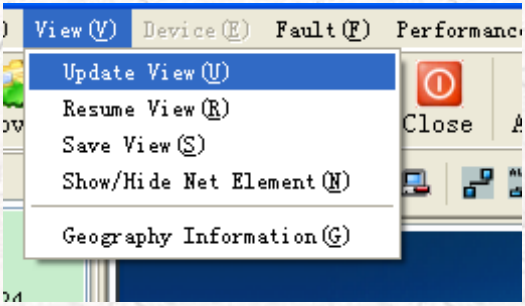
Picture 4-61User Information of Port

Export list to a file, it is used in the current system user information preserved in the form of documents. The file information is available through the 'import file to the list of' bulk import to the NMS. Also, save the file format also includes xls, txt, and csv three file formats.

Chapter 5 View Management

5.1 View Management Menu

The View Manager menu as shown below (TOPO panel only when these options, or only a geographic information appears), followed by a few bars of these menus will feature a detailed introduction.



Picture 5-1View Menu

5.2 Update View

Update TOPO View.

5.3 Resume View

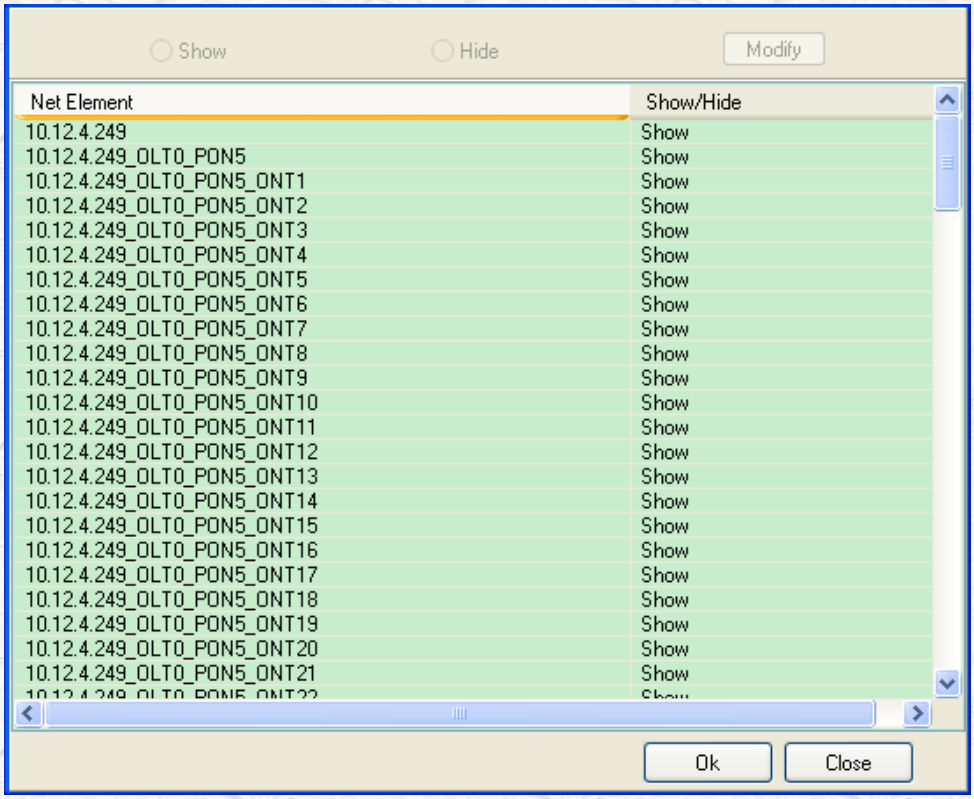
Undo the last operation.

5.4 Save View

Save the view.

5.5 Show/Hide Net Element

Show/Hide Net Element,as shown below.Choose one element to show or hide.



Picture 5-2Show /Hide Net Element

5.6 Grography Information

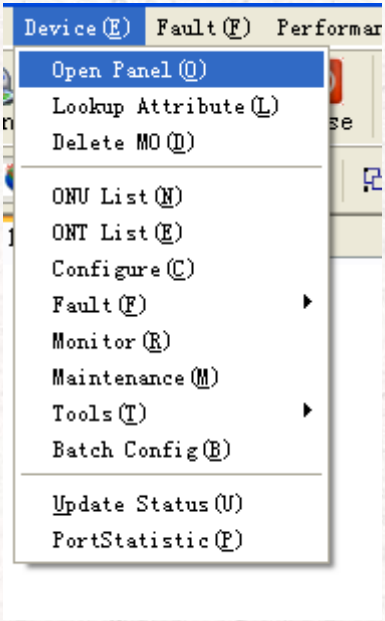
Details can be viewed the Geography View.

Chapter 6 Device Management

6.1 Menu

It can only be work when one or more devices is selected.

The menu for this part is as following:

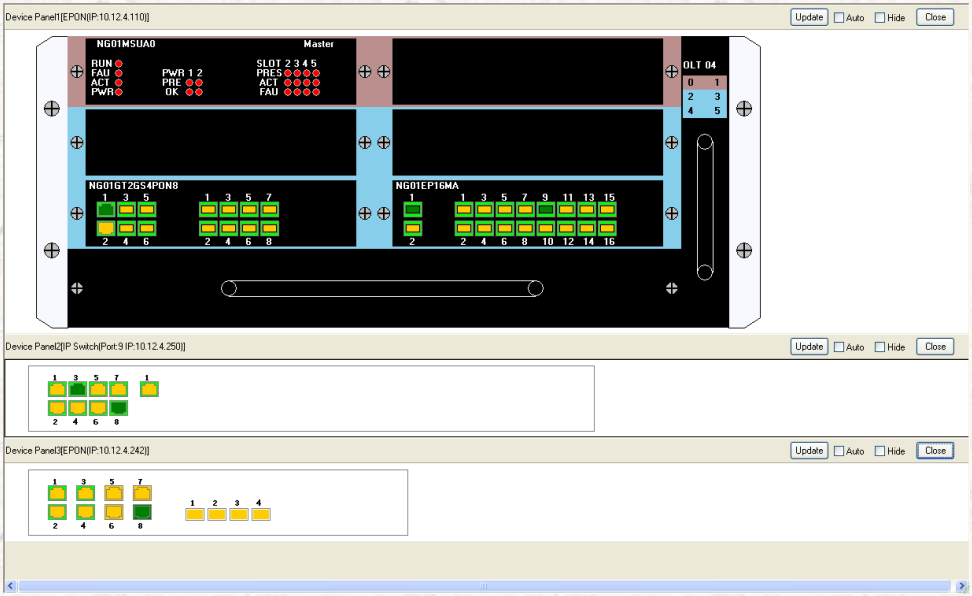


Picture 6-1The Menu of device management

Note: For different devices, the menu is different, but the main feature is the same.

6.2 Open panel

Click “open panel” to show the port location.



Picture 6-2The panel

Tip: in NMS, device panel is shown in panel window.

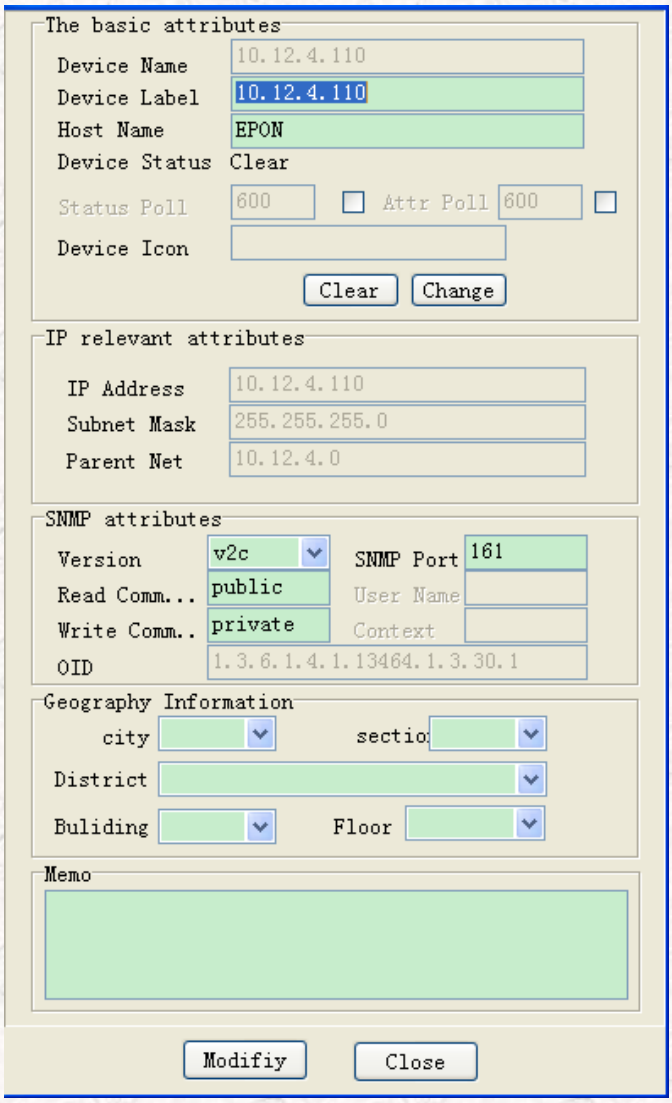
Port status: port status in panel is ifTable（ifAdminStatus）and STP port status（dot1dStpPortState）. broken (6) and adminstate(2) is red； forwarding (5)and adminstate(1) is green ；listening (3),learning (4)，disabled (1),blocking (2)and adminState(1) is yellow.

Enable/disable port: the X in port means port disabled

Port Type: black frame means trunk; green means hybrid and white means access.

6.3 Show attribute

Click “show attribute” menu to check the attribution list.



Picture 6-3Attribution

Attribution list description:

Table 6-1 Attribution list description

Item	Description

Device name	The managed device name, unique, unchangeable
Device ID	The managed device ID, can be changed
Host name	The hostname of the managed device, can be changed.
Device status	Identifies the network database state (importance) of the object, also the risk level of the corresponding device
Device polling	Interval polling device status, device state management platform tested once every seconds of the bar making.
Device Icon	Management objects are displayed in the NMS
IP address	IP address of the network object.
Subnet mask	Subnet mask of the network object
Parent Network	Parent network address the device belongs.
Interface list	Interface list the device contains

6.4 Delete NE

This operation works for deleting the selected managed objects and sub-objects.

note: if user delete devices through “Delete NE”, system will delete the device also in management view.

6.5 ONU list

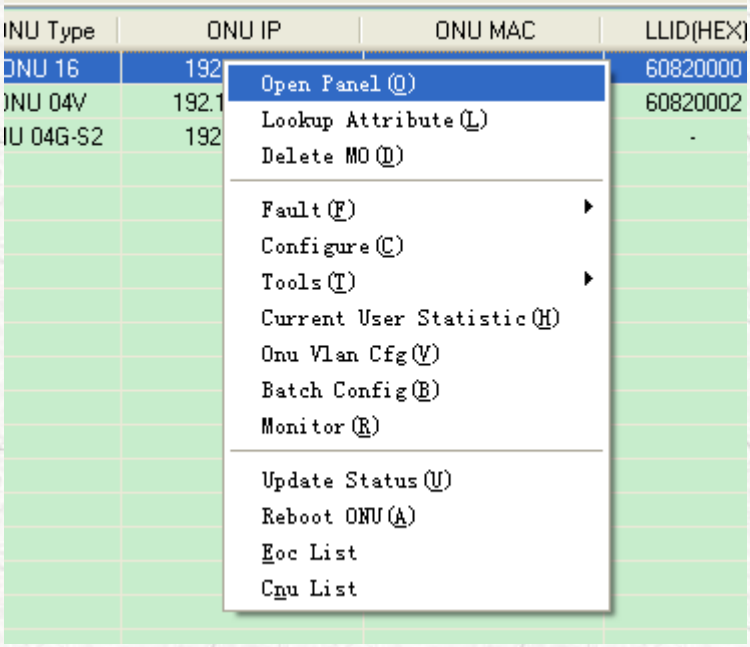
Show Onu in details:

ONU Position	Status	ONU Label	ONU Name	ONU Type	ONU IP	ONU MAC	LLID(HEX)	Round Trip Tim...
4/7/1	On-line	OptiWay	OptiWay	ONU 16	192.168.1.2	00:0A:5A:15:98:95	60820000	<= 10
4/7/2	On-line	OptiWay	OptiWay	ONU 04V	192.168.1.1...	00:0A:5A:16:D1:95	60820002	<= 10
4/7/3	Off-line	ONU - 3	04gs2	ONU 04G-S2	192.168.1.1	00:0A:5A:20:23:AC	-	-

Picture 6-4Onu detailed list

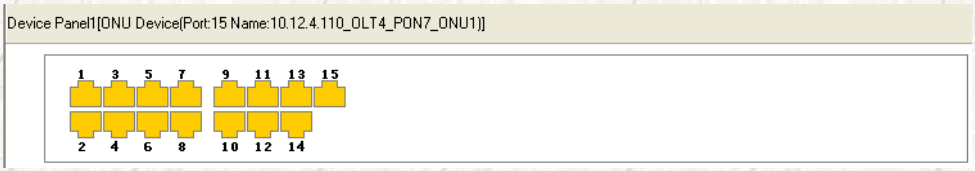
This list describes ONU location, status, type, MAC address and IP address（IP address 0.0.0.0 means offline）

Click right button:



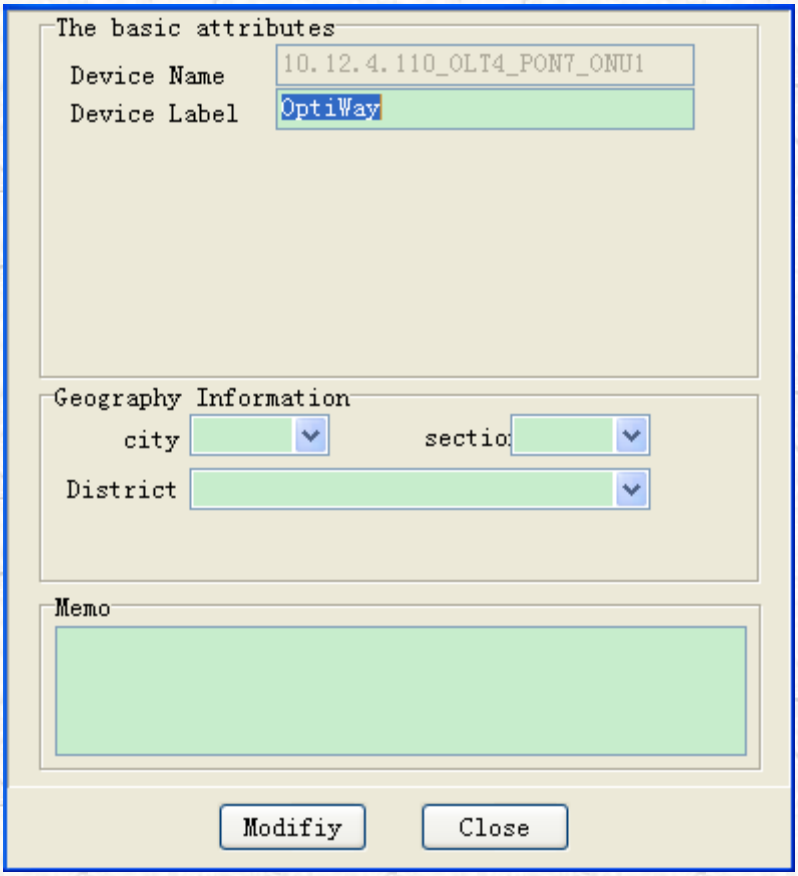
Picture 6-5Onu menu for right button

Open panel：show this ONU panel



Picture 6-6Onu panel

Show attribute：show ONU basic attribute, such as device name, device ID, location

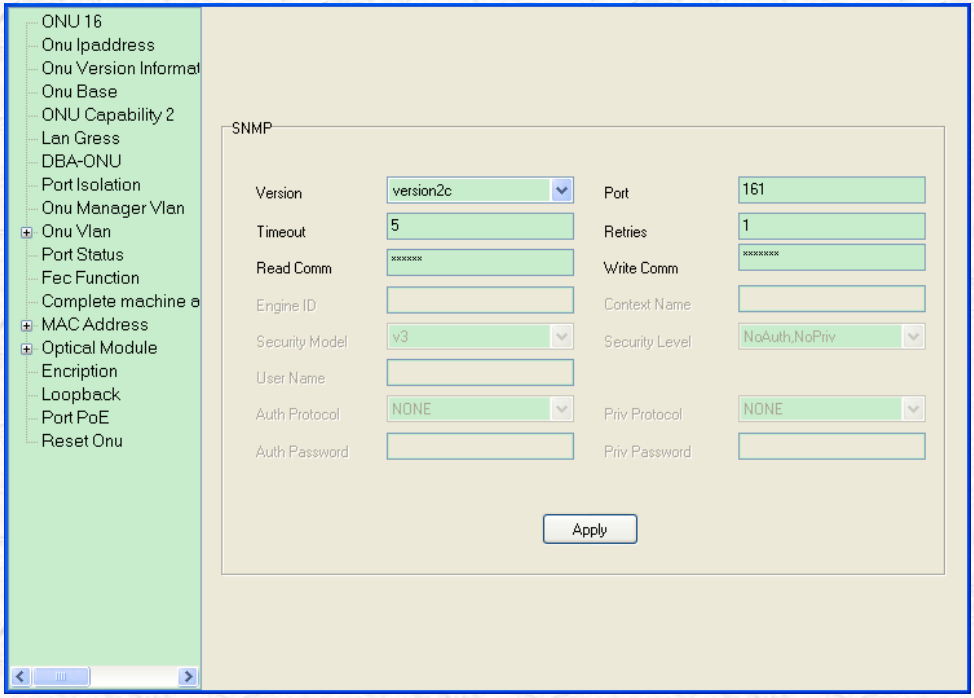


Picture 6-7Onu Attribute

Delete NE：Delete ONU node in client. It can be re-show by refreshing the list.

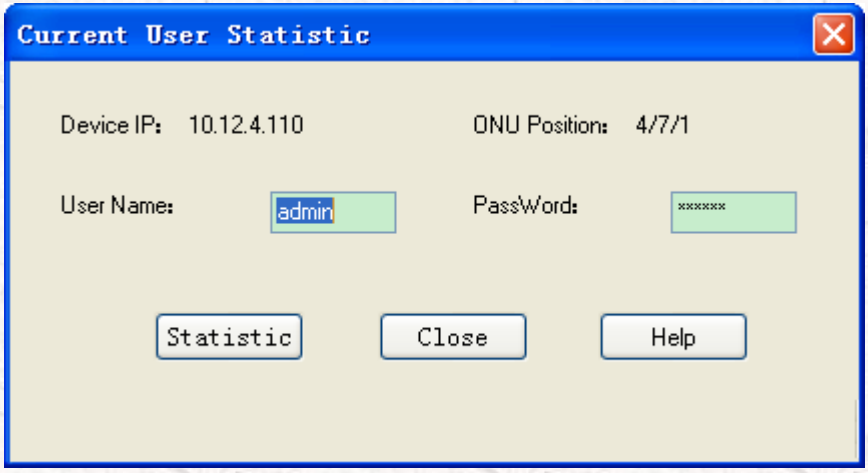
failure：some alarm

Configuration management：enter configuration management interface



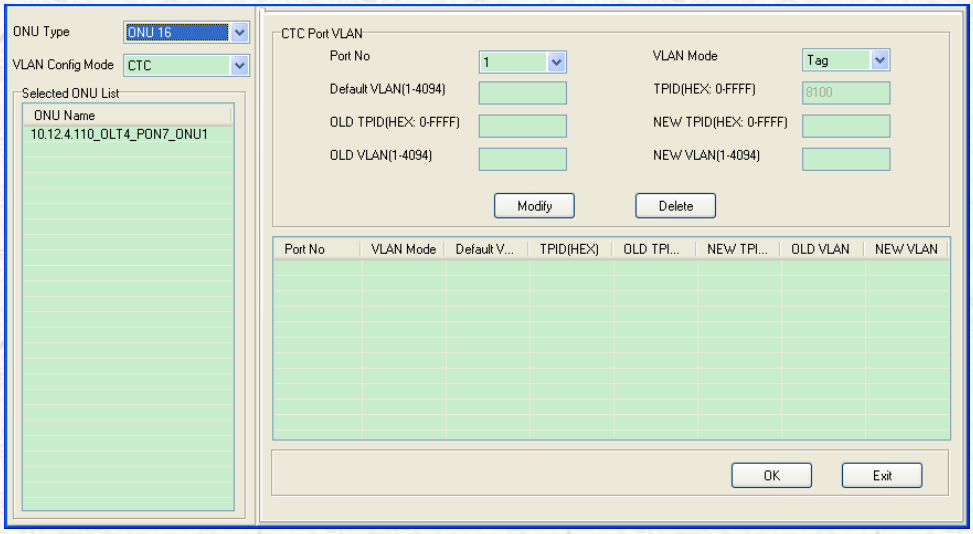
Picture 6-8Onu configuration management

Current user statistics：check accessed user number on current device



Picture 6-9Current Onu user statistics

VLAN range configuration：configure VLAN under CTC mode.



Picture 6-10VLAN range configuration

Update status：update ONU status

Reboot ONU：rebooting

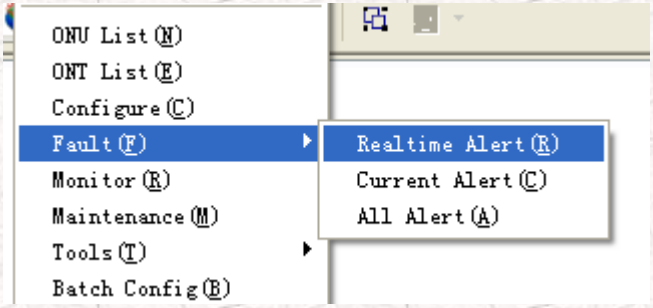
EOC CO：show EOC CO list

EOC terminal list：show EOC terminal list

6.6 Failure

6.6.1 Failure menu

The failure is alert, can be realtime alert, current alert or all alert.



Picture 6-11Failure

6.6.2 Realtime alert

It will be refreshed realtime. It can be used to see when the alert is sent.

6.6.3 Current alert

Check current alert

6.6.4 All alert

Check all alert

No	Level	Source	Label	Type	Recove...	Confirm Status
7	Warning	127.0.0.1		SECURITY	Unrest...	Unconfirmed
6	Clear	10.12.4.110_OLT4_PON7_ONU1	10.12.4.110	Poll	Unrest...	Unconfirmed
5	Critical	10.12.4.27	10.12.4.251	Poll	Unrest...	Unconfirmed
4	Critical	10.12.4.249	10.12.4.249	Poll	Unrest...	Unconfirmed
3	Critical	10.12.4.248	10.12.4.110	Poll	Unrest...	Unconfirmed
2	Clear	10.12.4.110_OLT4_PON3_ONU1	10.12.4.110	Poll	admin	admin

Picture 6-12All alert list

6.7 Realtime capacity detect

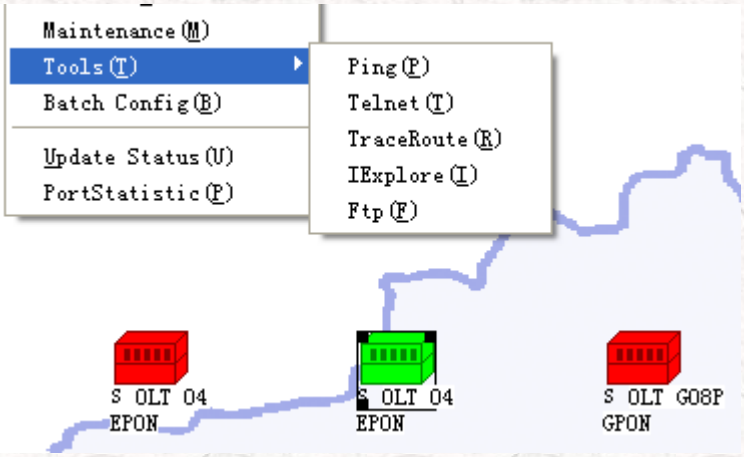
Realtime capacity monitor

6.8 Device maintenance

Equipment Maintain Configuration

6.9 Tools

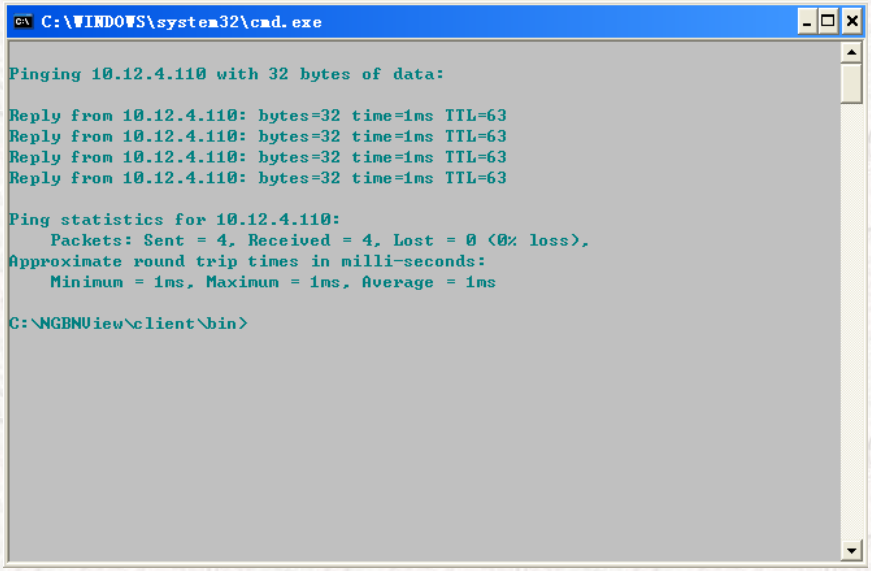
6.9.1 Menu



Picture 6-13tools

6.9.2 Ping

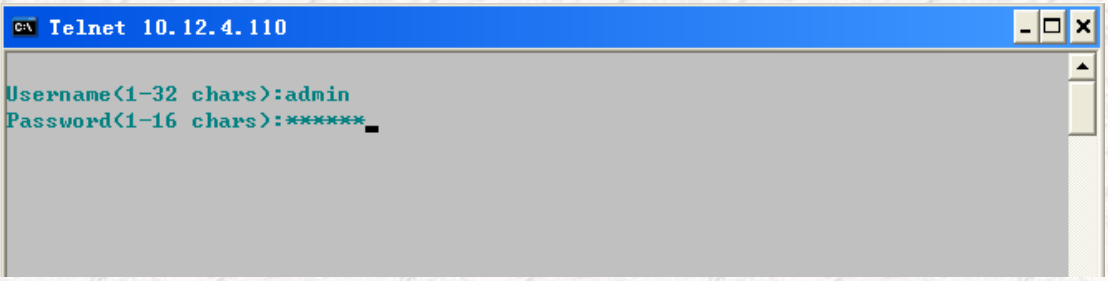
Check the connection of the device



Picture 6-14ping

6.9.3 Telnet

Telnet login:



Picture 6-15Telnet login

```
Telnet 10.12.4.110

8604>show interface
 Gigabit Ethernet e2/1 current state: enabled, port link is down
 Hardware address is 00:0a:5a:15:f6:4e
 SetSpeed is auto, ActualSpeed is unknown, Duplex mode is unknown
 Current port type: unknown
 Priority is 0
 Flow control is disabled
 Broadcast storm control target rate is 50000pps
 PVID is 1
 Port mode: trunk
 Vlan       allowed: 2,1000
 Input   : 0 packets, 0 bytes
           0 broadcasts, 0 multicasts, 0 unicasts
 Output  : 0 packets, 0 bytes
           0 broadcasts, 0 multicasts, 0 unicasts

 Gigabit Ethernet e2/2 current state: enabled, port link is down
 Hardware address is 00:0a:5a:15:f6:4e
 SetSpeed is auto, ActualSpeed is unknown, Duplex mode is unknown
 Current port type: unknown
 Priority is 0
 Flow control is disabled
 Broadcast storm control target rate is 50000pps
 PVID is 1
....press ENTER to next line, CTRL_C to break, other key to next page....
```

6.9.4 Traceroute

Traceroute operation:

```
C:\WINDOWS\system32\cmd.exe

Tracing route to 10.12.4.110 over a maximum of 30 hops

  1    <1 ms    <1 ms    <1 ms  10.12.6.1
  2     1 ms     1 ms     1 ms  10.12.4.110

Trace complete.

C:\NGBNView\client\bin>
```

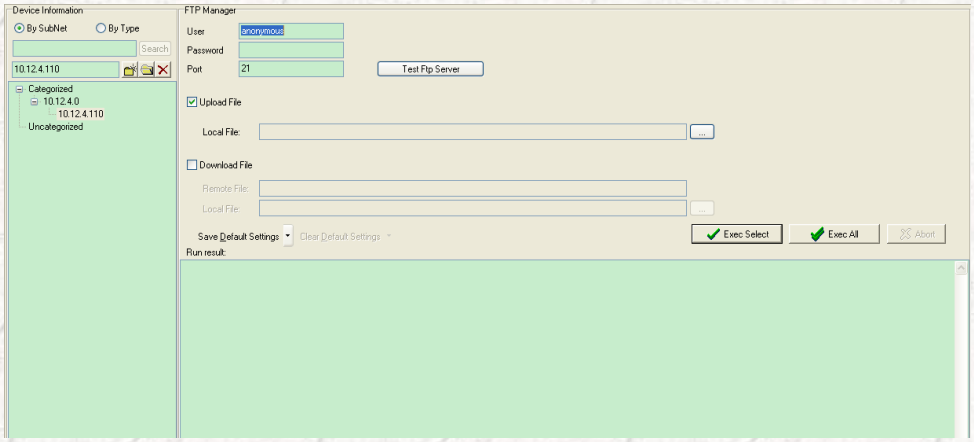
Picture 6-16traceroute

6.9.5 IExplore

Use IE check management. Some device can support it.

6.9.6 FTP

Some device can support it.



Picture 6-17FTP

Device info: choose device according to the type

FTP managem：1、user：FTP server login. It can be some user and can also be anonymous

2、test **FTP server**： test FTP server enabled or not.

Upload file： use FTP server to upload files

Download file：use FTP server to download files, including remote and local files

result：show upload and download info

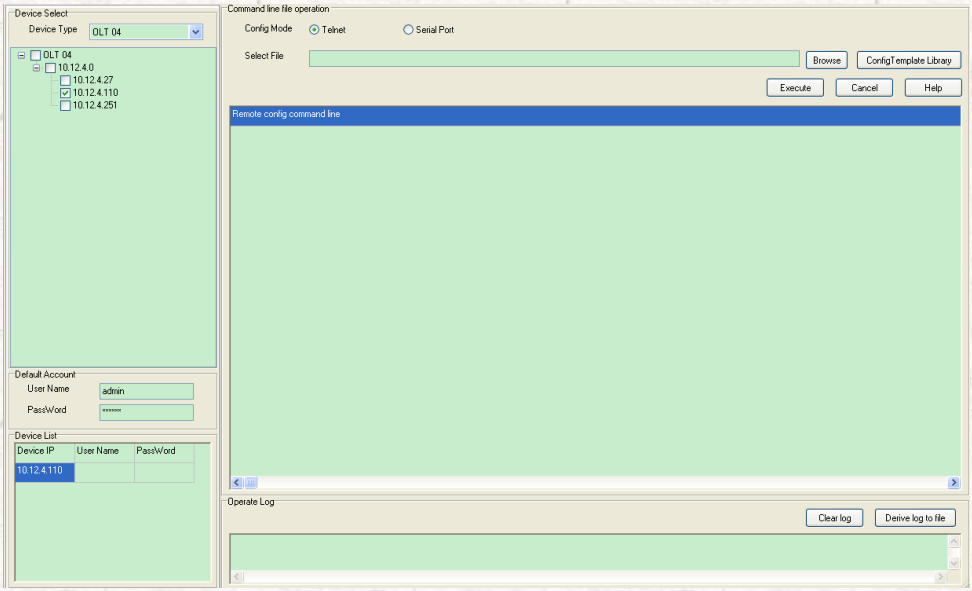
6.10 Batch configuration

6.10.1 Batch configuration Brief introduction

By default, remote telnet is used for batch configuration. Batch configuration support “superterminal” for single device. By installing serial port of NMS to connect to console port of the device to use CLI.

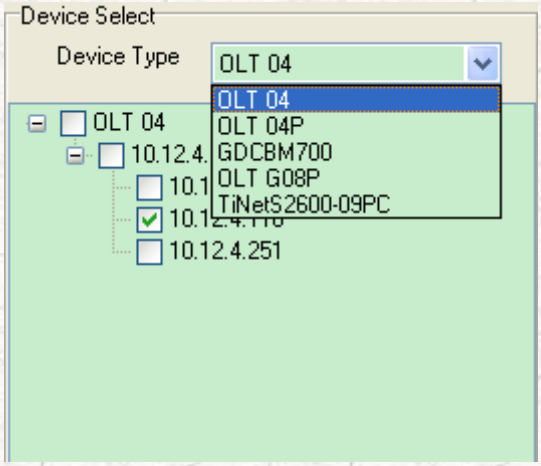
6.10.2 Select device

Select one or more device, “device management” ➔ “**batch configuration**”



Picture 6-18Batch configuration

Select device in device type



Picture 6-19Device type

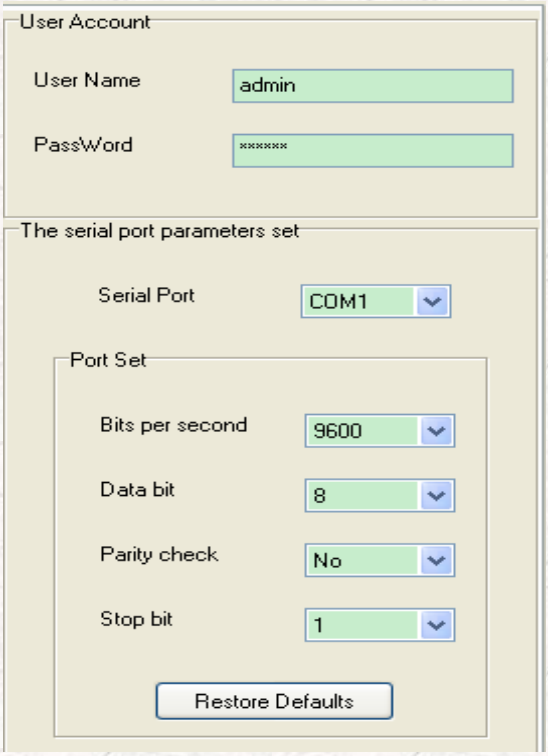
Change configuration mode to be serial port, it will show serial port configuration interface.

Serial port configuration：

Serial port： device connects to serial port. Right button “my computer” --Attribute--Hardware--device management to find the port.

Baud rate: 9600 by default.

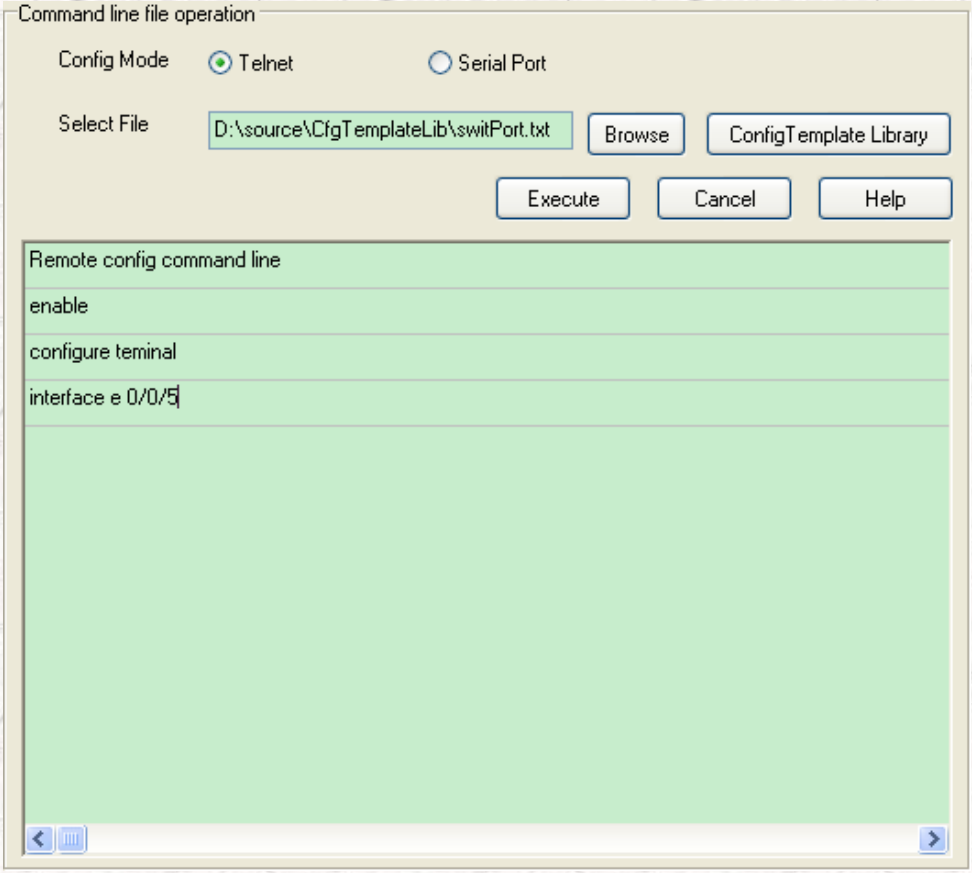
Data bit, parity check and stop bit use default setting.



Picture 6-20Serial port configuration

6.10.3 CLI operation

Click “browse”, to select file, or use “input configuration template”.



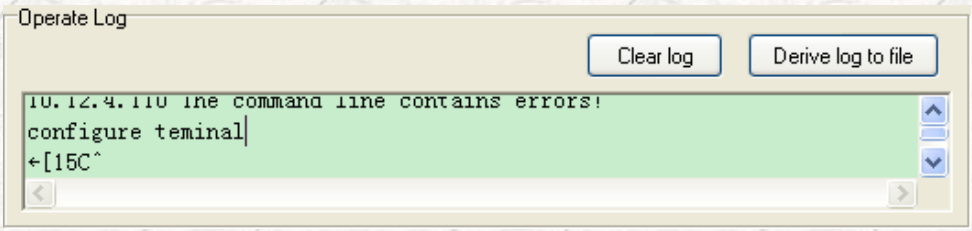
Picture 6-21CLI file operation

Click “execute” to deliver configuration.

Remote configuration CLI: right button to add/delete configuration command.

6.10.4 log

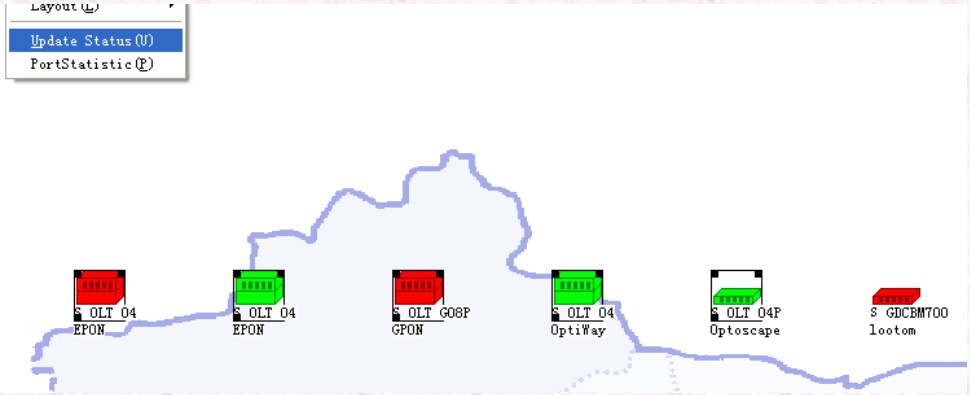
Show all logs of the operation, and can clear logs, output logs to be files.



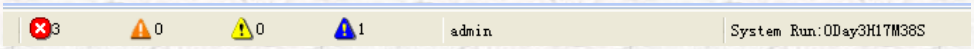
Picture 6-22log

6.11 Update status

This operation is used to update the state of the managed object. Namely, the state of the managed object polling operation. You can select one or more devices to be updated when the update is performed to check whether the device is still connected, if a situation occurs, if there is not normally the case, an alarm message, as shown later,the update status Figure 7-18, screen appears as shown in Figure7-19. At this point the status bar appears below the emergency alarm

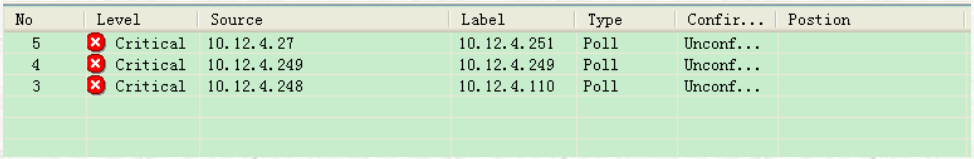


Picture 6-23Update status



Picture 6-24Alert status

Click on the warning message, you can see what kind of alarm occurred.



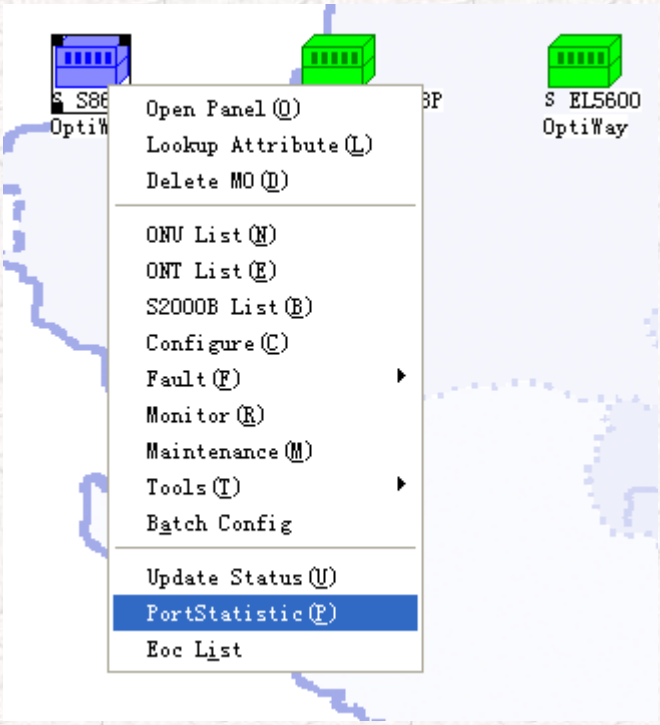
No	Level	Source	Label	Type	Confir...	Postion
5	Critical	10.12.4.27	10.12.4.251	Poll	Unconf...	
4	Critical	10.12.4.249	10.12.4.249	Poll	Unconf...	
3	Critical	10.12.4.248	10.12.4.110	Poll	Unconf...	

Picture 6-25Alert info

6.12 Port statistics

Port statistics realize the whole network device port number of statistical functions, respectively, statistics and the number of ports being used free port. Device panel is

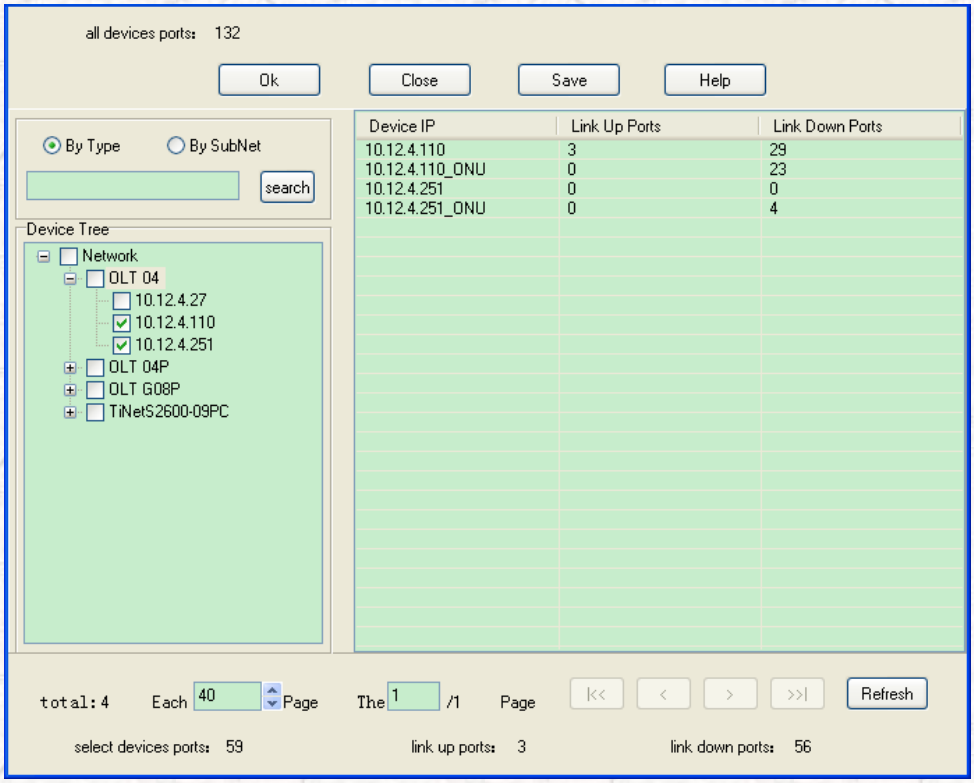
displayed in red port for the free port,the port is being used for the rest of the state.



Picture 6-26Port statistic

Open the Port Statistics screen you can seethe bottom left of the device selection tree, select the tree through the device to specify the port device object statistical operations. Open through the device menu interface port statistics, the

current device is selected by default, select a good device, click the OK button, the port number is displayed in the list of online and offline column, as shown below

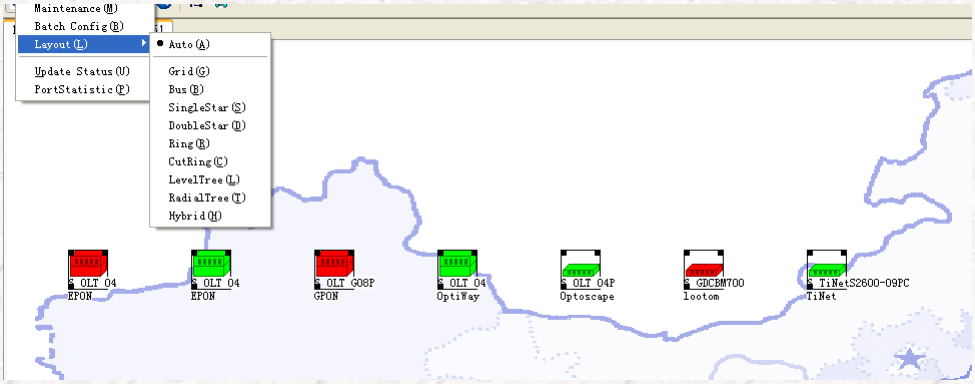


Picture 6-27Port statistics

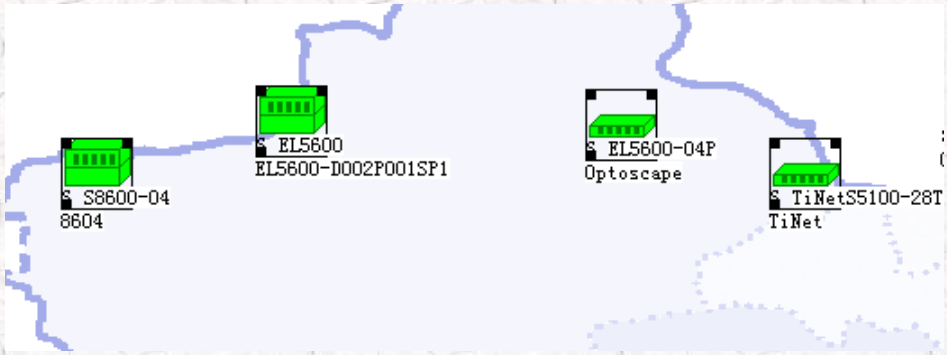
6.13 Device layout

Layout for multiple devices, as shown below, select

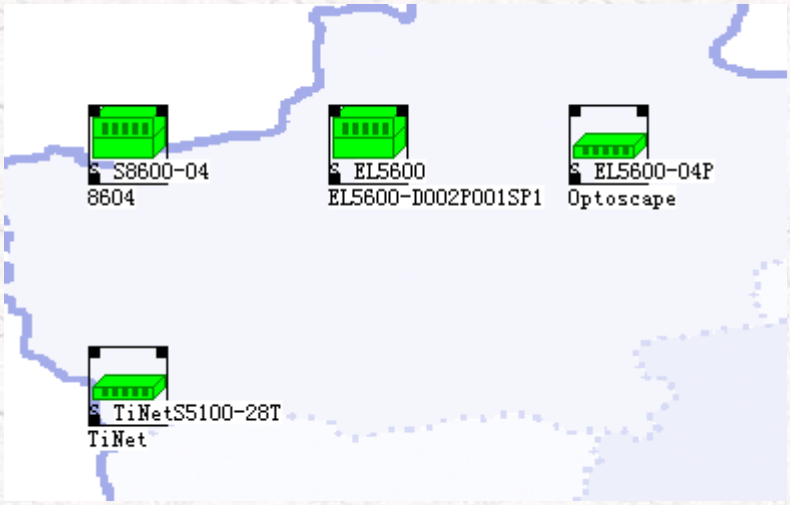
multiple devices, click on"Device Manager"➔"Layout"



Picture 6-28Device layout Alert info



Picture 6-29Mixture type Alert info

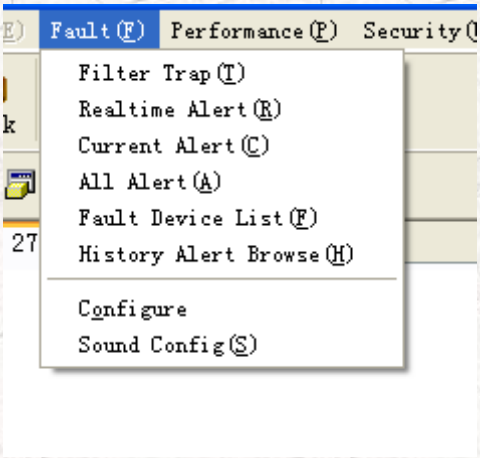


Picture 6-30Mesh type

Chapter 7 Fault

7.1 Fault menu

This chapter is mainly about the failure to introduce the device, as shown in the following figure. The following sections will be introduced in detail about the contents of these lists



Picture 7-1Fault menu

7.2 Filter Trap

7.2.1 Trap

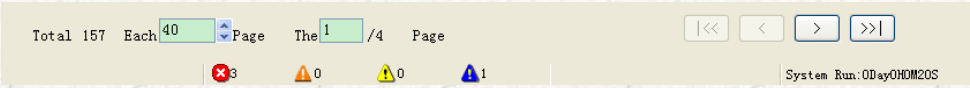
Filter Trap Trap is browsing for event information and appropriate treatment. Users can perform the corresponding operation on various Trap on the panel. Trap events can be divided into six levels: Notice (info), alarm clear (clear), alarm (warning), minor warning (minor), the main warning (major) and a serious warning (critical), as shown below。

Filter	Trap Name	Trap Type	Trap OID	Level	Source	Content
No	Rfc_newRoot_V2	Whole	1.3.6.1.2.1.17.0.1	Minor	$Source	Node becomes new root of a spanning tree
No	Rfc_topoChange_V2	Whole	1.3.6.1.2.1.17.0.2	Minor	$Source	Port of tree becomes Forwarding status
No	Rfc_newRoot_V1	Whole	1.3.6.1.2.1.17\t6\t1	Minor	$Source	Node becomes new root of a spanning tree
No	Rfc_topoChange_V1	Whole	1.3.6.1.2.1.17\t6\t2	Minor	$Source	Port of tree becomes Forwarding status
No	CPUBusy_V2	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24.1	Warning	$Source	CPUbusy
No	CPUUnBusy_V2	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24.2	Clear	$Source	CPUidle
No	CPUBusy_V1	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24\...	Warning	$Source	CPUbusy
No	CPUUnBusy_V1	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24\...	Clear	$Source	CPUidle
No	SaveConfig_V2	Whole	1.3.6.1.4.1.13464.1.2.1.1.7.3.1	Info	$Source	device$Source The configuration has been saved
No	SaveConfig_V1	Whole	1.3.6.1.4.1.13464.1.2.1.1.7.3\t...	Info	$Source	device$Source The configuration has been saved
No	EponSwitchSyslogV2	Syslog	1.3.6.1.4.1.13464.1.2.1.1.9.12	Info	$Source_SYSLOG	Device SYSLOG:
No	EponSwitchSyslogV1	Syslog	1.3.6.1.4.1.13464.1.2.1.1.9\t6\t12	Info	$Source_SYSLOG	Device SYSLOG:
No	Gbn_tinet20xLoop_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.1	Critical	$Source_LanS...	Port$2 existloop
No	Gbn_tinet20xLoopFree_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.2	Clear	$Source_LanS...	Port$2 loopremove
No	Gbn_tinet20xLinkUp_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.3	Clear	$Source_LanS...	$Source Port$2 connect
No	Gbn_tinet20xLinkDown_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.4	Warning	$Source_LanS...	$Source Port$2 disconnect
No	Gbn_tinet20xError_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.5	Minor	$Source_LanS...	devicedisconnectorinerrorstatus
No	Gbn_tinet20xClear_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.6	Clear	$Source_LanS...	deviceinnormalstatus
No	Gbn_tinet20xLoop_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t1	Critical	$Source_LanS...	Port$0 existloop
No	Gbn_tinet20xLoopFree_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t2	Clear	$Source_LanS...	Port$0 loopremove
No	Gbn_tinet20xLinkUp_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t3	Clear	$Source_LanS...	$Source Port$0 connect
No	Gbn_tinet20xLinkDown_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t4	Warning	$Source_LanS...	$Source Port$0 disconnect
No	Gbn_tinet20xError_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t5	Minor	$Source_LanS...	device disconnect or is in error status
No	Gbn_tinet20xClear_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t6	Clear	$Source_LanS...	device is in normal status
No	S8600_PowerRemoveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.1	Critical	$Source_POWER$2	power$2is pulled out!
No	S8600_BoardKoletoMasterV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.10	Warning	$Source_OLT$2	card slot bits$2The main control boardchangeto mainly ..
No	S8600_PowerNoRunningV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.11	Info	$Source_POWER$2	power$2stop run!
No	S8600_PowerRunningV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.12	Info	$Source_POWER$2	power$2 run!
No	S8600_PowerInsertV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.2	Clear	$Source_POWER$2	power$2successful initialization!
No	S8600_FanRemoveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.3	Critical	$Source_FAN$2	fan$2is pulled out!
No	S8600_FanInsertV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.4	Clear	$Source_FAN$2	fan$2successful initialization!
No	S8600_BoardRemoveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.5	Critical	$Source_OLT$2	card slot bits$2 boardis pulled out!
No	S8600_BoardInsertV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.6	Clear	$Source_OLT$2	card slot bits$2 boardsuccessful initialization!
No	S8600_BoardConnectedV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.7	Clear	$Source_OLT$2	card slot bits$2 boardis online!
No	S8600_BoardUnconnectedV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.8	Critical	$Source_OLT$2	card slot bits$2 boardis offline!
No	S8600_BoardKoletoSlaveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.9	Warning	$Source_OLT$2	card slot bits$2The main control boardchangeTo spare!
No	S8600_PowerRemoveV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t1	Critical	$Source_POWER$0	power$0is pulled out!
No	S8600_BoardKoletoMasterV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t10	Warning	$Source_OLT$0	card slot bits$0The main control boardchangeto mainly ..
No	S8600_PowerNoRunningV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t11	Info	$Source_POWER$0	power$0stop run!

Picture 7-2Trap

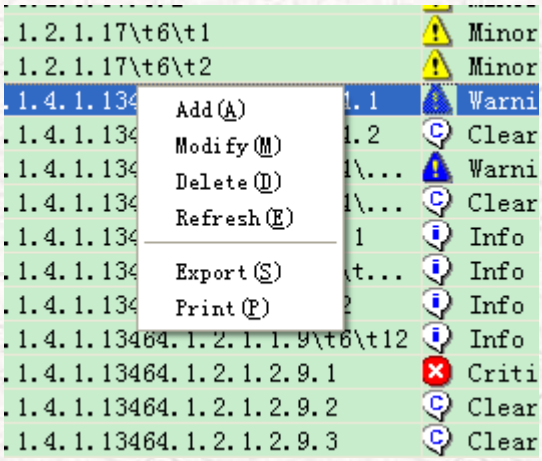
The bottom panel is the total number of events and

display settings, as shown below.



Picture 7-3Trap total number

Interface as shown in the right column Trap event occurs.

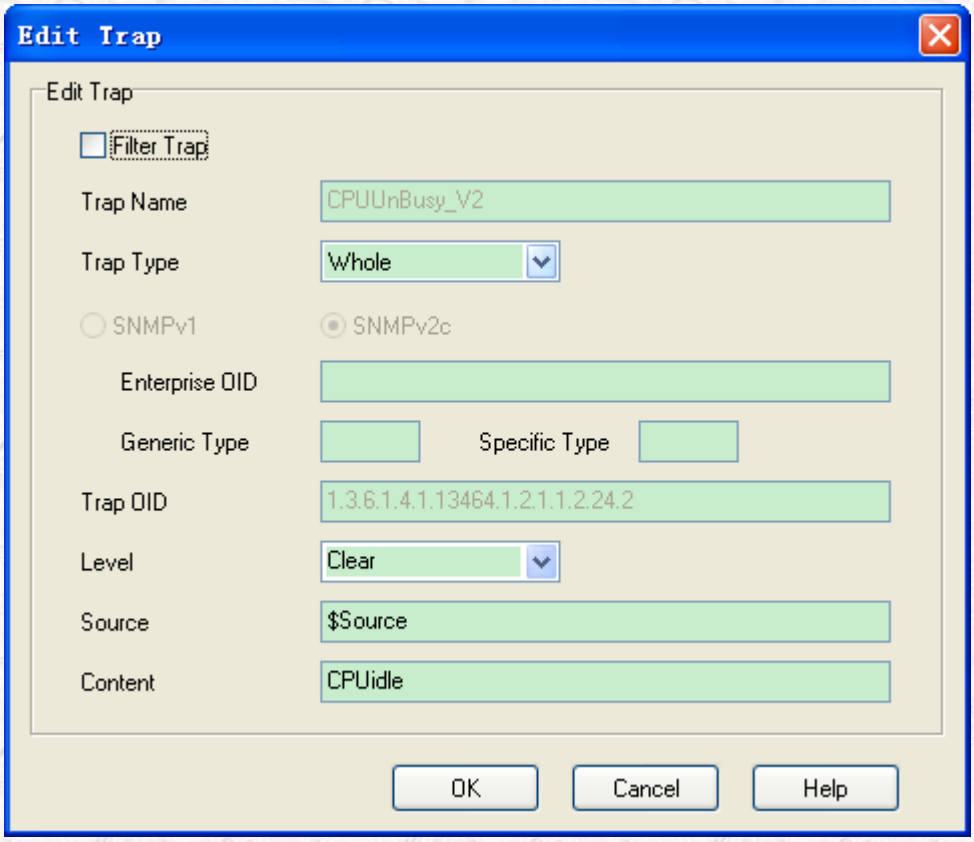


Picture 7-4Right button menu

7.2.2 Edit Trap

Increase: increase trap types.

Modify: Modify the trap event, you must select a trap events. As shown below.



Picture 7-5Edit trap

[Filter]: whether the trap event filtering.

Trap [Name]: The name of the trap.

Trap [type]: There are syslog, whole, port three kinds of trap type

[SNMPV1/SNMPV2]: What are SNMP type.

[Enterprise OID]: When the trap is SNMPV1 packets, this

option is effective frame for sending SNMPV1 the OID.

[Type]: Sub Universal (Generic) types and enterprise private (Specific) types, generic types include coldStart, warmStart, linkDown, linkUp, authenticationFailure, egpNeighborLoss, enterpriseSpecific. And belong SNMPV1 trap messages.

[Trap OID]: send a message when OID SNMPV2.

[Level: The level of the trap event, there are six levels of options.

[Source]: the source of the trap event.

[Contents]: details of the trap event.

Delete: Delete the trap event, you must select a trap events.

Refresh: refresh the list.

Export: Export the list.

Print: Print this list

7.3 Realtime alert

It will be refreshed realtime. It can be used to see when

the alert is sent.

7.4 Current alert

Check current alert

7.5 All alert

Check all alert

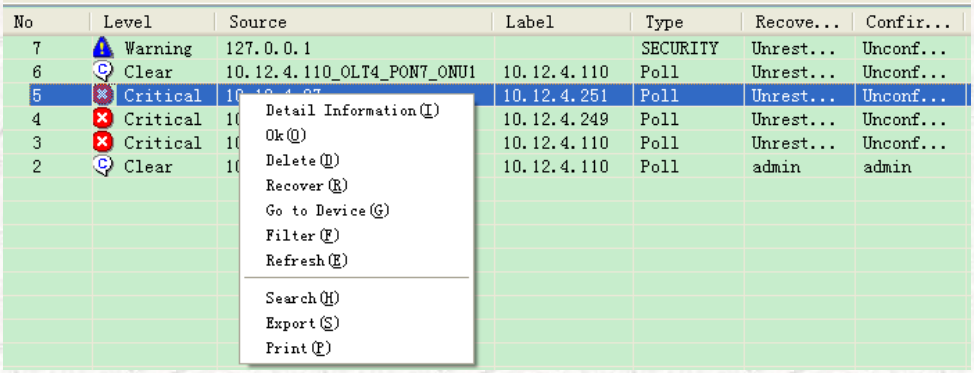
No	Level	Source	Label	Type	Recove...	Confir...	Postic
7	Warning	127.0.0.1		SECURITY	Unrest...	Unconf...	
6	Clear	10.12.4.110_OLT4_PON7_ONU1	10.12.4.110	Poll	Unrest...	Unconf...	
5	Critical	10.12.4.27	10.12.4.251	Poll	Unrest...	Unconf...	
4	Critical	10.12.4.249	10.12.4.249	Poll	Unrest...	Unconf...	
3	Critical	10.12.4.248	10.12.4.110	Poll	Unrest...	Unconf...	
2	Clear	10.12.4.110_OLT4_PON3_ONU1	10.12.4.110	Poll	admin	admin	

Picture 7-6All alert

7.6 Alert menu

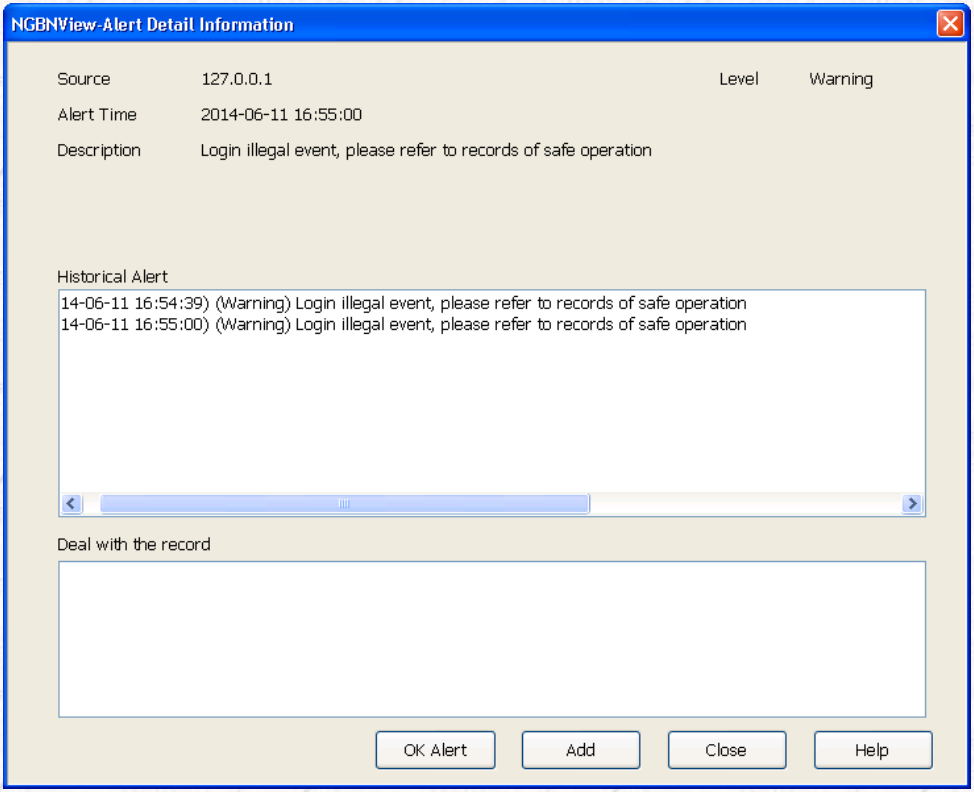
7.6.1 Description

Alarm menu is mainly appropriate action for specific warning information, as shown below.



Picture 7-7Right button menu

7.6.2 Detailed alert info



Picture 7-8Detailed alert info

Table 7-1 Alert description

Item	Description
Alarm Source	failure MO (managed objects), Platform Update fault source corresponding MO state property according to the fault alarm source object.
Warning level	Failure to identify the severity of the event object properties.
Alarm Time	The date and time the event occurred.
Fault Description	Store events complement any event object attribute information.
Alarm History	Alarm status change the course of history
Processing records	Network operators for alarm processing records

Alarm acknowledgment: that confirm the current operation of the user's user name on the column headings responsible alarm.

Added: handle comments on the events displayed in the treatment records.

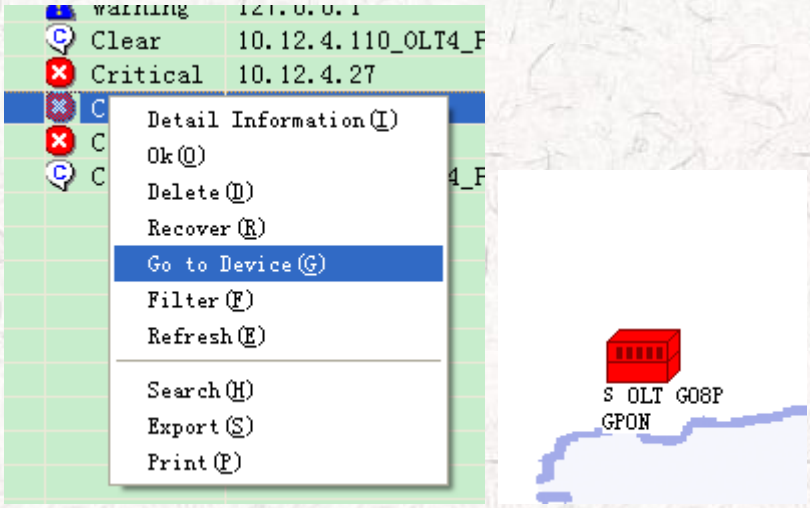
Close: Closes the dialog box.

Help: Opens the help file.

7.6.3 Go to device

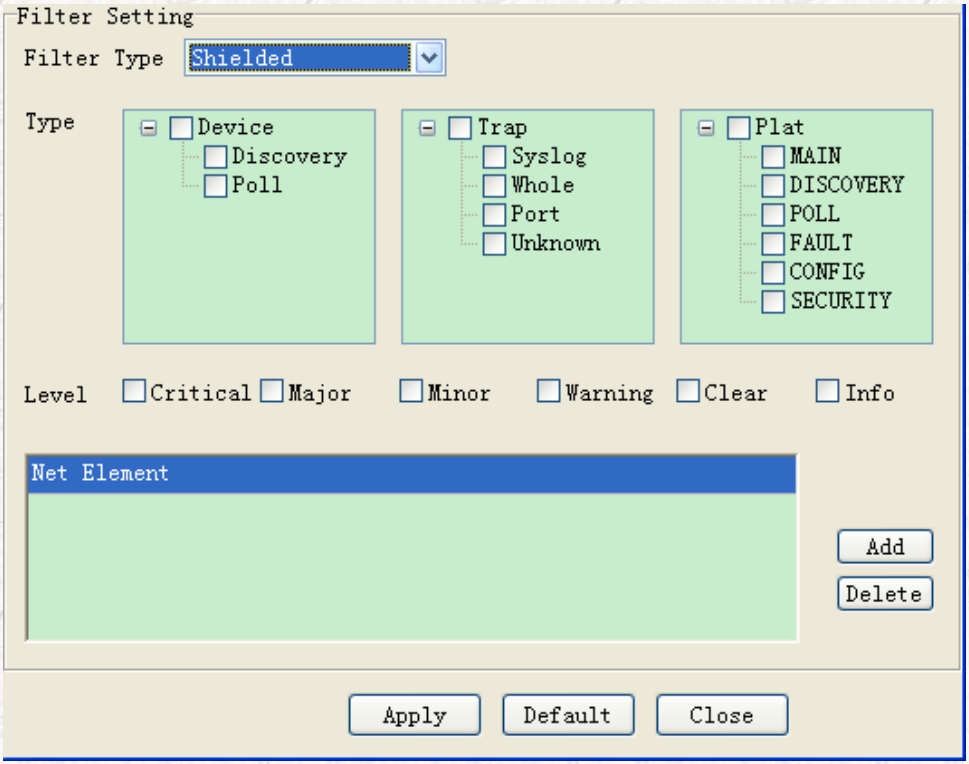
You can locate the information corresponding to the selected alarm equipment. The device is positioned will be

displayed on the device view.



Picture 7-9Locate device

7.6.4 Filter



Picture 7-10Filter

[Filter Type]: shielded, allowing, None are three types to choose from.

[Type]: each device, Trap, and platform selection.

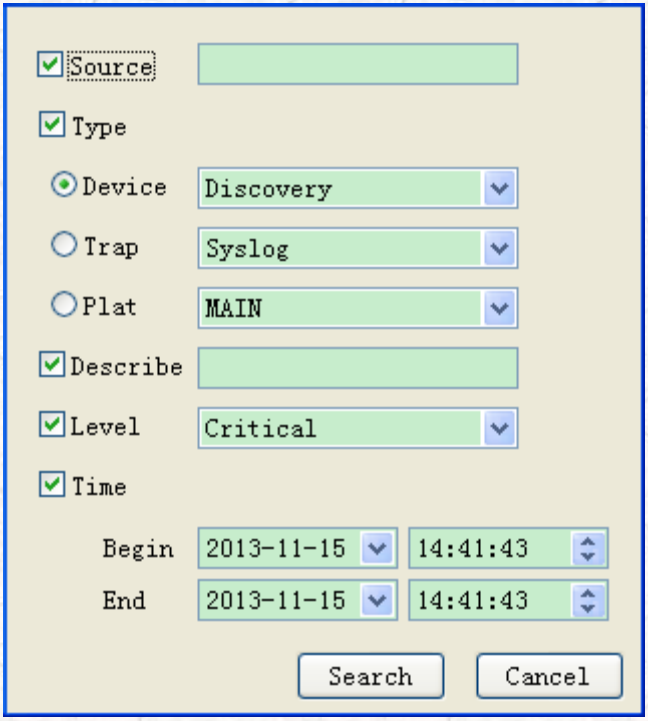
[Alarm Level: 6 kinds of alarm level, multi-optional.

[NE]: You can add or delete network elements.

7.6.5 Refresh

Refresh alert list

7.6.6 Search



Picture 7-11search

[Source] warning: is where the alarm.

[Type]: from device, trap, plat three options for screening.

[Alarm Description]: The alarm description.

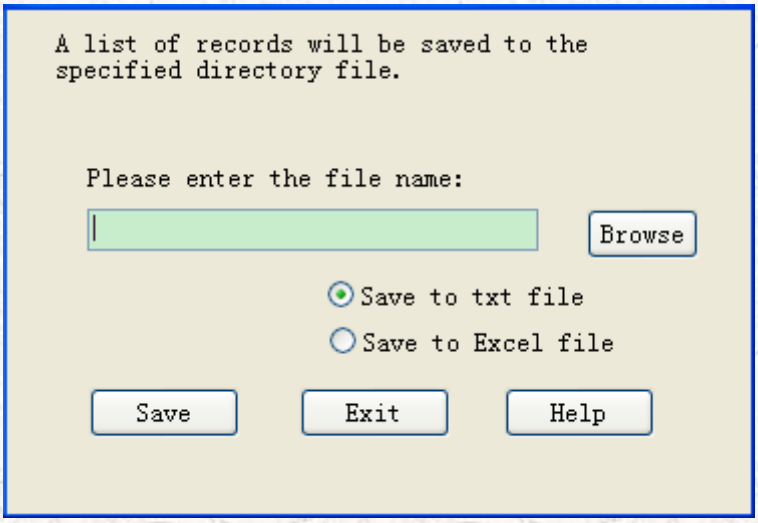
[Level: The level is 6 kinds which.

[Time]: Want to find the alarm start and end times.

7.6.7 Output

7.6.7.1 Save as txt

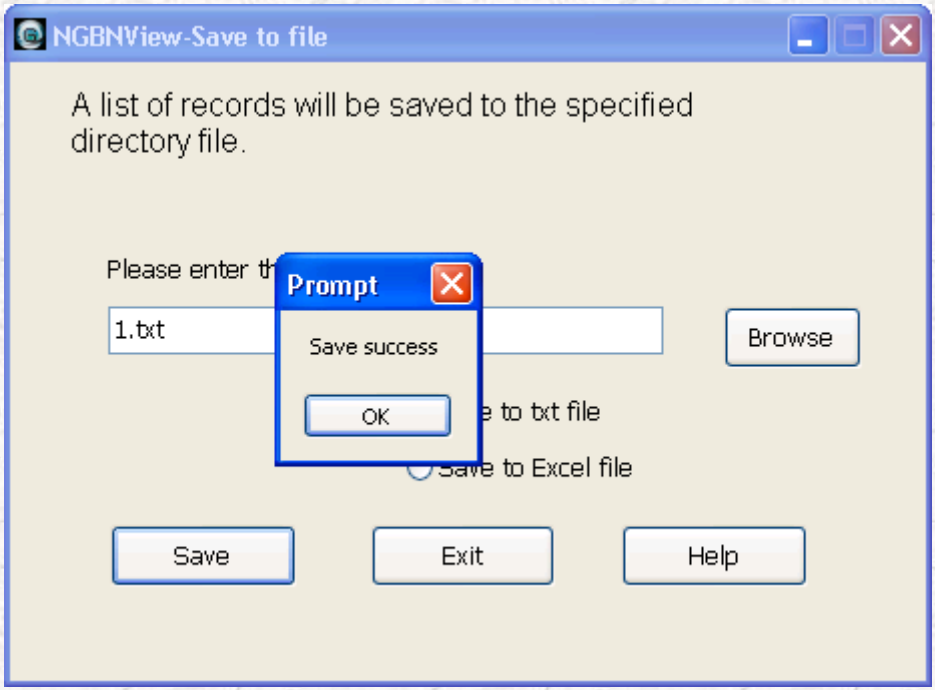
In the main menu, select "Export" ➔ "save as a text file", you can view a list of current alarms save the information to a file. When you select this menu, the dialog box will pop up as shown below.



Picture 7-12Save alert file

Fill in which you need to save the file name, if the file name does not ". Txt" at the end, it will automatically add ".

Txt" suffix when saving. Save the file path in fault management settings, or click "Browse" and select the save path. Save the file after the operation is successful, there is prompt box as shown.



Picture 7-13Save successfully

7.6.7.2 Save as Excel

Select "Export" from the main menu ➔ "Save as Excel file," this page can be an event to save the Excel file format, this more clear than in plain text format, classification clear. Select Options menu and save this as a text file similar

operations, end of the file will be ". Xls" saved to the specified path.

7.6.7.3 print

Select "List" in the main menu ➔ "print", you can print out the current list of events information. Selecting this action will call the operating system print manager client to print.

7.7 Trap/ alert order

Conducting Trap / Alarm browsing, can view the list with a mouse click the header, alarm information is displayed on the current page of data in ascending or descending order. Use the mouse to click on the appropriate header entries after sorting, the blue arrow will appear after the head of the table entries. Two graphs shown below, respectively, by the "number" field to display the results in ascending order page and press the "number" field to display the results in descending order page

Filter	Trap Name	Trap Type	Trap OID	Level	Source	Content
No	Rfc_newRoot_V2	Whole	1.3.6.1.2.1.17.0.1	Minor	$Source	Node becomes
No	Rfc_topoChange_V2	Whole	1.3.6.1.2.1.17.0.2	Minor	$Source	Port of tree
No	Rfc_newRoot_V1	Whole	1.3.6.1.2.1.17\t6\t1	Minor	$Source	Node becomes
No	Rfc_topoChange_V1	Whole	1.3.6.1.2.1.17\t6\t2	Minor	$Source	Port of tree
No	CPUBusy_V2	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24.1	Warning	$Source	CPUbusy
No	CPUUnBusy_V2	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24.2	Clear	$Source	CPUidle
No	CPUBusy_V1	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24\...	Warning	$Source	CPUbusy
No	CPUUnBusy_V1	Whole	1.3.6.1.4.1.13464.1.2.1.1.2.24\...	Clear	$Source	CPUidle
No	SaveConfig_V2	Whole	1.3.6.1.4.1.13464.1.2.1.1.7.3.1	Info	$Source	device$Source
No	SaveConfig_V1	Whole	1.3.6.1.4.1.13464.1.2.1.1.7.3\t...	Info	$Source	device$Source
No	EponSwitchSyslogV2	Syslog	1.3.6.1.4.1.13464.1.2.1.1.9.12	Info	$Source_SYSLOG	Device SYSLOG
No	EponSwitchSyslogV1	Syslog	1.3.6.1.4.1.13464.1.2.1.1.9\t6\t12	Info	$Source_SYSLOG	Device SYSLOG
No	Gbn_tinet20xLoop_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.1	Critical	$Source_LanS...	Port$2 existl
No	Gbn_tinet20xLoopFree_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.2	Clear	$Source_LanS...	Port$2 loopre
No	Gbn_tinet20xLinkUp_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.3	Clear	$Source_LanS...	$Source Port$
No	Gbn_tinet20xLinkDown_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.4	Warning	$Source_LanS...	$Source Port$
No	Gbn_tinet20xError_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.5	Minor	$Source_LanS...	devicediscon
No	Gbn_tinet20xClear_V2	Port	1.3.6.1.4.1.13464.1.2.1.2.9.6	Clear	$Source_LanS...	deviceinnorma
No	Gbn_tinet20xLoop_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t1	Critical	$Source_LanS...	Port$0 existl
No	Gbn_tinet20xLoopFree_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t2	Clear	$Source_LanS...	Port$0 loopre
No	Gbn_tinet20xLinkUp_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t3	Clear	$Source_LanS...	$Source Port$
No	Gbn_tinet20xLinkDown_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t4	Warning	$Source_LanS...	$Source Port$
No	Gbn_tinet20xError_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t5	Minor	$Source_LanS...	device discor
No	Gbn_tinet20xClear_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t6	Clear	$Source_LanS...	device is in
No	S8600_PowerRemoveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.1	Critical	$Source_POWER$2	power$2is pul

Picture 7-14Ascending

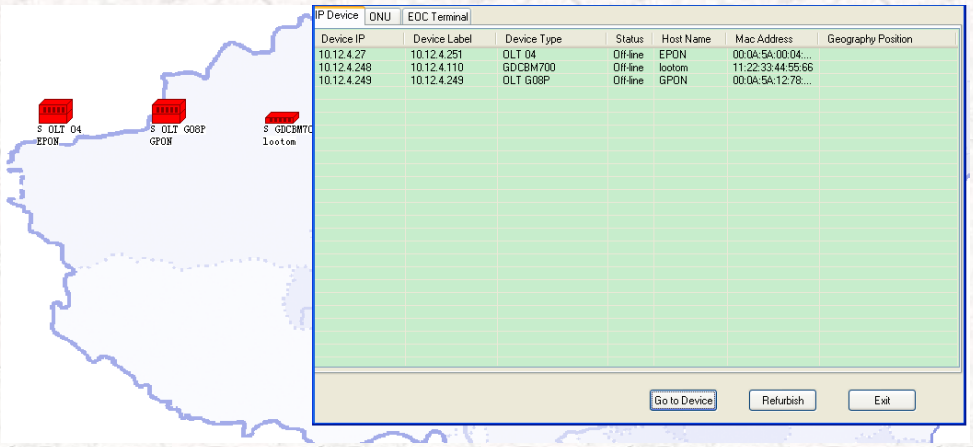
	Trap Type	Trap OID	Level	Source
:RunningV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t12	Info	$Source_PO
:NoRunningV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t11	Info	$Source_PO
lRoletoMasterV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t10	Warning	$Source_OL
:RemoveV1	Port	1.3.6.1.4.1.13464.1.2.1.3.3\t6\t1	Critical	$Source_PO
lRoletoSlaveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.9	Warning	$Source_OL
lUnconnectedV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.8	Critical	$Source_OL
lConnectedV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.7	Clear	$Source_OL
lInsertV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.6	Clear	$Source_OL
lRemoveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.5	Critical	$Source_OL
ısertV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.4	Clear	$Source_FA
:moveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.3	Critical	$Source_FA
:InsertV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.2	Clear	$Source_PO
:RunningV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.12	Info	$Source_PO
:NoRunningV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.11	Info	$Source_PO
lRoletoMasterV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.10	Warning	$Source_OL
:RemoveV2	Port	1.3.6.1.4.1.13464.1.2.1.3.3.1	Critical	$Source_PO
)xClear_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t6	Clear	$Source_La
)xError_V1	Port	1.3.6.1.4.1.13464.1.2.1.2.9\t6\t5	Minor	$Source_La

Picture 7-15Descending

7.8 Failure device list

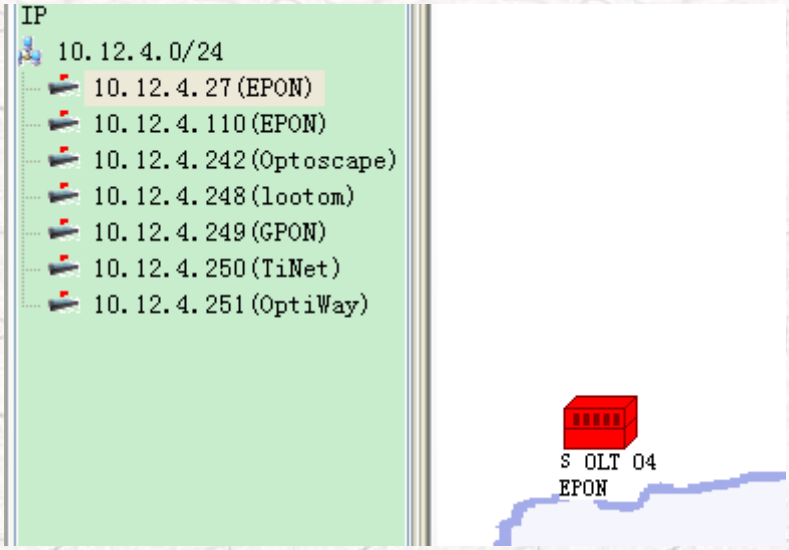
Faulty equipment list displays all fault status is Critical and

Major GN.Link IP devices and equipment in the form of the current platform list. View all faulty equipment through the fault faulty equipment list. Shown below.



Picture 7-16Failure device list

Choose a faulty device, click the pointing device button to select the device in the navigation tree, as shown in the figure below

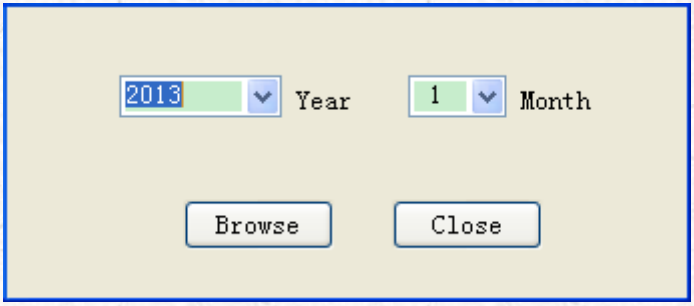


Picture 7-17Locate failure device

Faulty equipment list will be updated automatically when opened, the interface is open if you need to view the current fault list, click the Refresh button.

7.9 History alert

History alarm system for alerting the saved backup browser, the information is displayed in the alarm browser interface. Click on "History alarm" menu, you can open as shown in the interface



Picture 7-18History alert

Select the alarms you want to browse the year, click on "Browse" and select the list you can see the alarm time

1257	Major	10.9.2.102_Port8	10.9.2.102 port 8 link down	2007-11-30 15:4
1252	Critical	10.9.6.211	unable connect to device,please confirm its running	2007-11-30 12:0
1246	Major	10.9.2.102_Port8	10.9.2.102 port 8 link down	2007-11-29 19:4
1245	Major	10.9.2.101_Port8	10.9.2.101 port 8 link down	2007-11-29 19:4
1244	Major	10.9.2.101_Port2	10.9.2.101 port 2 link down	2007-11-29 19:4
1233	Critical	00.0a.5a.10.41.85	unable connect to device,please confirm its running	2007-11-29 10:4
1232	Critical	00.0a.5a.10.26.4c	unable connect to device,please confirm its running	2007-11-29 10:4
1231	Critical	00.0a.5a.00.10.11	unable connect to device,please confirm its running	2007-11-29 10:4
1229	Major	10.9.2.102_Port7	10.9.2.102 port 7 link down	2007-11-29 09:4
1216	Major	10.9.2.102_Port8	10.9.2.102 port 8 link down	2007-11-27 19:5
1215	Major	10.9.2.101_Port8	10.9.2.101 port 8 link down	2007-11-27 19:5
1214	Major	10.9.2.101_Port2	10.9.2.101 port 2 link down	2007-11-27 19:5
1209	Major	10.9.2.102_Port7	10.9.2.102 port 7 link down	2007-11-27 15:4
1207	Critical	10.9.6.228	unable connect to device,please confirm its running	2007-11-27 15:0
1199	Major	10	port disabled	2007-11-26 19:3
1198	Critical	10.9.6.228	unable connect to device,please confirm its running	2007-11-26 19:2

Picture 7-19History alert list

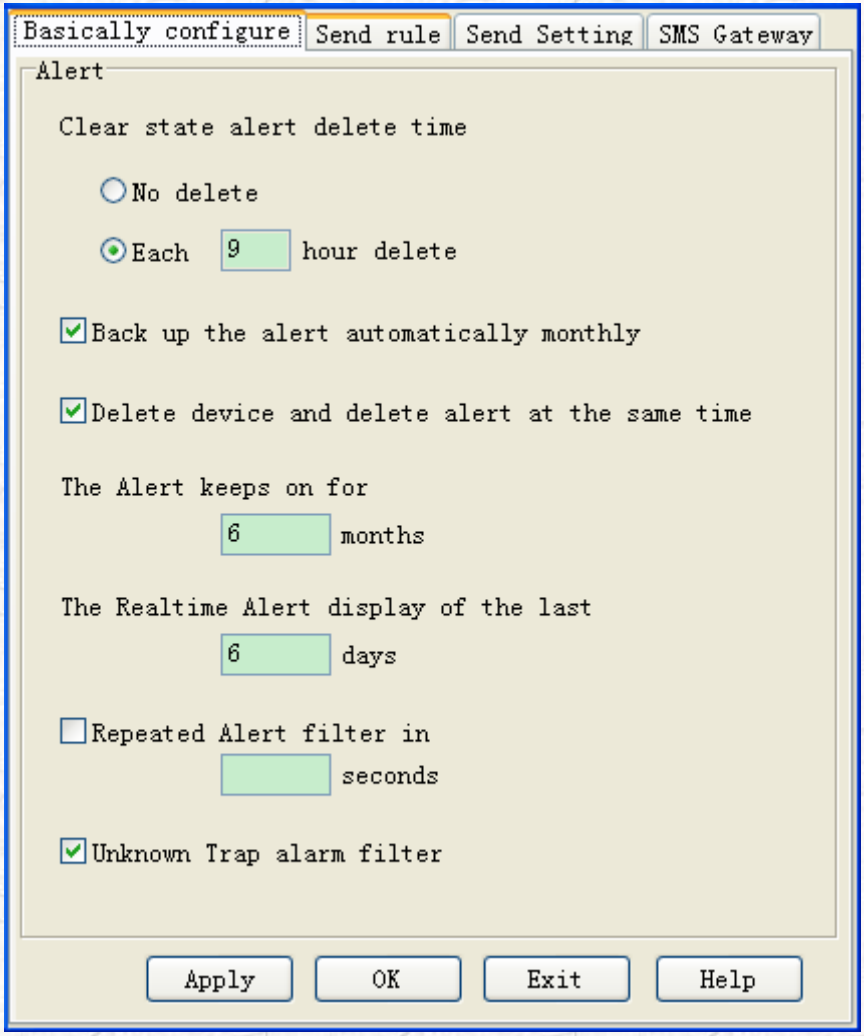
7.10 Failure management

7.10.1 Failure management Description

Fault management configuration includes four interfaces are: basic configuration, sending rules, settings, and send SMS gateway parameter settings. This feature is configured only "admin" user can operate.

By "failure" ➔ "Fault Management Configuration" can turn on the fault management related functions configuration interface.

7.10.2 Basic configuration



Picture 7-20Failure configuration

Interval [Clear] to delete the alarm state: When is a clear warning may choose not to delete or delete a custom number

of hours every time. Recommended once every few hours to delete, delete unwanted messages.

[Monthly] automatic backup alarm: the need for a monthly backup alarms.

Delete to delete the corresponding alarm devices simultaneously]: When the device is removed, the corresponding alarm message is also deleted together.

[Reserved] warning: Custom reserved alarms many months.

Near real-time alarm display []: Display the past number of days of alarm information.

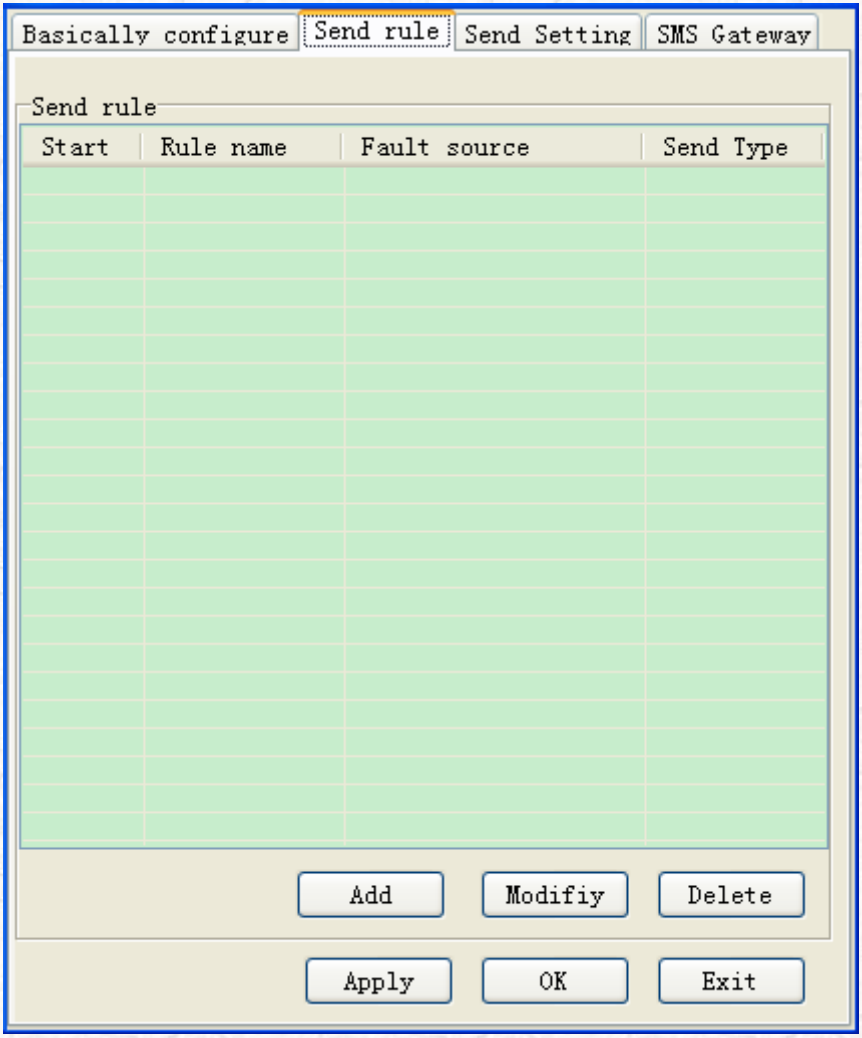
[Repeat] warning: the number of seconds the alarm filtering repeat custom.

[Unknown Trap alarm filtering]: whether the unknown alarm filtering.

7.10.3 Sending rules

Send rule is that users need to take e-mail or text message alerts when you need to set the appropriate alarm sending rules, each rule contains a certain level of failure to

take some fault sources alarm transmission operation, the system supports up to 50 rules. Interface as shown below.

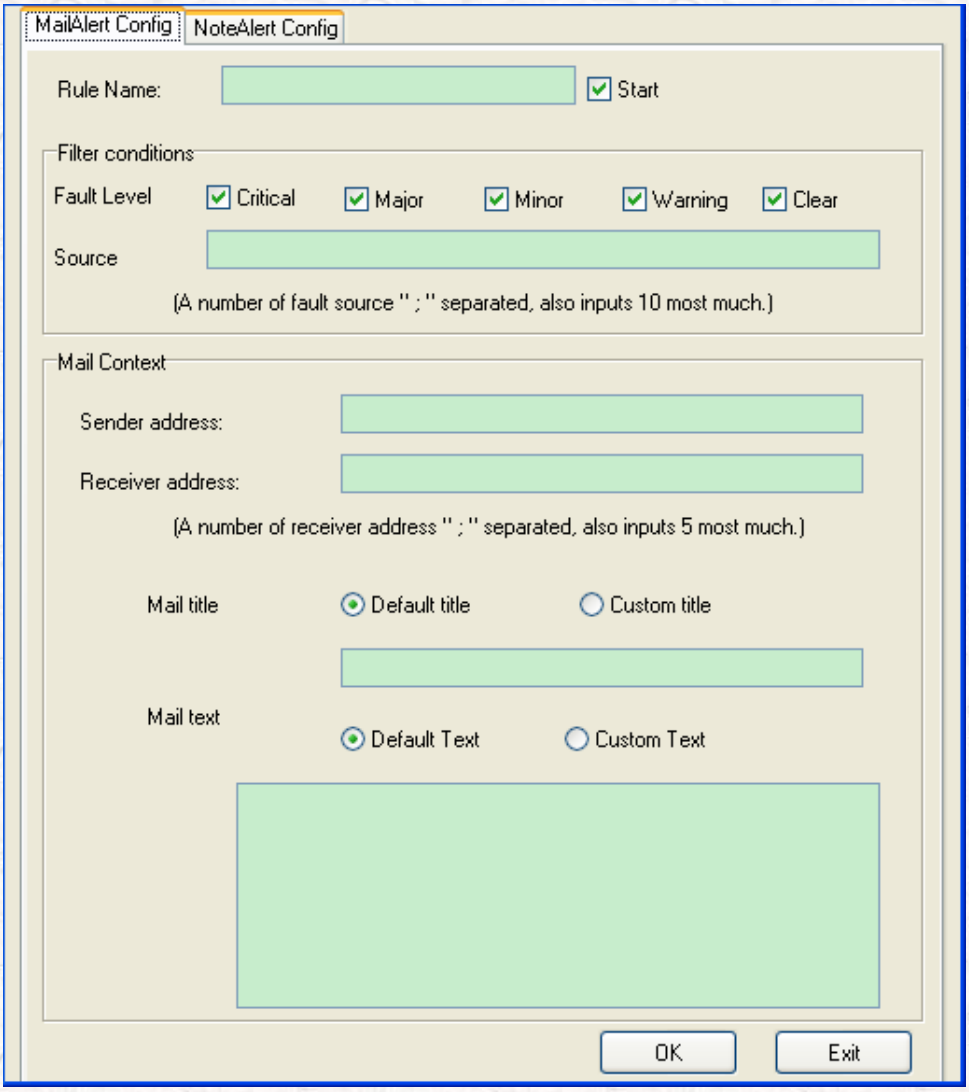


Picture 7-21Send rules

Displayed in the form of a list of rules in the interface, display items as whether to start the rule, the rule name to

send the fault source and transmit type (Email / Sms. Rules by adding a user to edit the list of rules below, modify the rules and delete rules.

When you click "Add rule", the rule appears alarm setting interface. Fill in the data in the corresponding rules to increase the page. As shown below.



Picture 7-22Add rules

The top of the screen to enter the rule name and choose whether the rule is enabled , the default is enabled, the rule is named in the 20 -byte length of the character , in English or

Chinese .

Filters: What should be included in the rules and what level of fault sources alarm when the alarm with these conditions occur , the rules will stimulate sent . You can specify multiple fault sources , separated by " ; " was separated , and supports up to 10 fault source . Completing the fault source , you can use wildcards :

An asterisk (*) - can replace any number of characters from 0 to ;

Exclamation mark (!) - Said they did not include the specified string .

E-mail alert settings, the recipient address can " ; " was separated to send to people, a maximum of five .

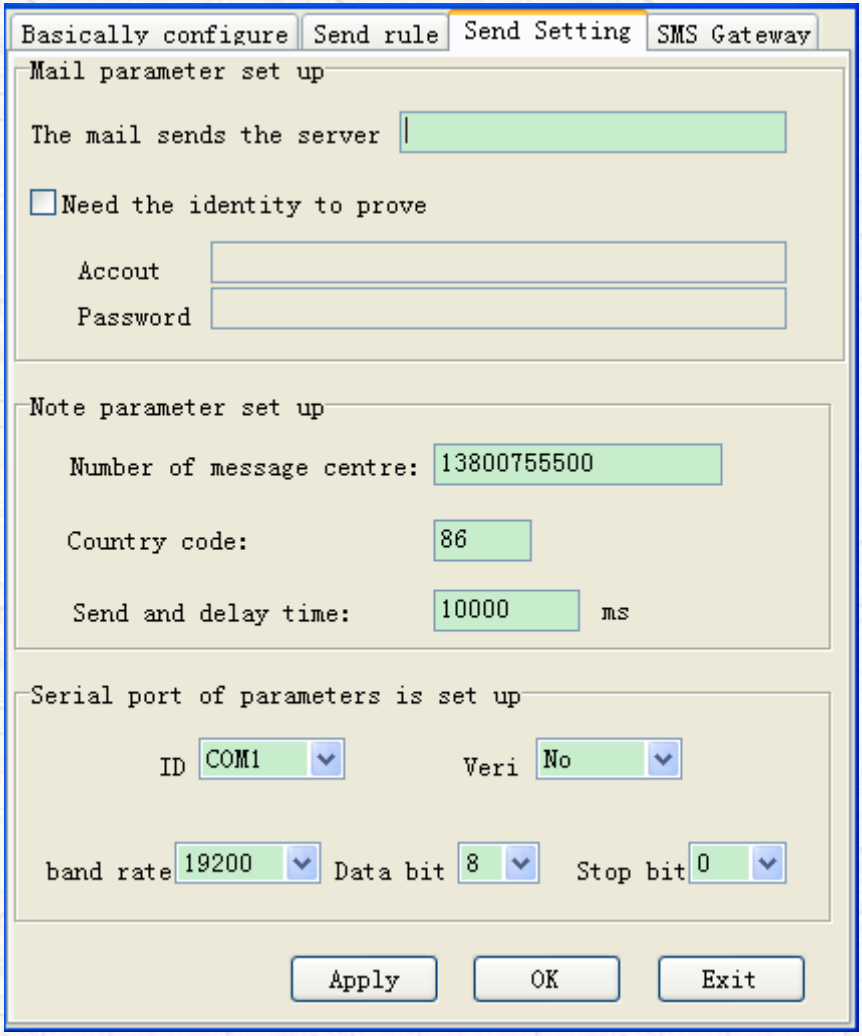
Similarly , SMS alarm settings, text messages can be received number " ; " was separated to send to people, a maximum of five .

Title and body of the message can use the default format , you can also customize the format. The default format is : Title [fault source] [failure description] ; body contains the source of the fault , the fault level , fault description and fault

occurred. SMS default content source contains a fault , the fault levels and fault description . When an alarm SMS alarm message to be sent a text message contains more than the maximum capacity of a few minutes to send the alarm message and each message before the message is that this article has displayed a few messages in the first few . Its message header format as 1/3.

7.10.4 Sending configuration

Set mainly used to set sending SMS messages sent and parameters, the interface is shown below.



Picture 7-23Sending configuration

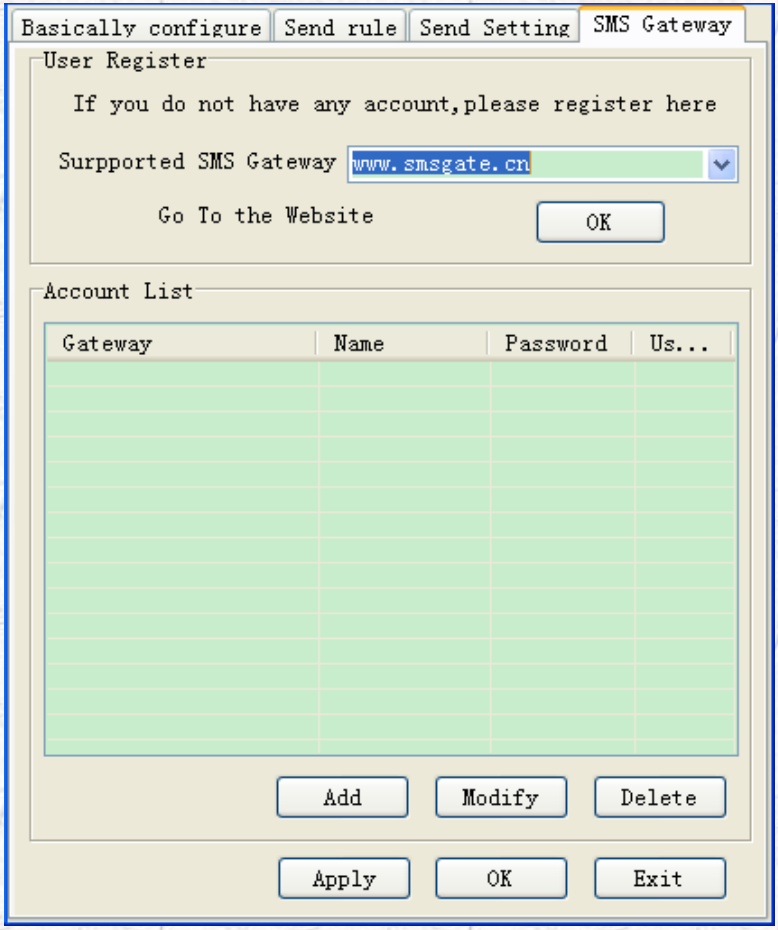
Interface of three parts, the top is the message parameter settings, you need to enter mail server, if the server requires authentication, you need to select the item requires authentication and fill username and password.

Intermediate message parameter settings, you need to set the local SMS center number and the country code, and set the transmission delay time, transmission delay setting range is between 5000-50000 milliseconds, in order to ensure the normal SMS, and recommended that the delay interval is set to 10000 milliseconds or longer.

Parameter settings for the serial port at the bottom, you need to set the serial number and the serial port parameters used in GSM terminals, depending on the serial port parameters used GSM terminals and different.

7.10.5 SMS gateway configuration

As shown below, on the SMS gateway parameter settings, such as registering a gateway account, add, modify, delete gateways, account numbers, passwords and other settings.



Picture 7-24SMS gateway configuration

7.11 Sound management

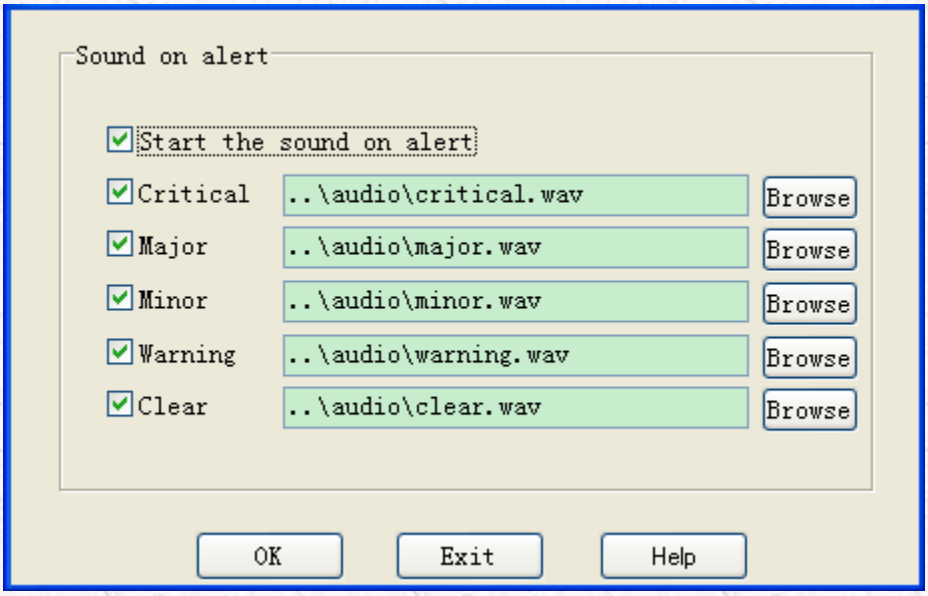
Sound the alarm: Fault sound notification function when the system generates an alarm, network managers can be prompted by voice, users can:

Control whether a certain level of fault alarm sounds generated notices;

Use different voices for different fault notification level;

Control the start and stop sound notification feature.

Sound the alarm configuration interface as shown below.



Picture 7-25Sound management

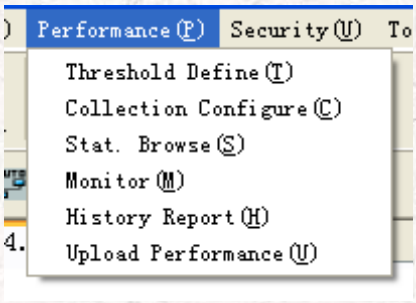
Alarm sound file can use the system default file, you can also "Browse" button after different alarm levels, select the path the sound file is located. Different levels of pre-alarm box is used to control the level of the corresponding alarm audible alarm is enabled.

Chapter 8 Capacity management

8.1 Description

The NMS in Performance management provides the following functions: threshold definition, collection configuration, statistics browsing, real-time performance monitoring, historical performance reports. Data collection configuration is the basis of performance management, data to be collected are set by the user, such as a device receives the number of bytes of data, the number of bytes of data sent, port rate is much more. The statistics browsing is collected for statistical data, generate reports on demand, in order to understand the current usage of the network, such as whether a switch port utilization to meet the requirements, whether the network load balancing and so on. Users can also customize thresholds according to the rules, through network events, alarms, etc. can effectively monitor and manage the network.

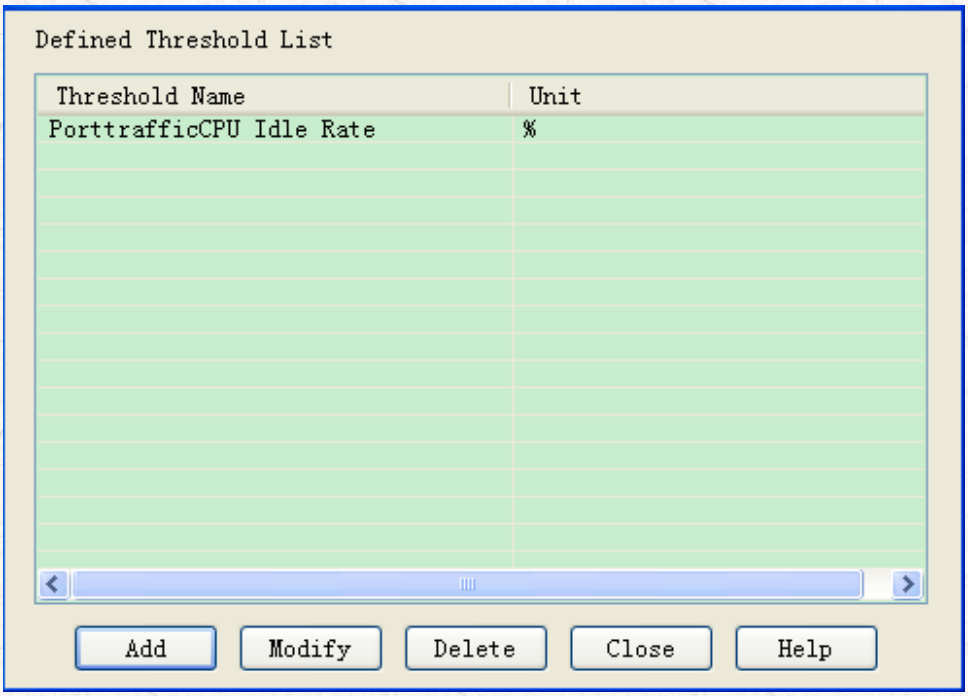
The performance management menu, as shown below, followed by a small section of the menu functions do each of these in detail.



Picture 8-1menu

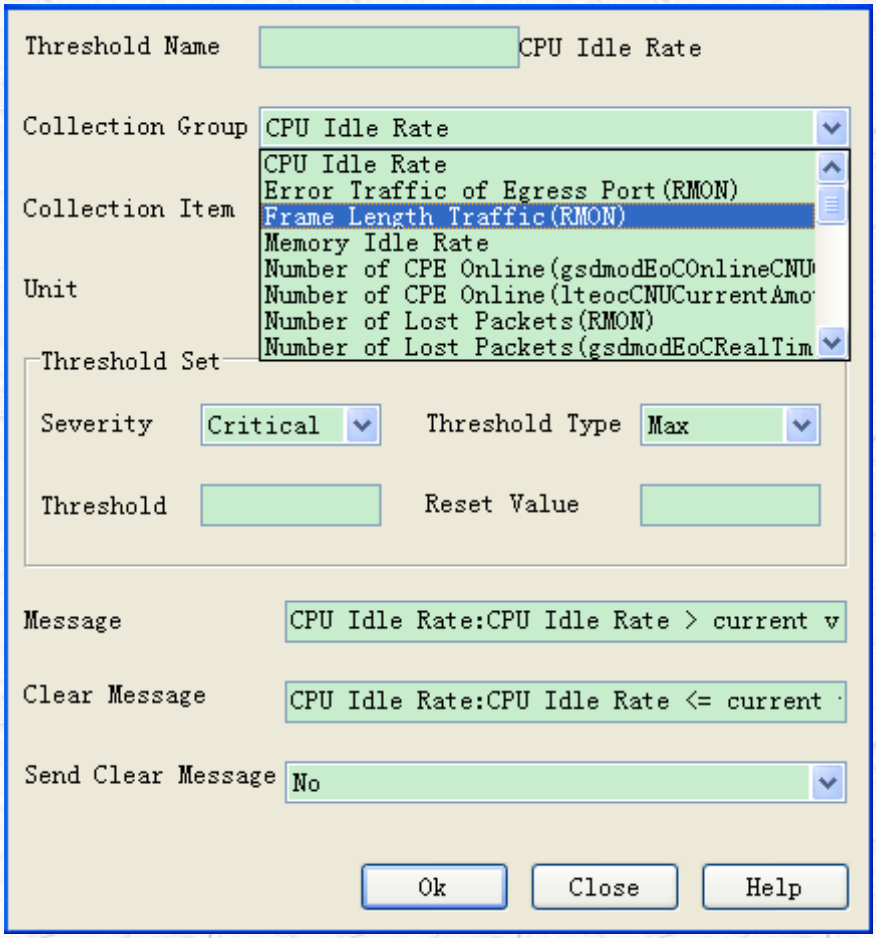
8.2 Threshold

Click on the menu "Performance Management" ➔ "threshold definition of" entry, the following interface:



Picture 8-2Threshold

The list shows all the current threshold defined network management system, as shown above, depending on the acquisition group, divided into different thresholds, up to 29 species, which can be divided and still collecting items, but adding the threshold conditions are generally Like hereby added to illustrate one use it. Click Add, the following interface will appear.



Picture 8-3Add threshold

Threshold Name: Limit add an identifier for the door , you can not add , the default group name for the collection .

Acquisition Group: To add to what threshold.

Collection items : Different items collected under the acquisition group , such as port packet loss statistics, the

statistics of the port is still dropping into the port size .

Unit : Acquisition of Units , default.

Importance : Arrival of the generated alarm threshold level . There are five types , which are critical, major, minor, warning, clear.

Threshold Type: There are three , max (maximum) - If the acquisition value exceeds the threshold then generate an alarm event , equal (equal) - If the acquisition value is equal to the threshold will generate an alarm event , min (minimum) - If the acquisition value less than the threshold an alarm is generated events.

Threshold: the collection is compared with a threshold value and generating an alarm threshold event .

Reorganization value : When collecting value of this value, an alarm event to restore the normal state (clear).

Message : When an alarm event occurs descriptive information display.

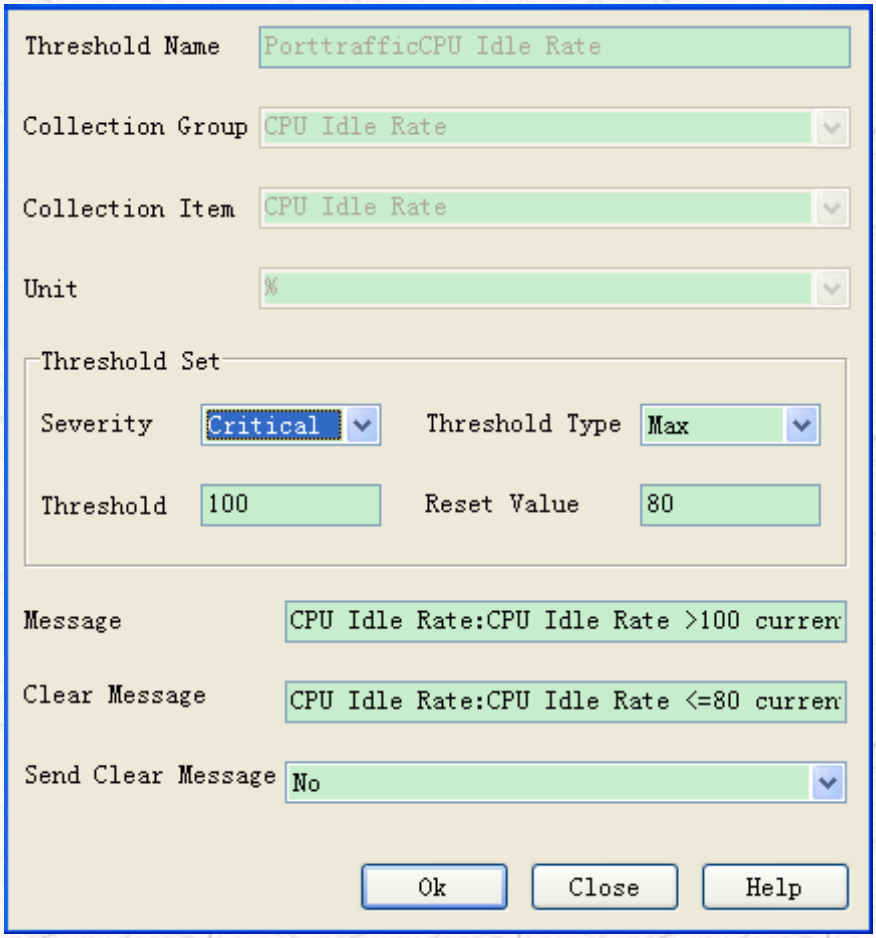
Clear message : Description alarm event information when the state returns to normal (clear) display.

Generated when the device is in normal event recovery

device status (clear): whether to send the clear message.

Click OK , you can increase a threshold , other values can be default, but the threshold value must be filled and re size .

Threshold defined interface, click the "Delete " button to delete the selected directly limit the definition of the door , click "Edit" button (or double-click the selected row) , appear to modify the threshold defined interface, as shown below.



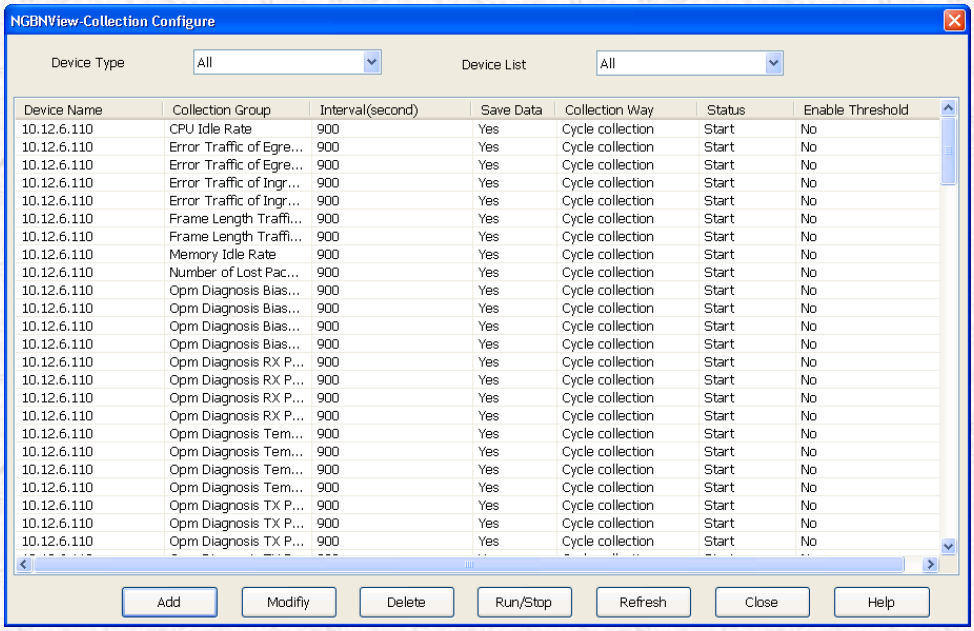
Picture 8-4Modify threshold

8.3 Collection configuration

By collecting configuration, you can add, modify, delete, equipment and acquisition options to be collected, and thus the performance of certain equipment for background

acquisition, can generate historical performance reports.

Click the menu "single Performance Management" ➔ "Acquisition Configuration" item, as shown below screen appears.



Device Name	Collection Group	Interval(second)	Save Data	Collection Way	Status	Enable Threshold
10.12.6.110	CPU Idle Rate	900	Yes	Cycle collection	Start	No
10.12.6.110	Error Traffic of Egre...	900	Yes	Cycle collection	Start	No
10.12.6.110	Error Traffic of Egre...	900	Yes	Cycle collection	Start	No
10.12.6.110	Error Traffic of Ingr...	900	Yes	Cycle collection	Start	No
10.12.6.110	Error Traffic of Ingr...	900	Yes	Cycle collection	Start	No
10.12.6.110	Frame Length Traffi...	900	Yes	Cycle collection	Start	No
10.12.6.110	Frame Length Traffi...	900	Yes	Cycle collection	Start	No
10.12.6.110	Memory Idle Rate	900	Yes	Cycle collection	Start	No
10.12.6.110	Number of Lost Pac...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Bias...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Bias...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Bias...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Bias...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis RX P...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis RX P...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis RX P...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis RX P...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Tem...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Tem...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Tem...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis Tem...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis TX P...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis TX P...	900	Yes	Cycle collection	Start	No
10.12.6.110	Opm Diagnosis TX P...	900	Yes	Cycle collection	Start	No

Picture 8-5Data collection

Add, modify, delete, view data collection defined to add, modify and delete;

Run / Stop: select one or some of the equipment, whether or not collected;

Refresh: Interface;

Close: Close the interface;

Help: Starts the online help documentation.

8.4 Data collection defines the display list (for a device)

Select the device type, and then select the appropriate device from the list of IP devices, data acquisition definition list below will show the data collection equipment has defined the term, including six attributes:

Device Name: IP devices

Acquisition Group Name: Acquisition of data items

Collection interval: Acquisition interval

Save data: polling the collected data is stored in the database

Collection methods: periodic collection or book collection

Status: Start or stop collecting

Enable Threshold: Threshold is enabled

Tip:

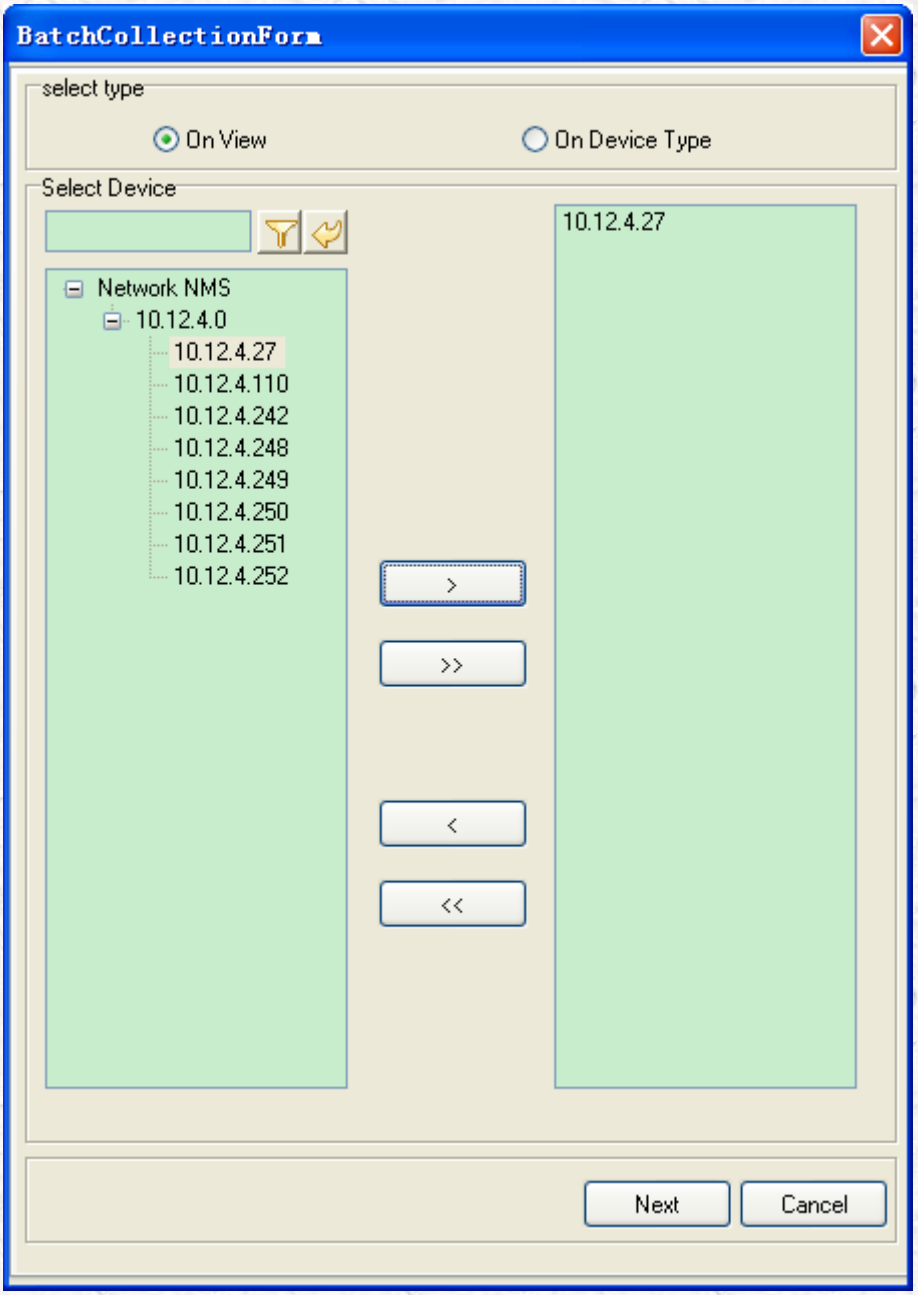
Periodic acquisition - the system at regular intervals in accordance with the set of data collected from a user-defined key moments of the data collection, has been collecting continues until the user stops or delete the data collection definition.

Appointment acquisition - the system will start collecting task start time set by the user, and to terminate the acquisition task in stopping time.

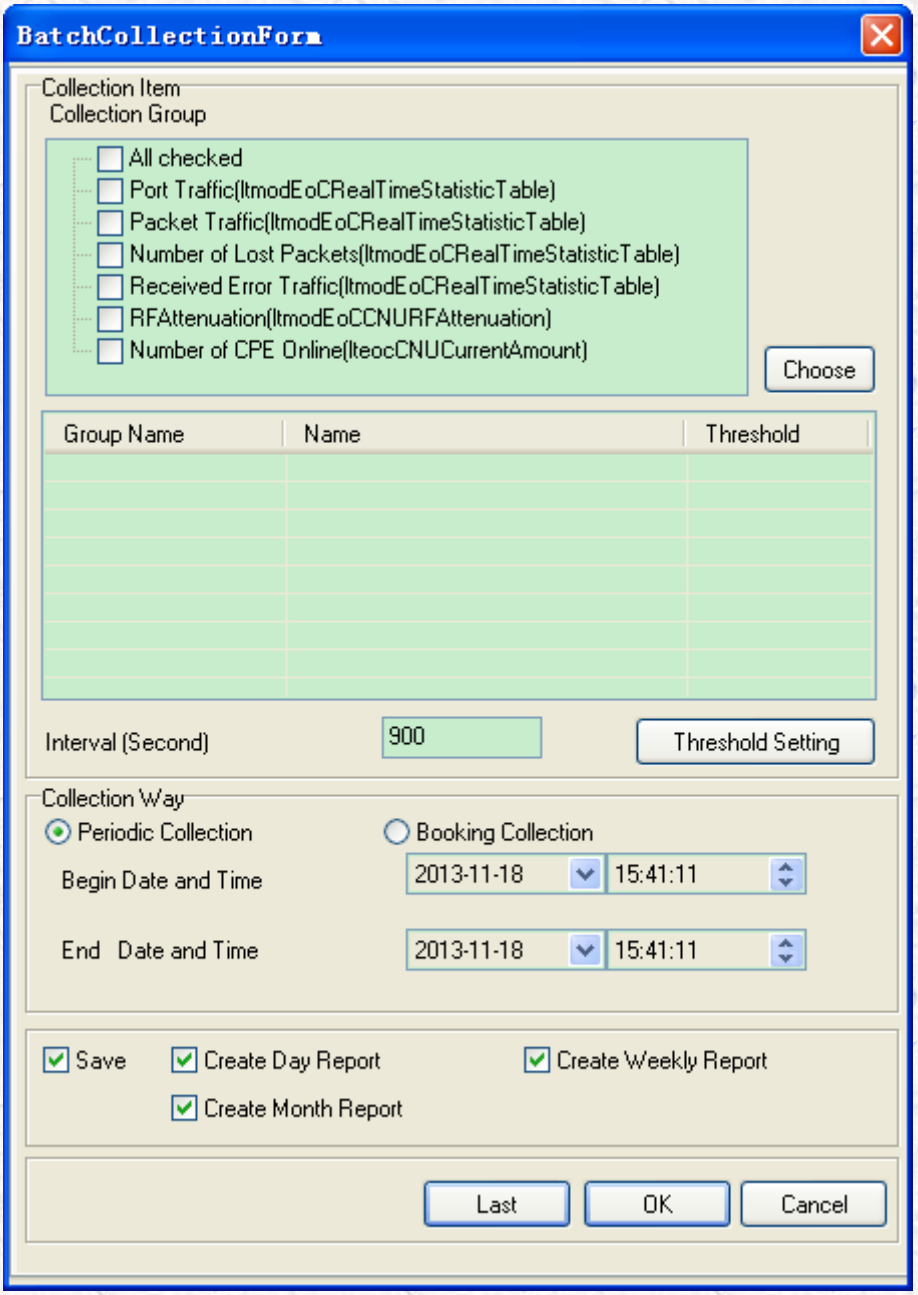
8.5 Data collection definition to add, modify and delete

8.5.1 Add

On the data collection configuration interface click "Add" button to add items of data acquisition interface appears



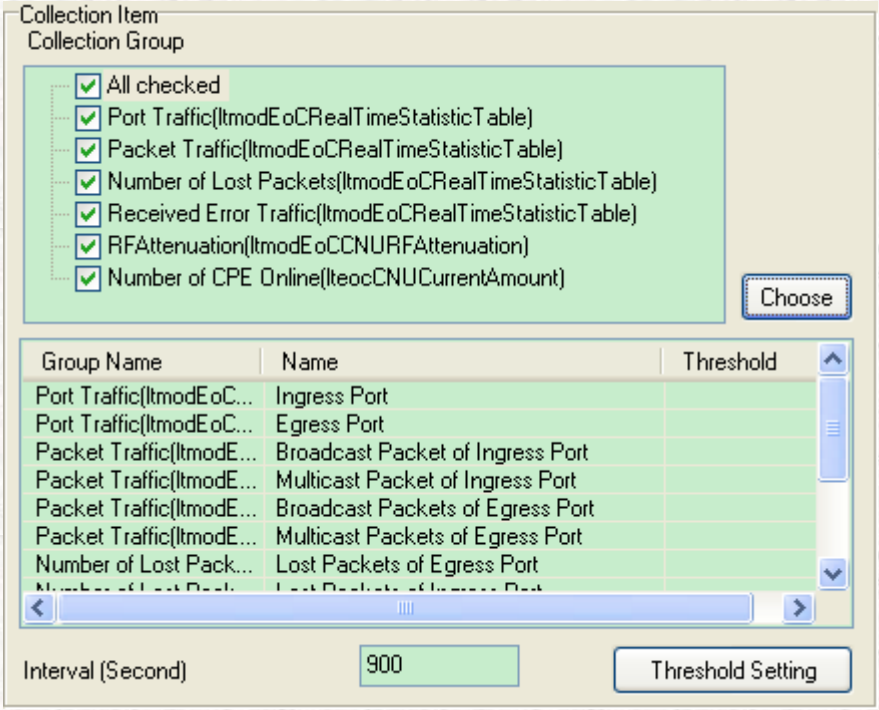
Picture 8-6Add（1）



Picture 8-7Add（2）

Collection group name: Select the type to be collected.

Select an item at the click of choice appears as shown.



Picture 8-8Select collection

Setting data acquisition parameters :

Parameter defines a data collection set by the user needed items include : polling interval , the data is saved to the database collected , collection types (relative or absolute) , whether to take the time average acquisition mode (periodic acquisition or appointment collection) ,

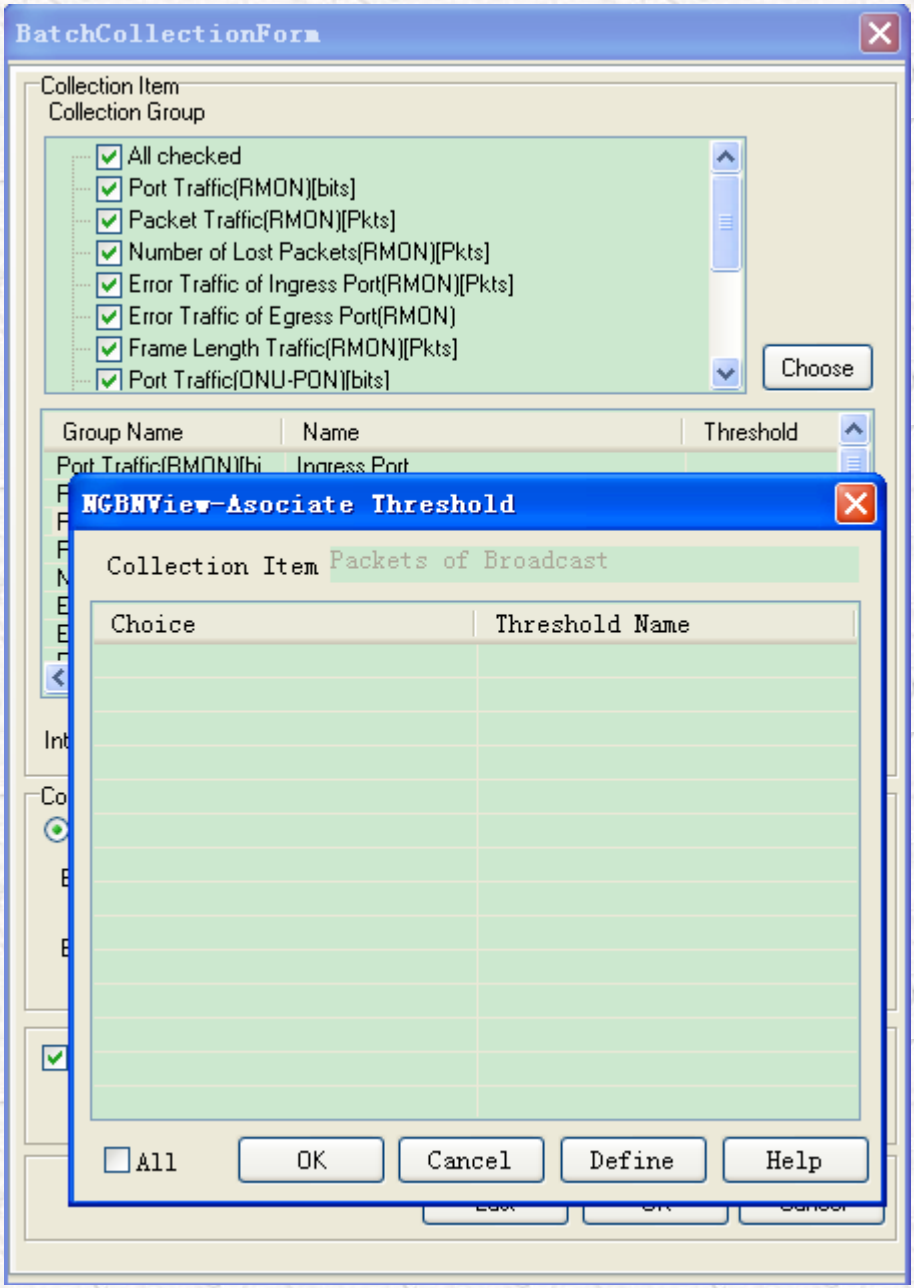
threshold definitions.

Which set the acquisition mode is divided into two types: periodic collection and reservations acquisition.

For the periodic collection, data collection is added after the data collection started immediately ; reservation for the collection, the collection need to configure the start and end time, only after the start time of arrival , the acquisition process will start . When the acquisition mode for the periodic collection by the user to specify whether to generate daily report. Note : When a user-specified time interval is greater than seven days , gives a hint , suggest because of the time interval is too large , you may lose data collected prematurely (defined by the system database emptied Scheduled Tasks decision) .

Threshold settings: a data collection item can have multiple threshold setting.

Figure Threshold click Settings button next column , add the threshold interface appears , as shown below.



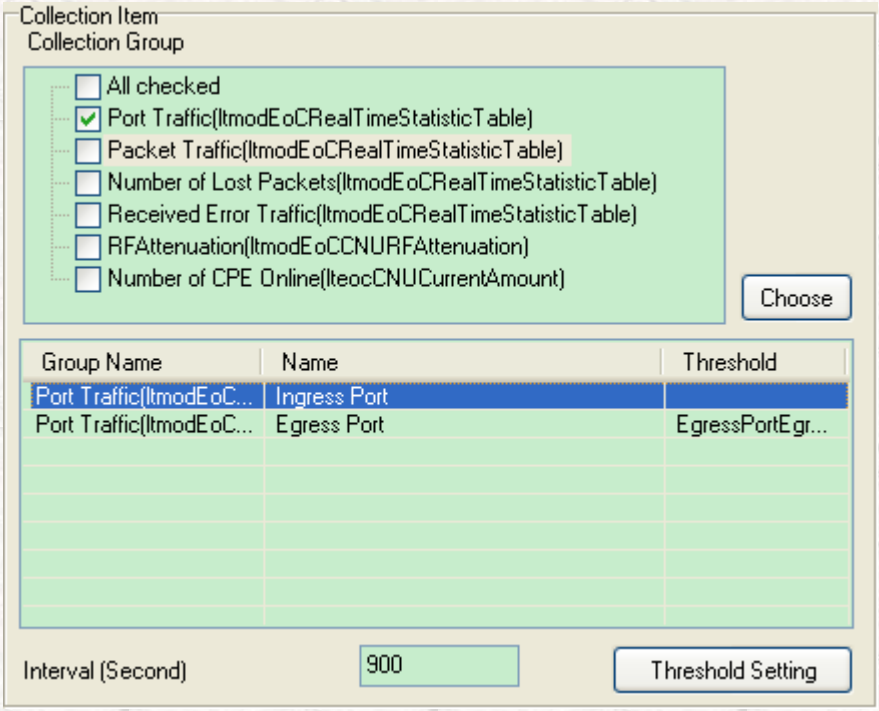
Picture 8-9Add threshold

Among them, the "data collection items" shows will be added threshold data collection items, the following list shows a list of all the doors have been defined limit. Users can elect one or more of the listed radio threshold definition.

Here brings up the system to add the interface defined threshold defined threshold.

Double-click the selected row can be retrieved here threshold modifies the definition of system interfaces defined threshold.

Adding threshold interface (or modify threshold interface), click "OK" button to return to the interface, and the user-selected threshold definitions appear in the door "data collection item" limit bar, as shown below.



Picture 8-10Collected interface

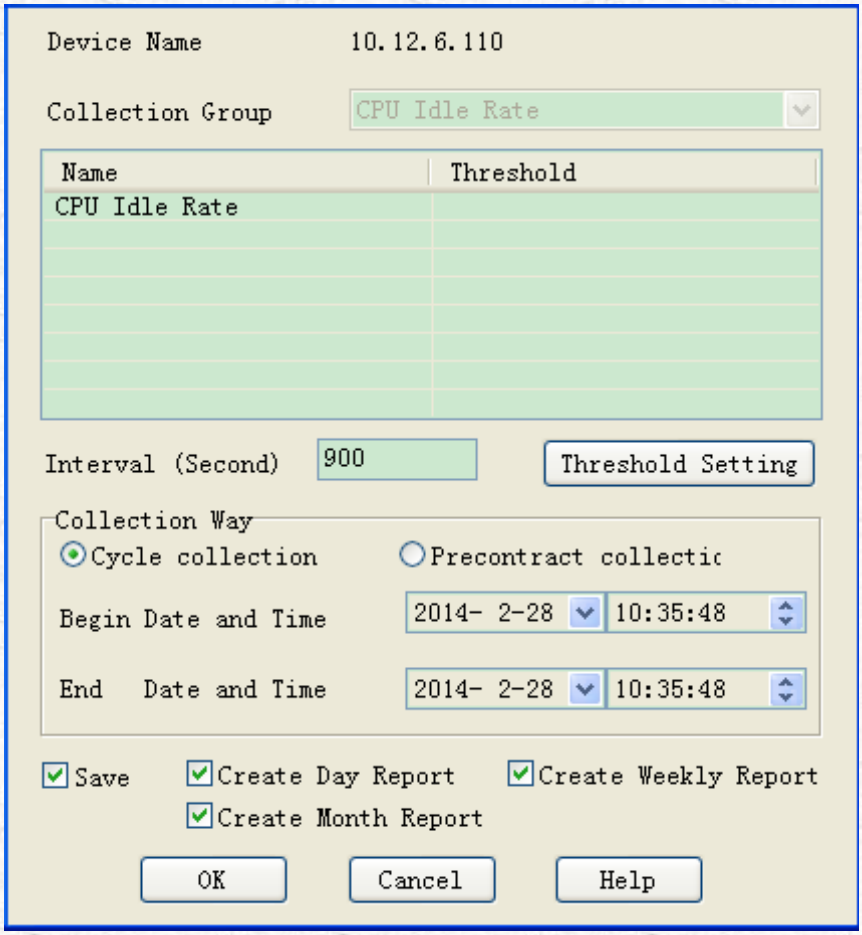
Click "OK" to complete the addition of the data acquisition operations defined.

Note: 1, when the acquisition mode of appointment acquisition, when booking long (end time - start time) is not less than the time interval.

2, if you want to generate historical performance reports, you must check the save, create a daily report, create weekly reports, monthly reports created.

8.5.2 Modify

On the data collection configuration interface to select a "capture group", click "Edit" button (or double-click the selected row), appear to modify the data collection item interface, as shown below:



Picture 8-11Modify

This page displays the selected "collection set" contains "data collection item" may be one to many relationship, that a class contains a plurality of data collection data collection items.

Adding items with similar data collection, users can capture multiple data acquisition parameters for the data collection item class settings, including polling interval, whether to save the collected data to the database, collecting type (relative or absolute), the average time , acquisition mode (periodic acquisition or custom collection), threshold definitions. Click "OK" to save the changed parameter value.

8.5.3 Delete

On the data collection configuration interface to select a "capture group", click "Delete" button, the system will be given a confirmation dialog box to confirm whether to delete the data acquisition category, click "OK" to delete the selected data collection type, click "No "," cancel "to undo the action.

8.5.4 Data collection status of start / stop

On the data collection configuration interface to select a "capture group", click "Start / Stop" button, you can instantly start or stop the current "collection group" of data collection.

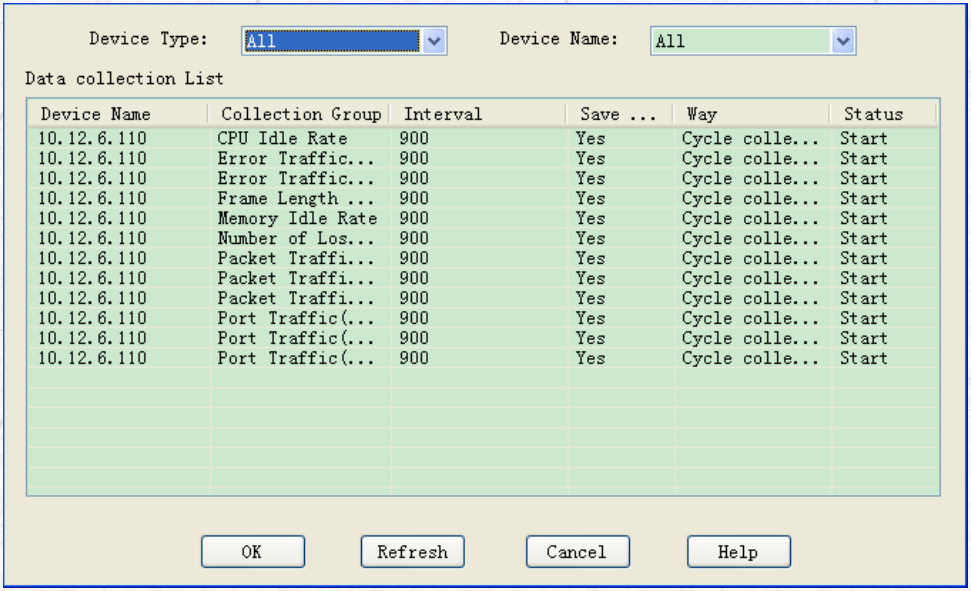
Note: Only the status of "start" and "stop" the definition of data collection in order to be stopped or started

8.5.5 Refresh

On the data collection configuration screen, click the "Refresh" button, you can instantly refreshed.

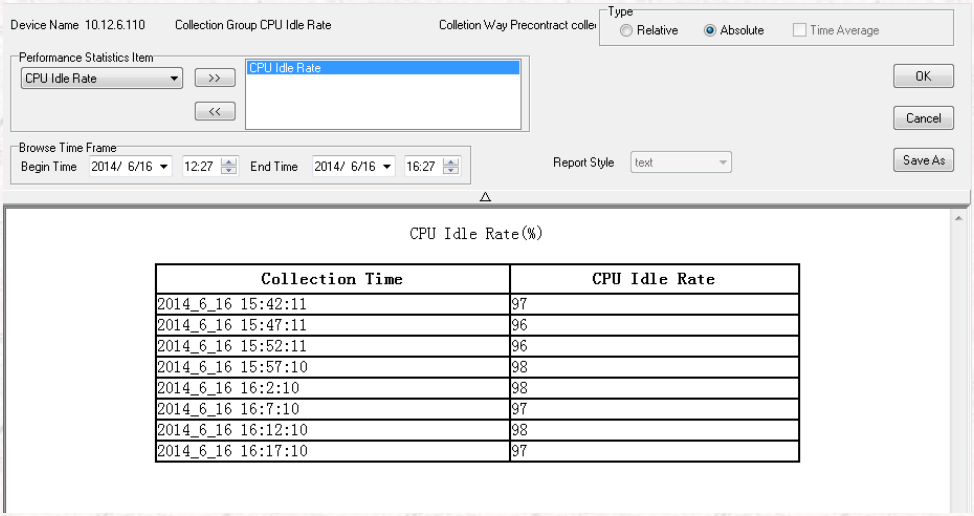
8.6 Statistics View

Click on the menu "Performance Management ➔ Statistics browse" item, the following interface.



Picture 8-12Statistics interface

Check the configuration of the acquisition results in the monitor configuration items, such as the option to select the CPU idle rate, appear as shown below and click OK.



Collection Time	CPU Idle Rate
2014_6_16 15:42:11	97
2014_6_16 15:47:11	96
2014_6_16 15:52:11	96
2014_6_16 15:57:10	98
2014_6_16 16:2:10	98
2014_6_16 16:7:10	97
2014_6_16 16:12:10	98
2014_6_16 16:17:10	97

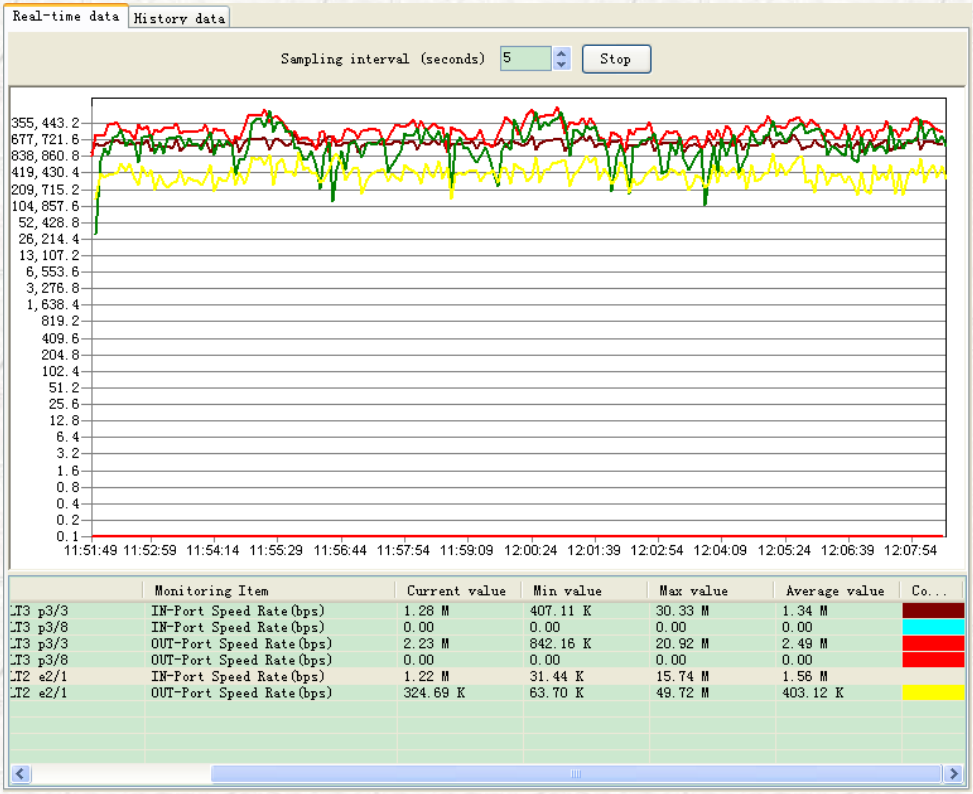
Picture 8-13CPU idle

8.7 Realtime capacity monitor

8.7.1 Realtime capacity monitor Description

Real-time performance monitoring equipment and its port is the real-time performance monitoring interval to collect and refresh the display interface according to the specified time. Real-time performance monitoring capabilities can help network administrators understand the operational status of the equipment in order to take the necessary measures in case of emergency in the network management staff. The

main interface is shown below.

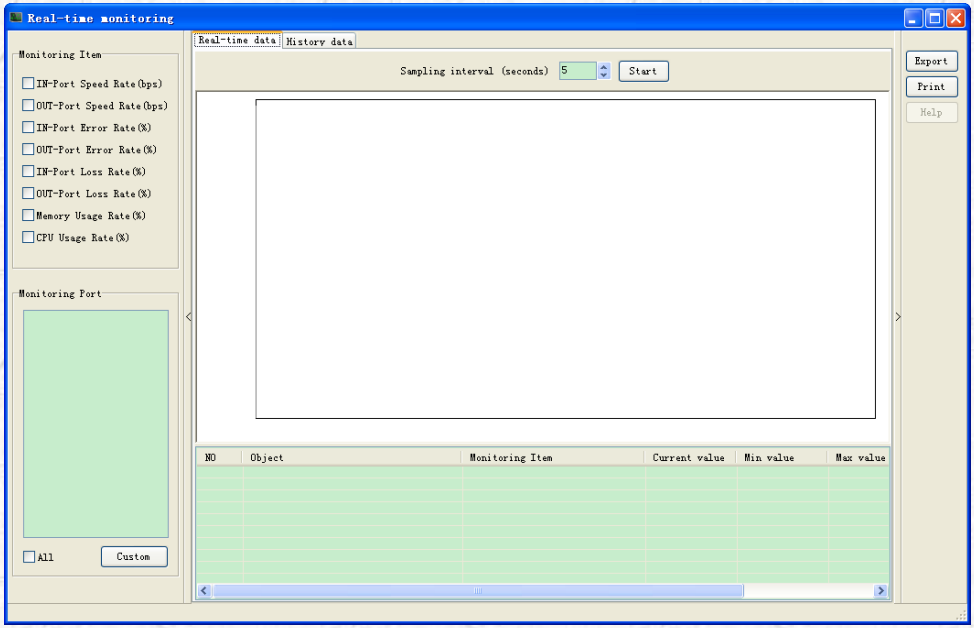


Picture 8-14Realtime monitor

8.7.2 Operation

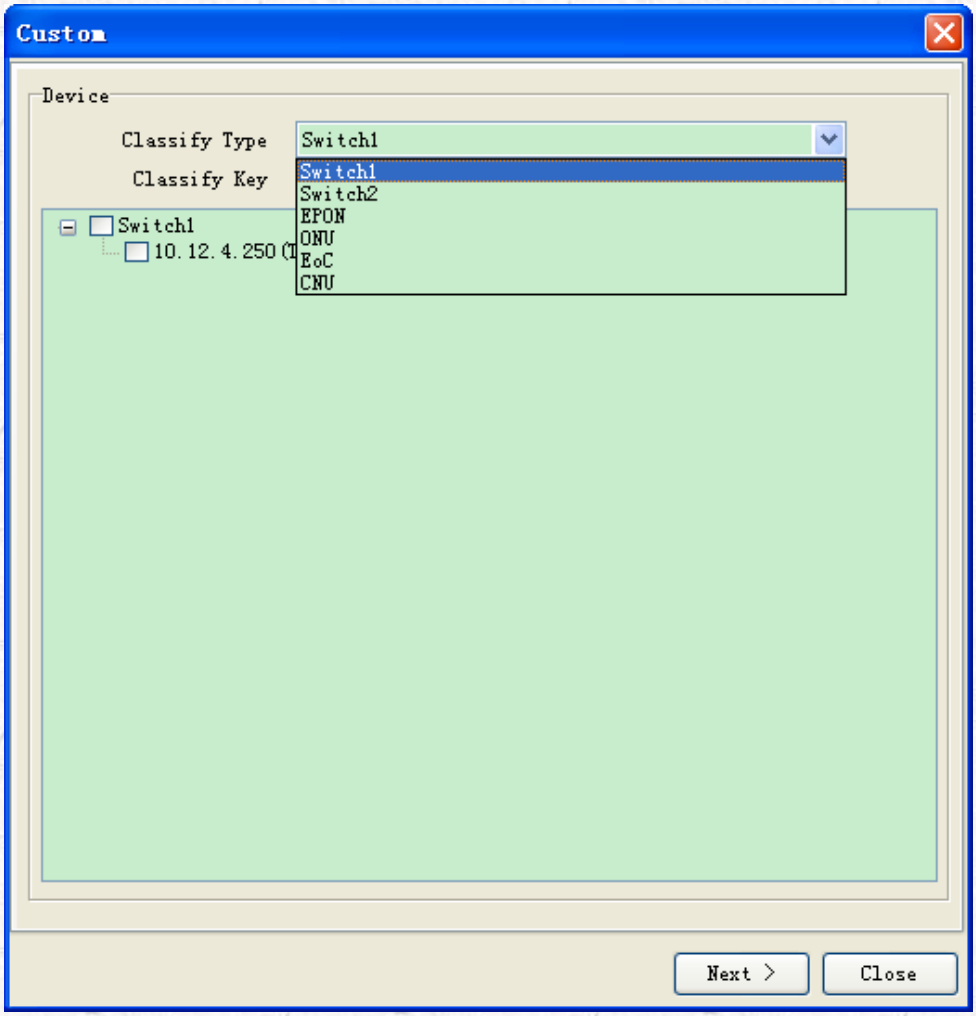
Select Real-time performance monitoring of the main interface "Performance Management" ➔ "Real-time performance monitoring", or select a device right-click the toolbar that appears choose "real time performance

monitoring", open the Performance Monitor main interface.



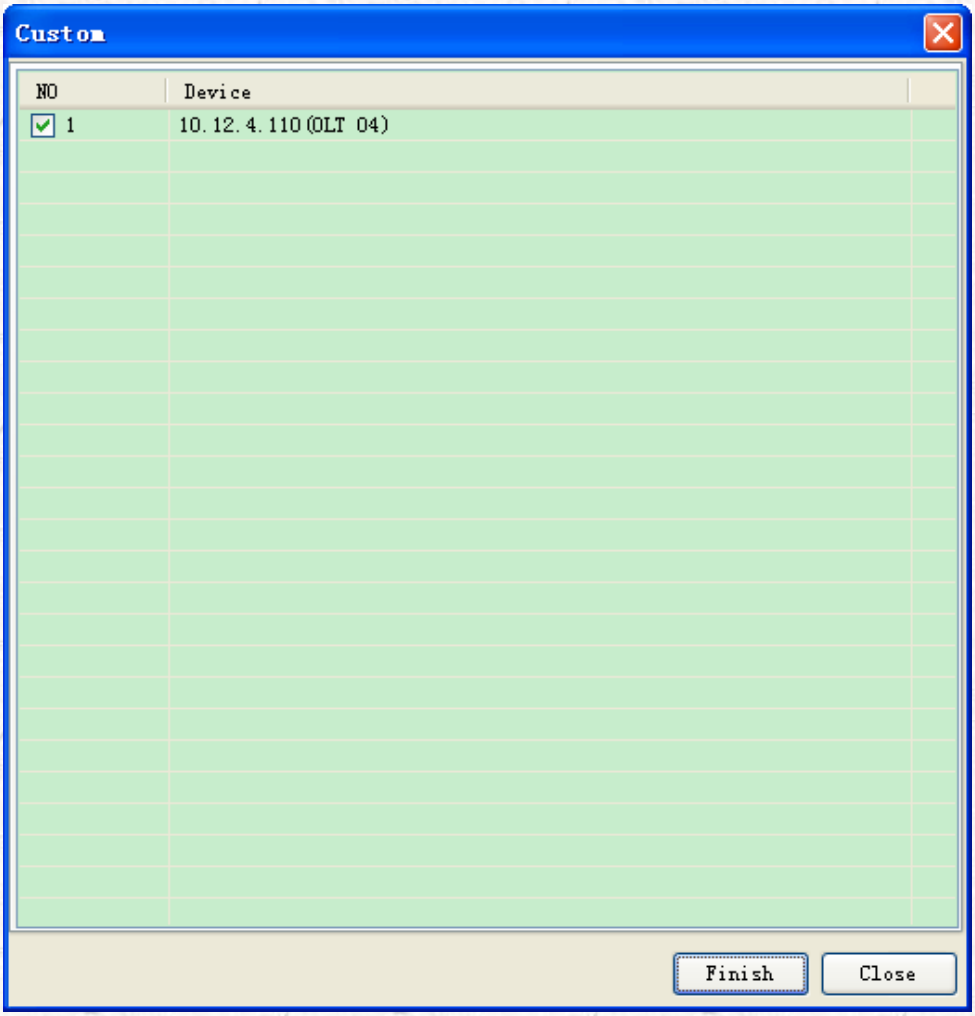
Picture 8-15Realtime interface

Click Customize, then jump out of the interface shown below.



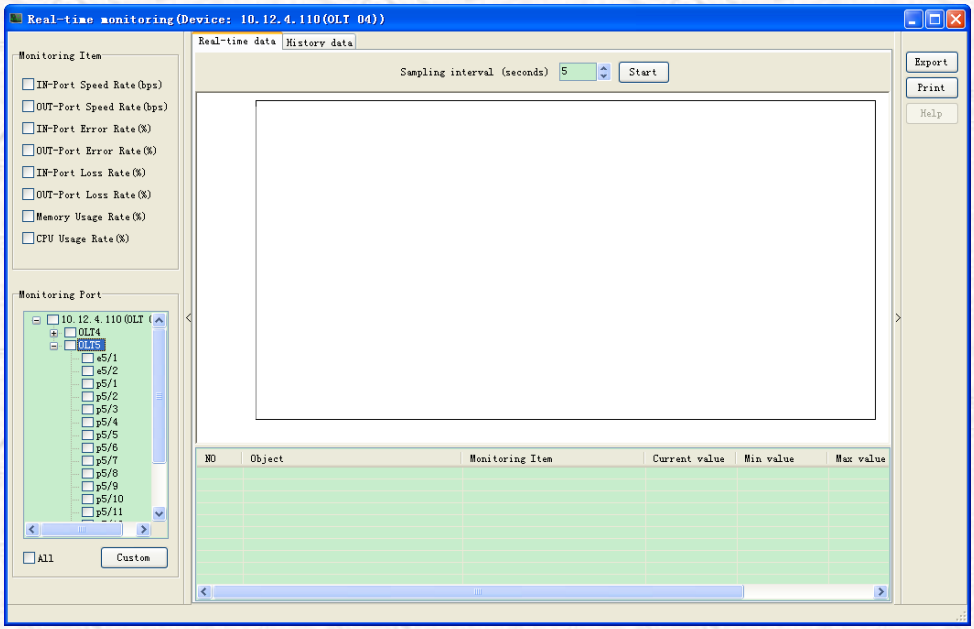
Picture 8-16Select device type

After you select a type, and then select one or more of the same type of device, click Next, there is shown below.



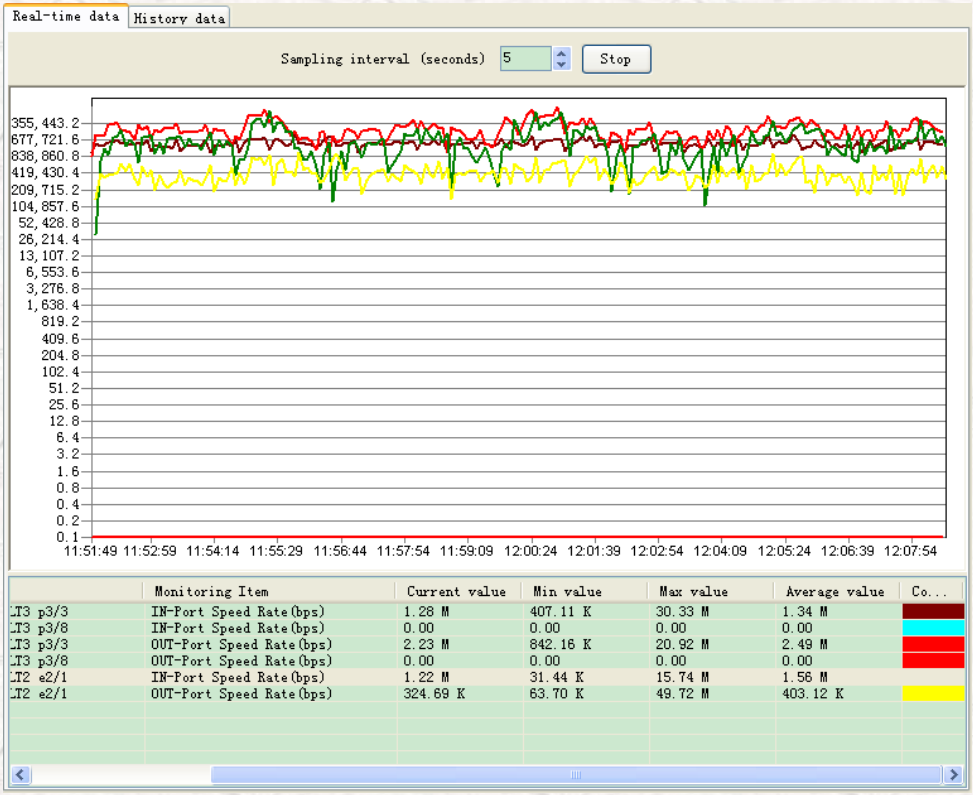
Picture 8-17Selected device

Click Finish, then appear as shown below.



Picture 8-18Monitor device

Monitoring key, select the type to be monitored; monitoring port, select the port to be monitored. Click Start, then begin monitoring. As shown below.



Picture 8-19Real-time data monitoring equipment

Note: The current window monitoring while allowing only eight entries in the list of objects is monitored only allow a maximum of 8 rows. System allows up to 10 real-time monitoring simultaneously open windows. And if you re-select the monitor entry, the original information monitoring area will disappear, and start monitoring. But you can see the value recorded by historical data.

Finally, according to the actual needs of the user, export or print the

monitoring data, monitoring data for easy storage.

8.7.3 Real-time performance monitoring items

8.7.3.1 Port rate

On the (in) the port speed is monitored by monitoring the rate chart, you can view the operational status of the device, in order to see trends within a certain time interval port rate stability and size, it can be a network management members find, locate and resolve network problems to provide a reference

8.7.3.2 Port BER

On the (in) the error rate monitor port, by monitoring the rate chart, you can view the operational status of the device, in order to see trends within a certain time interval error rate, which can be found for the network administrator reference, locate and resolve network problems

8.7.3.3 Port packet loss rate

On the (in) the error rate monitor port, by monitoring the

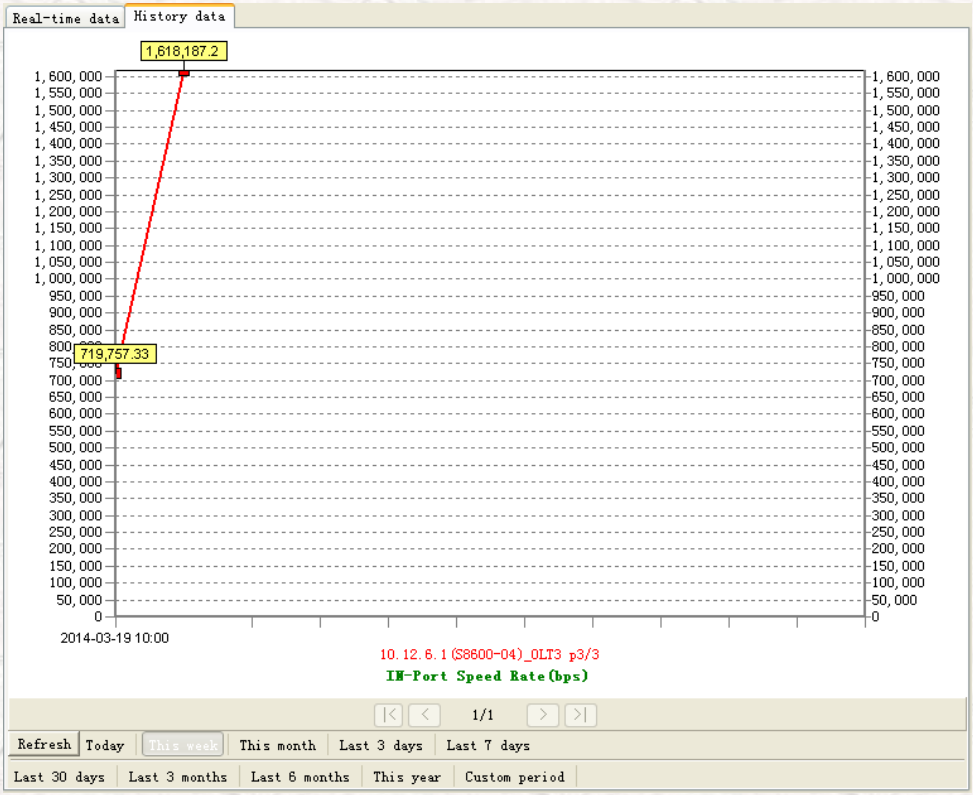
rate chart, you can view the operational status of the device, in order to see changes within a certain time interval of packet loss rate of the device, it can be a network administrators find and solve network problems locating reference.

8.7.3.4 memory/CPU unitization

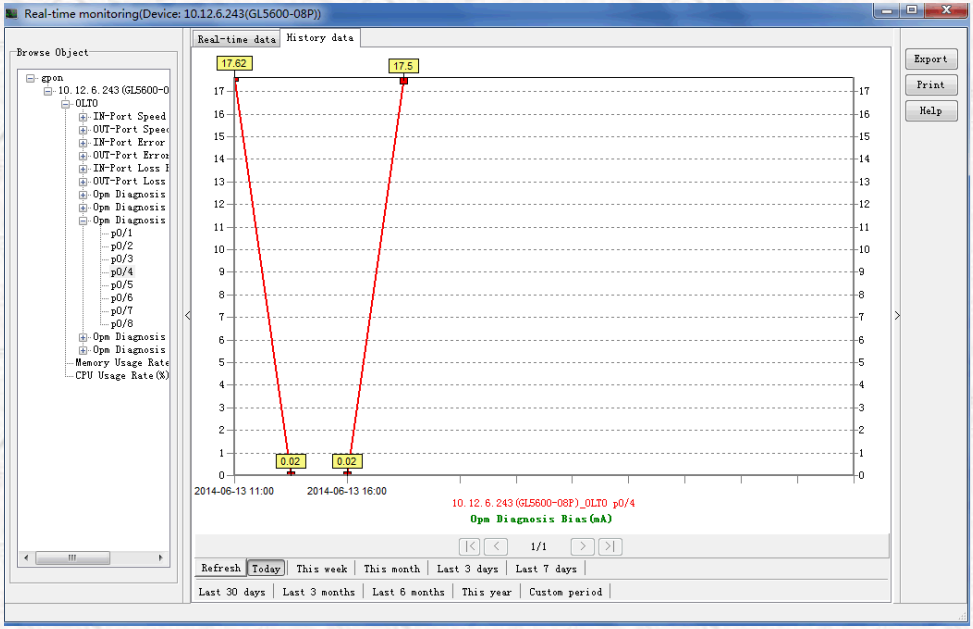
The device memory / CPU utilization rate is monitored by monitoring the usage, you can view the operational status of the device, in order to see in a certain time interval that the device memory / CPU usage changes, it can be network administrators find, locate and resolve network problems to provide a reference.

8.7.4 History data

View historical monitoring records stored in the database, you can view historical data, as shown below.



Picture 8-20Memory utilization

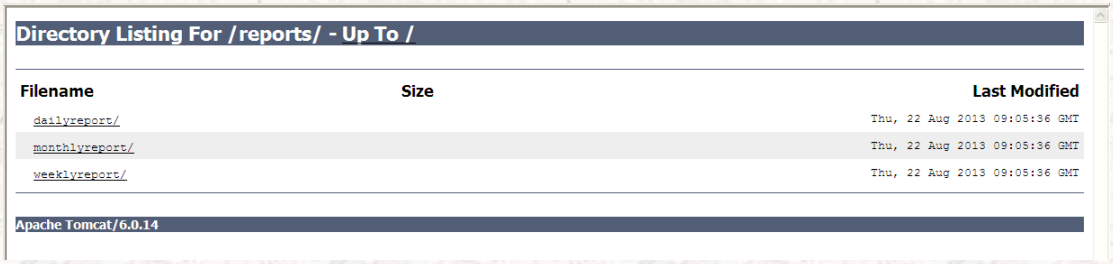


Picture 8-21Opm Diagnosis

But the view of the panel of the day, week, month, nearly three days, nearly 30 days, nearly three months, nearly six months time this year, and their own self-definition.

8.8 History capacity statistics

This feature works with plan task. Set the schedule for statistics. It will run when time is up.



Picture 8-22History capacity statistics

Please click here to return

Report performance statistics at the time:2014_6_11

Device name:10.12.6.110 Collected group:CPU Idle Rate

Time	CPU Idle Rate
06-11 17:31	95.00%
06-11 17:45	97.00%
06-11 17:59	97.00%
06-11 18:13	95.00%
06-11 18:27	97.00%
06-11 18:41	96.00%
06-11 18:55	96.00%
06-11 19:09	95.00%
06-11 19:23	94.00%
06-11 19:37	93.00%
06-11 19:51	95.00%
06-11 20:05	93.00%
06-11 20:19	95.00%
06-11 20:33	94.00%
06-11 20:47	96.00%
06-11 21:01	96.00%
06-11 21:15	95.00%
06-11 21:29	95.00%
06-11 21:43	95.00%
06-11 21:57	94.00%
06-11 22:11	96.00%
06-11 22:25	96.00%
06-11 22:39	94.00%
06-11 22:53	94.00%
06-11 23:07	96.00%
06-11 23:22	95.00%
06-11 23:36	95.00%
06-11 23:50	85.00%

Picture 8-23Daily statistics

Please click here to return

Performance statistics Week Report Time:2014_6_9-2014_6_15

Device name:10.12.6.110 Collected group:CPU Idle Rate

Time	CPU Idle Rate
06-11 17:31	95.00%
06-11 17:45	97.00%
06-11 17:59	97.00%
06-11 18:13	95.00%
06-11 18:27	97.00%
06-11 18:41	96.00%
06-11 18:55	96.00%
06-11 19:09	95.00%
06-11 19:23	94.00%
06-11 19:37	93.00%
06-11 19:51	95.00%
06-11 20:05	93.00%
06-11 20:19	95.00%
06-11 20:33	94.00%
06-11 20:47	96.00%
06-11 21:01	96.00%
06-11 21:15	95.00%
06-11 21:29	95.00%
06-11 21:43	95.00%
06-11 21:57	94.00%
06-11 22:11	96.00%
06-11 22:25	96.00%
06-11 22:39	94.00%
06-11 22:53	94.00%
06-11 23:07	96.00%
06-11 23:22	95.00%
06-11 23:36	95.00%
06-11 23:50	85.00%
06-12 00:04	93.00%

Picture 8-24Weekly statistics

Please click here to return

Monthly report time performance statistics:2014_6

Device name:10.12.6.110 Collected group:CPU Idle Rate

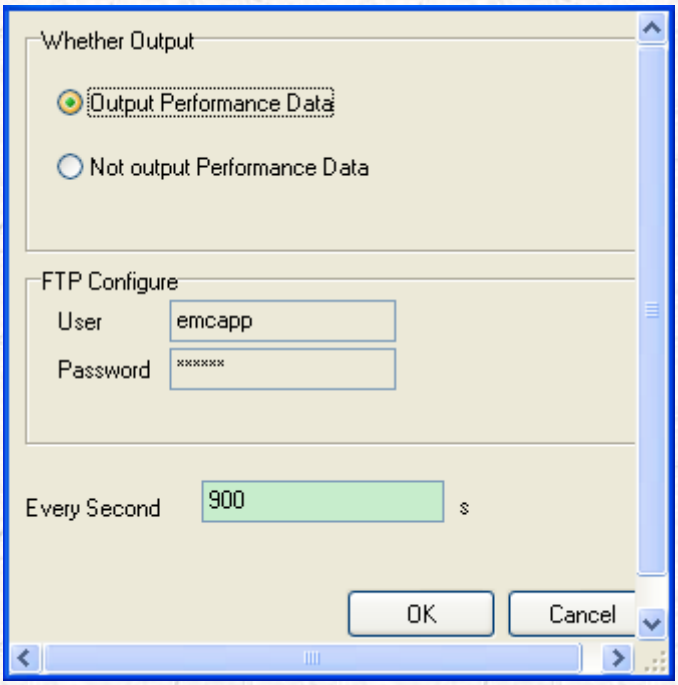
Time	CPU Idle Rate
06-11 17:31	95.00%
06-11 17:45	97.00%
06-11 17:59	97.00%
06-11 18:13	95.00%
06-11 18:27	97.00%
06-11 18:41	96.00%
06-11 18:55	96.00%
06-11 19:09	95.00%
06-11 19:23	94.00%
06-11 19:37	93.00%
06-11 19:51	95.00%
06-11 20:05	93.00%
06-11 20:19	95.00%
06-11 20:33	94.00%
06-11 20:47	96.00%
06-11 21:01	96.00%
06-11 21:15	95.00%
06-11 21:29	95.00%
06-11 21:43	95.00%
06-11 21:57	94.00%
06-11 22:11	96.00%
06-11 22:25	96.00%
06-11 22:39	94.00%
06-11 22:53	94.00%
06-11 23:07	96.00%
06-11 23:22	95.00%
06-11 23:36	95.00%
06-11 23:50	85.00%
06-12 00:04	93.00%

Picture 8-25Monthly statistics

Note: To generate this report, you must set a good time in the scheduled task, and must be of the "daily report", "Weekly Report" and "Monthly Report" check on the setting items in the collection configuration.

8.9 Output performance data

Performance data refers to data reported configured locally generated performance monitoring of packaged and then sent via FTP server.



Picture 8-26Output performance data

[Output switch]: Do you want to upload performance monitoring data.

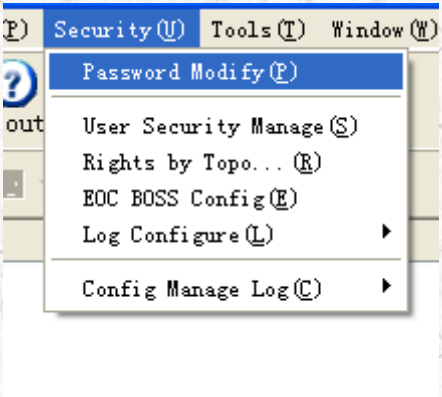
[Parameters] FTP: FTP settings.

[Interval]: Interval much time for delivery.

Chapter 9 Security Log Management

9.1 Security Log Management menu

The Security Log Management menu as shown below, followed by a small section of the menu functions do each of these in detail.



Picture 9-1Security menu

9.2 Modify password

Log on user NMS can secure "all Log Management" in ➔ "Password to modify", as shown in the interface, change their

own passwords.

Picture 9-2Modify username and password

9.3 User Security Management Configuration

9.3.1 User Security Management Configuration Description

The NMS security management system can be configured for centralized management of users, including:

1, create a system user

2, delete system users

3, set up user accounts and passwords

4, the current state of the display and set the user's

5, set user permissions

6, set the user can manage devices

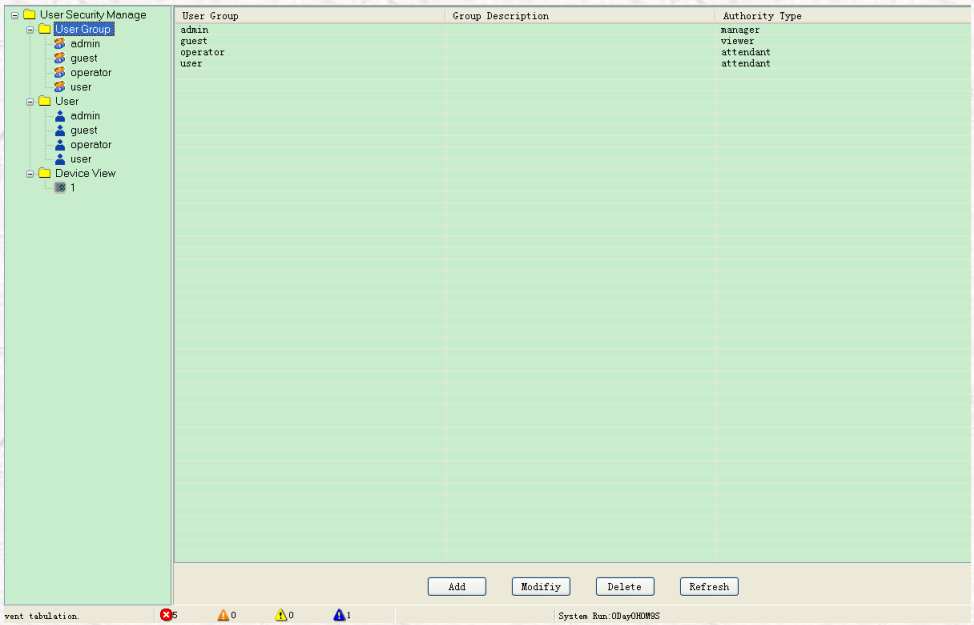
7, set the user's profile

8, view the user's operating records

9, modify user passwords

10, the user can manage devices, personal name and user ID check three ways

The main users of the system management list shows the current system user ID, user name, belongs to the user group and user state in the form of a list, which includes the state of online, offline, disabled, account expiration, password expiration, prohibited login. Security Management Configuration main interface as shown.

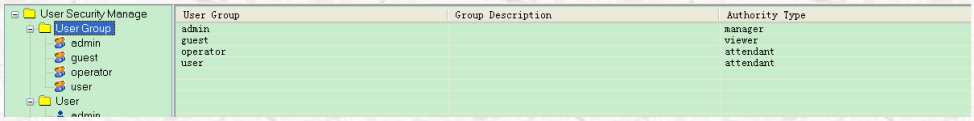


Picture 9-3Security management

9.3.2 User group

9.3.2.1 Description

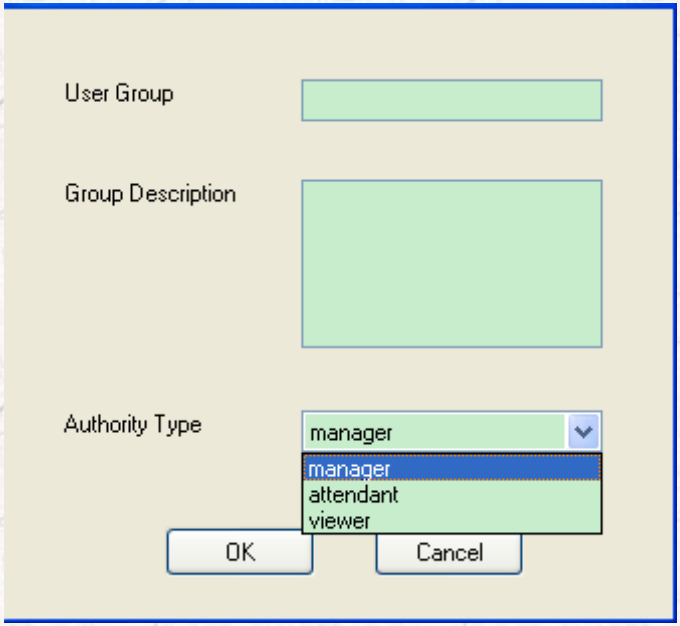
User group is a collection of some of the user's operating authority, each user must have a user group, as shown below.



Picture 9-4User group

9.3.2.2 Add user group

Click the Add button, the following interface will appear



Picture 9-5Add user group

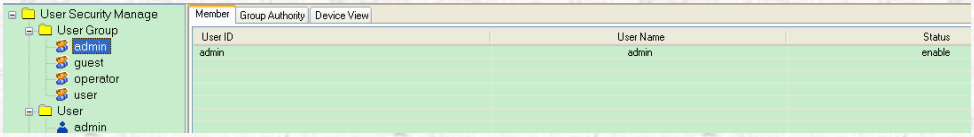
User groups: group name.

Packet Description: the case of a brief description of the group, such as the operating authority, and the like can be written to the members.

Permission types: There are three types of authority, namely administrators, maintenance staff, view members, different permissions corresponding to different types of privileges.

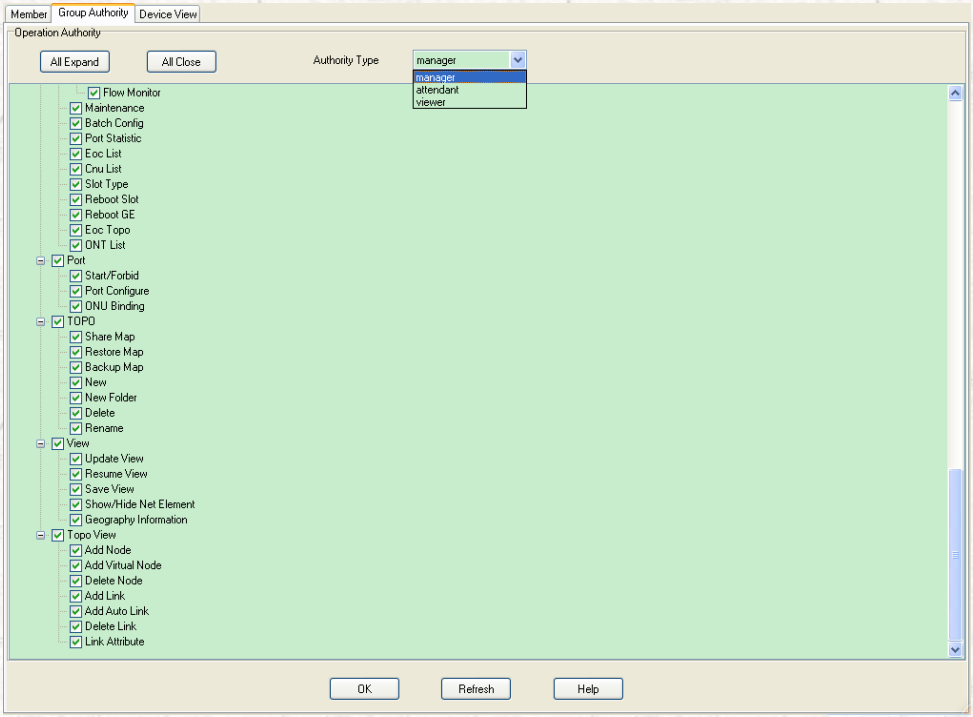
9.3.2.3 Single user group operation

Members: Each user group has a user group with the same name as the user. As shown below for the admin user group membership figure.

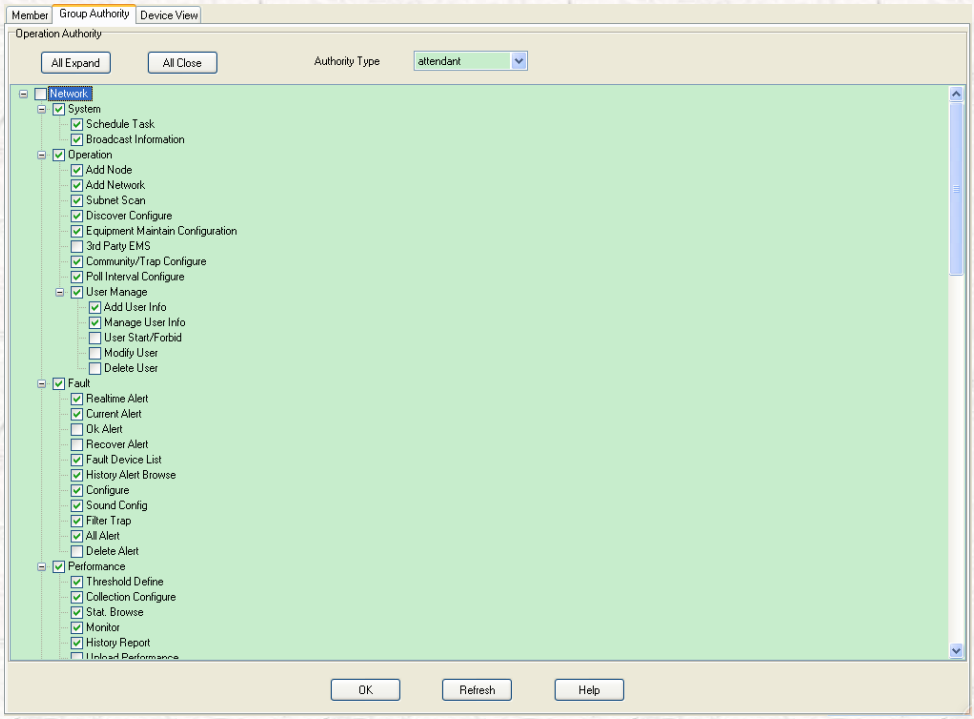


Picture 9-6Admin user group member

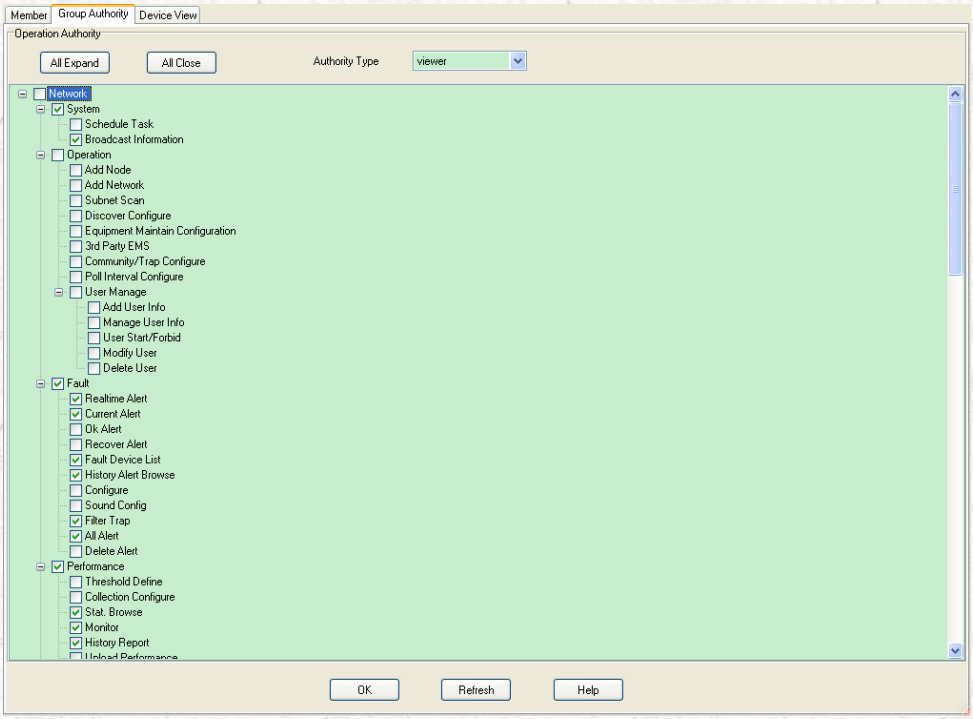
Group permissions: different user groups corresponding to different permissions, as shown administrator privileges, the highest level diagram, followed by maintenance staff, the lowest level for viewing member.



Picture 9-7administrator



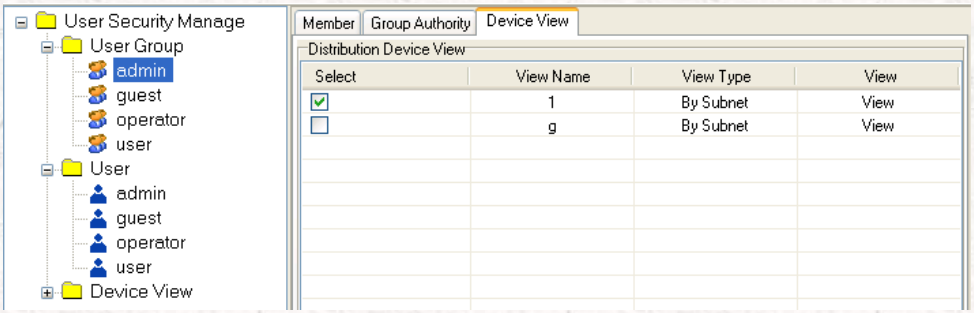
Picture 9-8Maintain administrator



Picture 9-9Check member

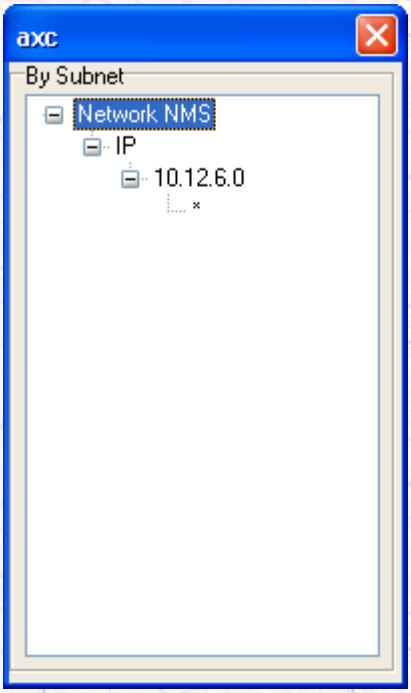
Note: Each user group can be subdivided operating authority, details are shown in Table 9-1.

Management device view: whether a user group can manage the device view. First you need to add the device in the device view, this will be mentioned later.



Picture 9-10Manage device

As shown above, selected, then the user group can manage the device view, click View, the following interface will appear.



Picture 9-11Check device

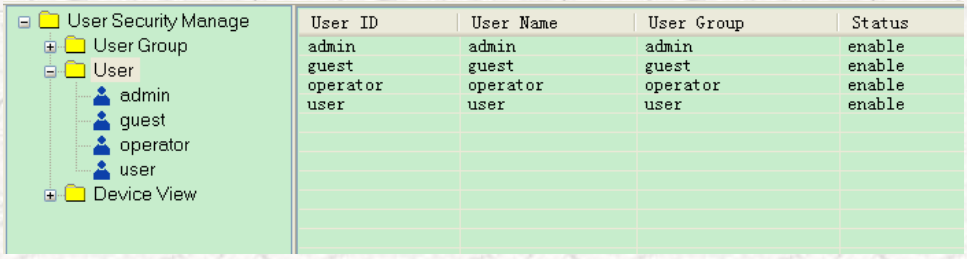
Table 9-1 Privilege description

Work group	Check dat	Add/dele e node	Capacit polling	Confi ure devic	Confi ure syste m	Backup	Securit manag ment	Note
Guests	√							Do not allow any write operation
Users	√	√						Network nodes can be added and deleted events and alarms, the user management operations
Operat ors	√	√	√	√				Allow the performance of polling configuration, including modify / delete polling object, set thresholds and other related polling operation, and the device can be configured
Admin	√	√	√	√	√	√	√	The highest level, you can configure the system, backup and restore the database, shut down the server, but also to security management

9.3.3 User

9.3.3.1 Description

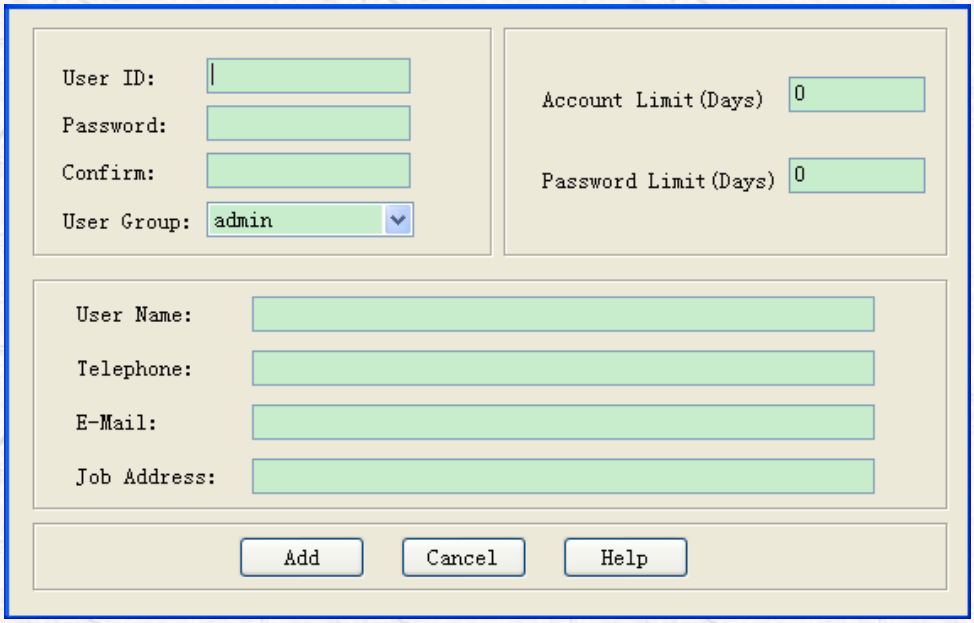
As shown below, the user interface, the system default of four users, user groups with the same name that four users.



Picture 9-12User interface

9.3.3.2 Add user

Add users mainly includes three sections: Layout of a user ID and password as well as user group belongs. The first two sections for the duration of your account and password. The third is to set the layout of the user ID user information, including user name, telephone, E-Mail address and work address. Wherein the user ID and password are required for the items. As shown in FIG.



Picture 9-13Add user

User ID: Enter the user's ID (login account name), when you add a user must choose (a length of 5-28).

Password: Set the user's password, required when adding users.

User Group: Set user group. That authority, when you add a user must choose, the default is guest.

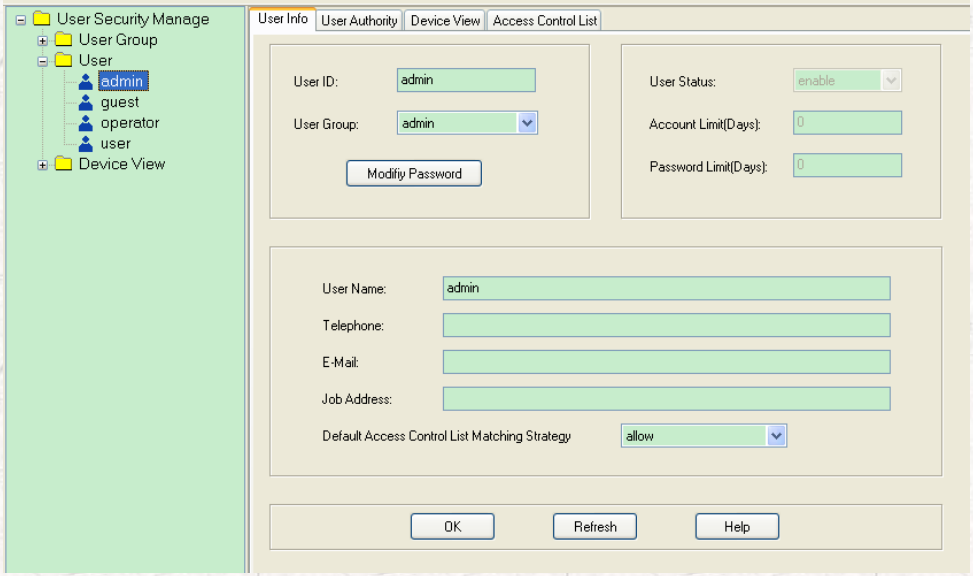
Account Term: Set account the effective time (days), 0 is no time limit, the default is 0.

Password Age: set a password valid time (days), 0 is no time limit, the default is 0.

9.3.3.3 Modify user

9.3.3.3.1 user info

And add a user to modify the user generally similar, the difference is to change the password out separately and added "Set the user's status." Edit the user can click on a user, the user interface will pop up automatically.



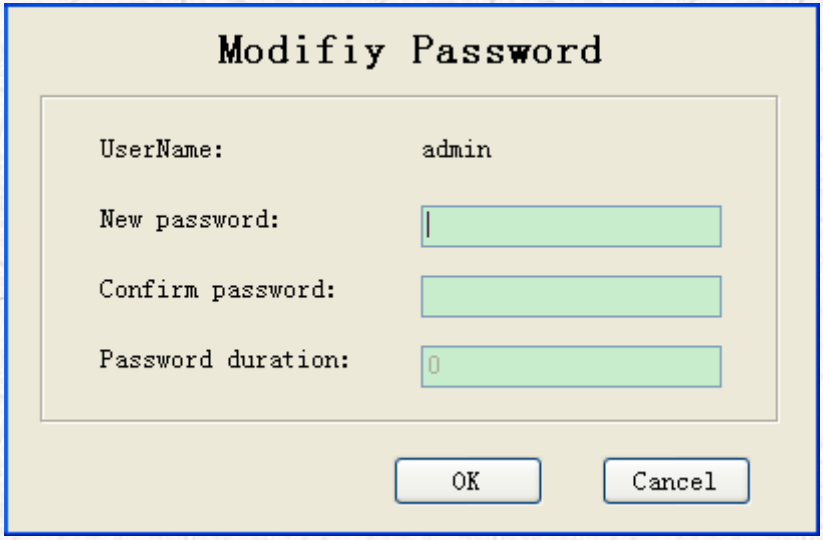
Picture 9-14User info

User Status: Enable / Disable account when selecting ban users, if a user is logged on at the time, the user will be forced to exit the system.

Accounts Term: Specify a number of days, after time, if not re-edit is not available, 0 is unlimited.

Password Age: Specify a number of days, after time, if not modified, then the password is not available, 0 is unlimited.

Change Password: In the figure above, click on the Change Password interface as shown below.



Picture 9-15Modify user’s password

User Name: The user's name

Tel: The user's phone number

E-Mail Address: the user's E-Mail

Work Address: The user's work location

The default access control list matching strategy: Visit

some IP addresses, allowing, you can access, denied, denied.

9.3.3.3.2user privilege

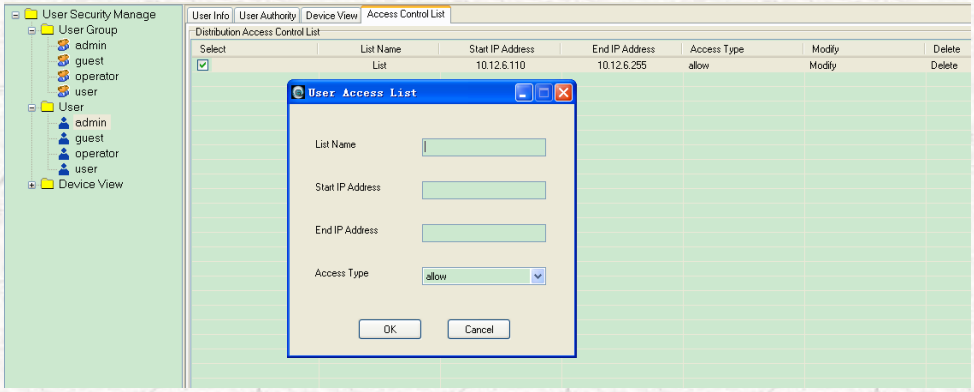
The default permissions for the user group, but you can customize the permissions. For details, see Introduction to the user group permissions.

9.3.3.3.3Management device

This function must first add the devices in a user group, or can not operate, methods of operation and the type of operation the user group, you can view the user group operating on the managed device view.

9.3.3.3.4 ACL

As shown below, by adding, to increase access control lists.



Picture 9-16Add ACL

List Name: The name of the list

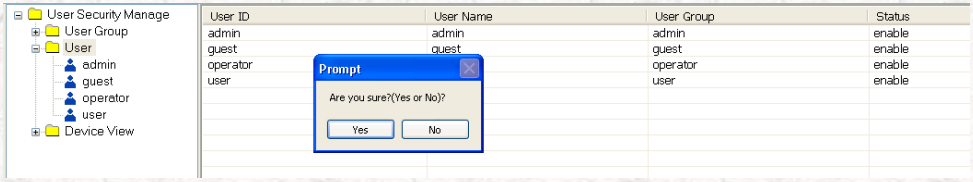
IP address of the start of the visit: Start IP address

End IP Address: You can access the end of the IP address.

Access: Users can access the IP address of the segment.

9.3.3.4 Delete user

Showing records of a user record to be deleted, and then through the "delete" icon on the toolbar to delete a user, then there is the dialog box shown in Figure with a mouse click. If "Yes", the user is deleted.



Picture 9-17Delete user

9.3.4 Show user operation record

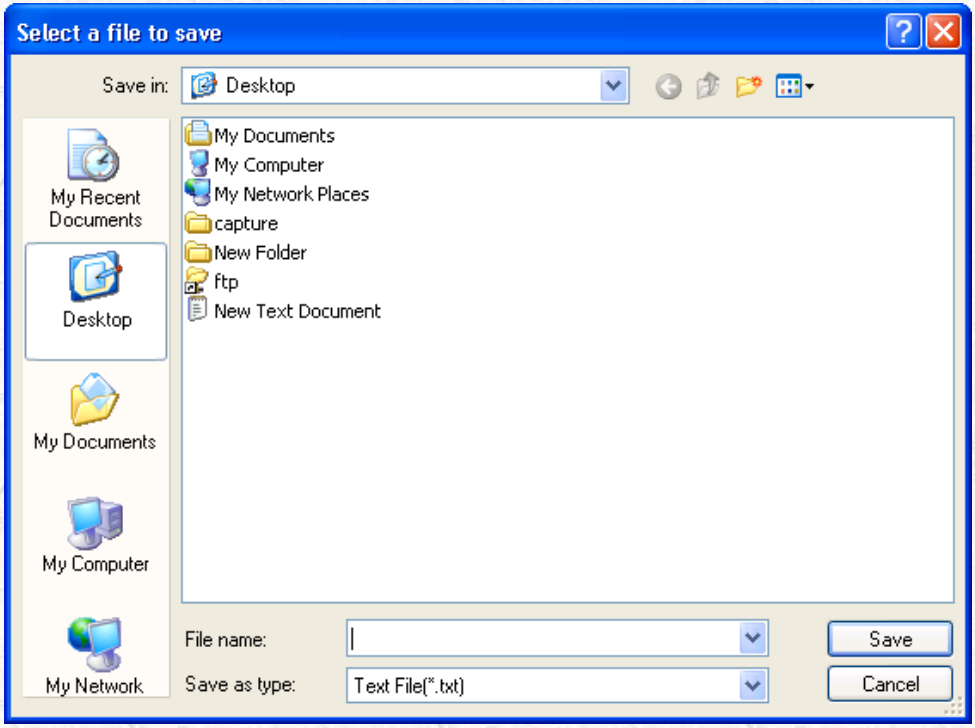
At the midpoint of the main interface to the "User" that sub-tree, as shown in the interface will appear, click the operating records can show the user interface of the operating record.

No.	User Name	Operate Name	Time	Status
10	admin	admin create view	2014-06-11 17:35:45	Success
9	admin	User login	2014-06-11 16:57:40	Success
8	admin	User login	2014-06-11 16:55:00	Password Error
7	xaaa	User login	2014-06-11 16:54:39	Not user
6	admin	User exit	2014-06-11 16:44:08	Success
5	admin	User login	2014-06-11 14:13:14	Success
4	admin	User exit	2014-06-11 11:21:20	Success
3	admin	User login	2014-06-11 11:20:38	Success
2	admin	User exit	2014-06-11 11:20:29	Success
1	admin	User login	2014-06-11 09:58:35	Success

Picture 9-18User operation log

Click "Save to File" button to display the file dialog box, as shown below.

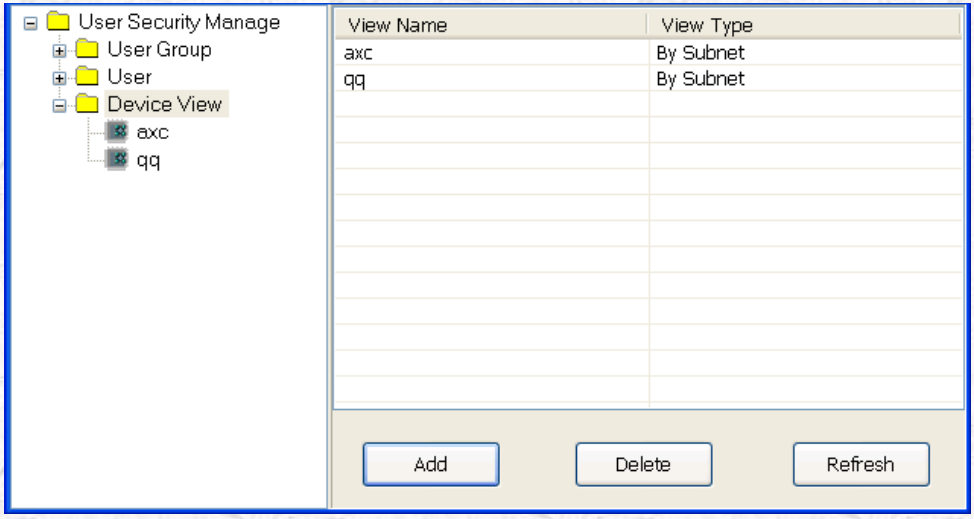
Set the correct path and file name and file format, click the Save button.



Picture 9-19Save file

9.3.5 Configuration management device

Management device configuration means that the view can be configured to contain a specific device and assign it to a specific user, so that the user can manage devices that are included in the view. This view can be configured to view configuration via the main interface calls. The figure is the call management device configuration interface through the main interface.



Picture 9-20Manage device

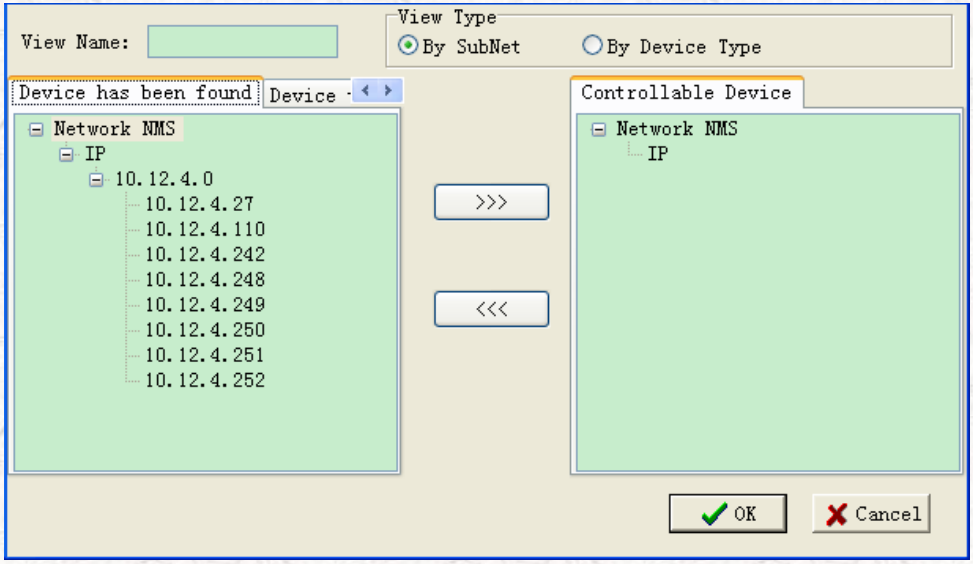
If the view name which has a corresponding device, double-click the field, it will open the Device View window, as shown below.

Picture 9-21Device info

If the list is not the right view, you can add a new view by clicking on the button to open a new view management view configuration interface. Where "*" indicates all the tubes under the subnet IP address.

Add View column refers to the equipment currently exists in the object database management tree on the left for the user to select the device can be managed, and create a new view.

Click the Add button, there will be as shown below.



Picture 9-22Add view

By setting the view name, select the type of view, and select the appropriate device from the device tree on the left, you can form a device management view.

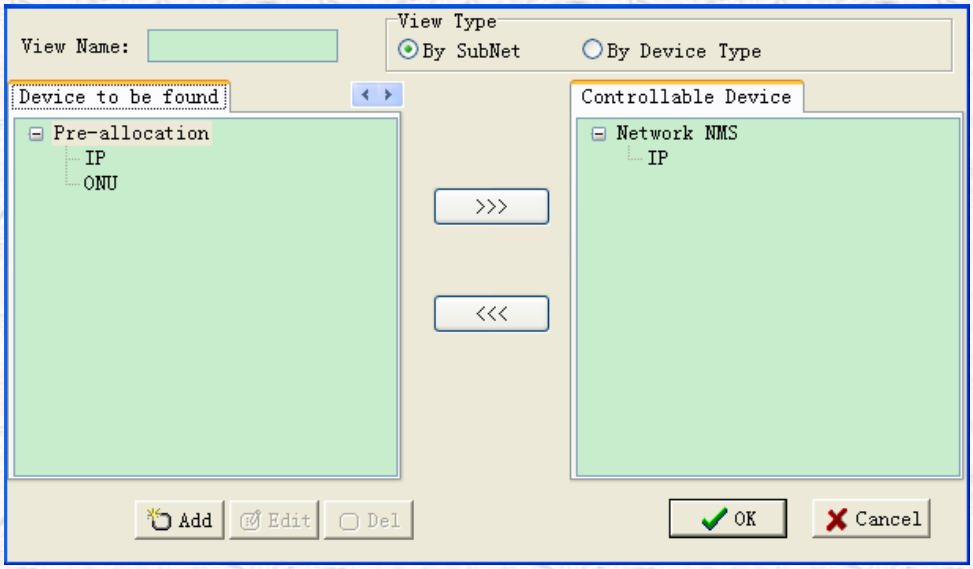
Click the Delete button will delete the selected view from the system, if the view has been configured to the user, then remove it from the same users.

Note: If the user via the "Delete NE" Delete device, the system will delete the management device in the appropriate device.

Equipment has been found: the already existing

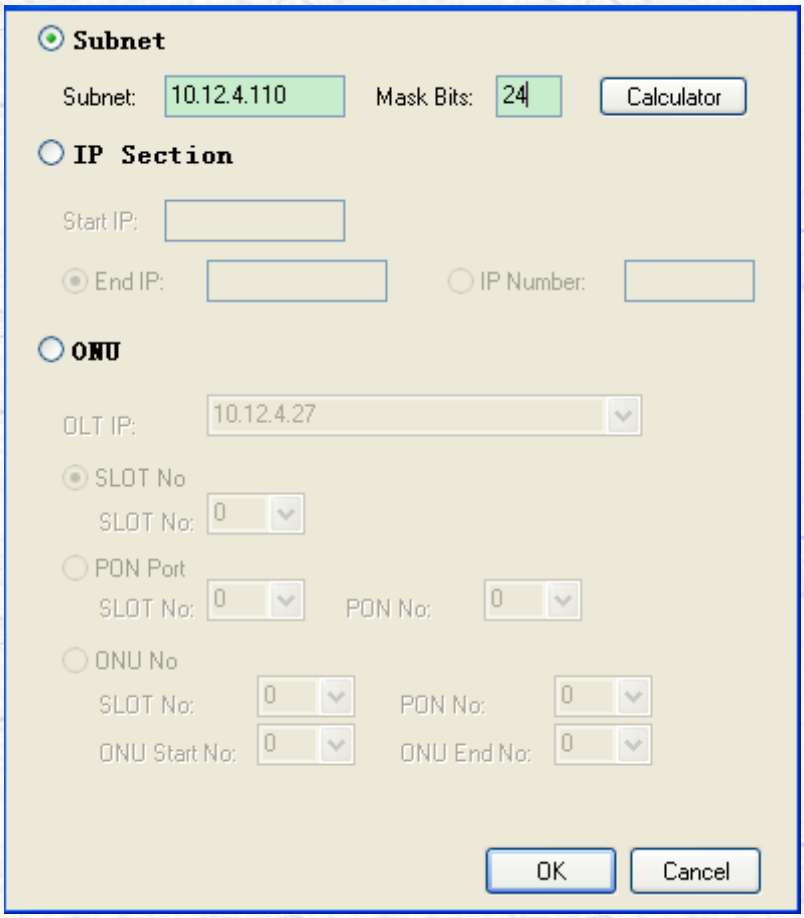
equipment management system

Be found in equipment: equipment used to search for the presence but not found, as shown below.



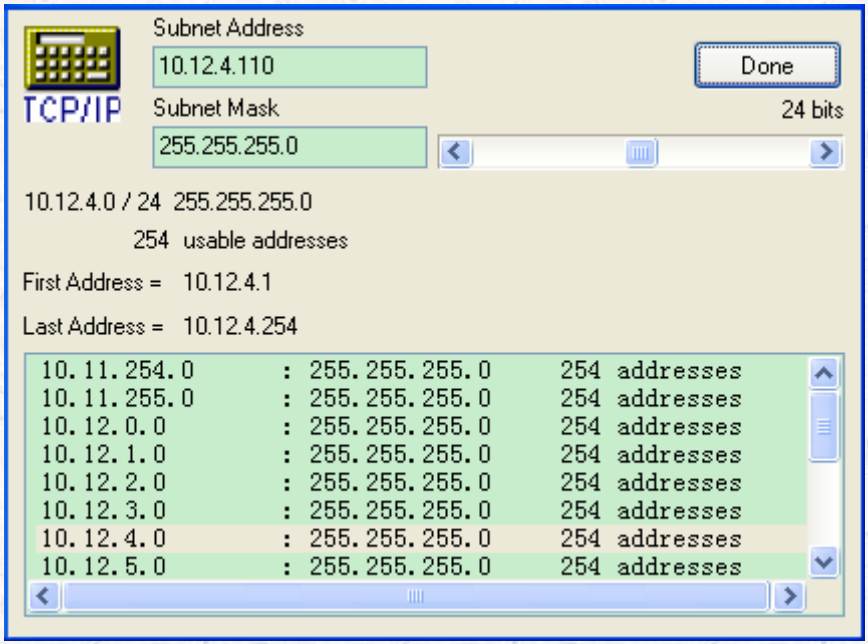
Picture 9-23Device to be found

Click “new-add”.



Picture 9-24add

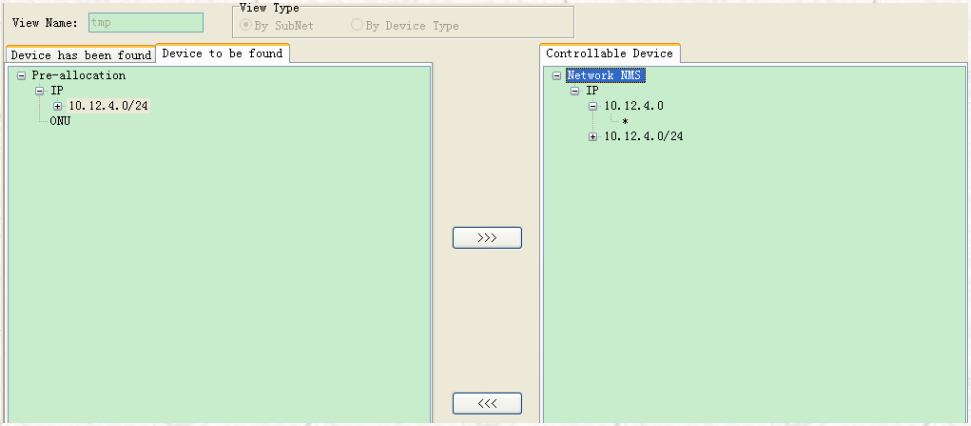
1、 **Subnet:** Select a subnet, subnet calculation performed, as shown below.



Picture 9-25Sub-net calculate

2、 **IP**：Used to calculate the available IP addresses, IP Start IP is the starting address search, search IP End IP is the ending address, IP number refers to the number calculated from the starting address, where IP address and ending IP number can only choose one.

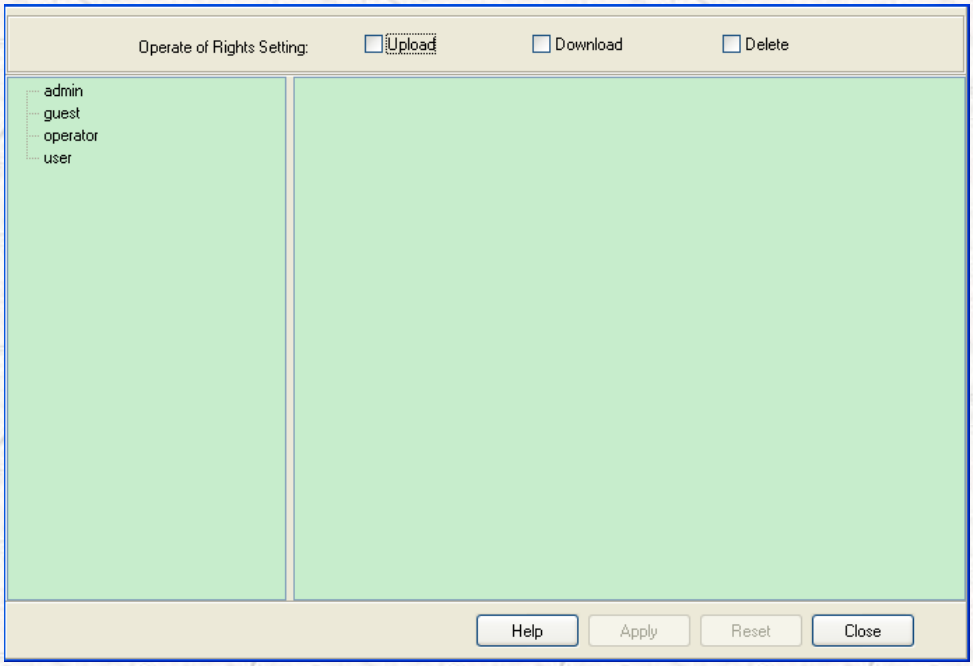
3、 **ONU**：Search for ONU equipment. First select the OLT's IP address, and then search through the slot number / PON port / ONU number. Search results are as follows



Picture 9-26Search result

9.4 Configure TOPO privilege

Through the "Security Log Management" ➔ "Settings Topo permission ..." menu, you can specify permissions for users Topo figure (This feature requires back-end servers running FTP server), as shown below.

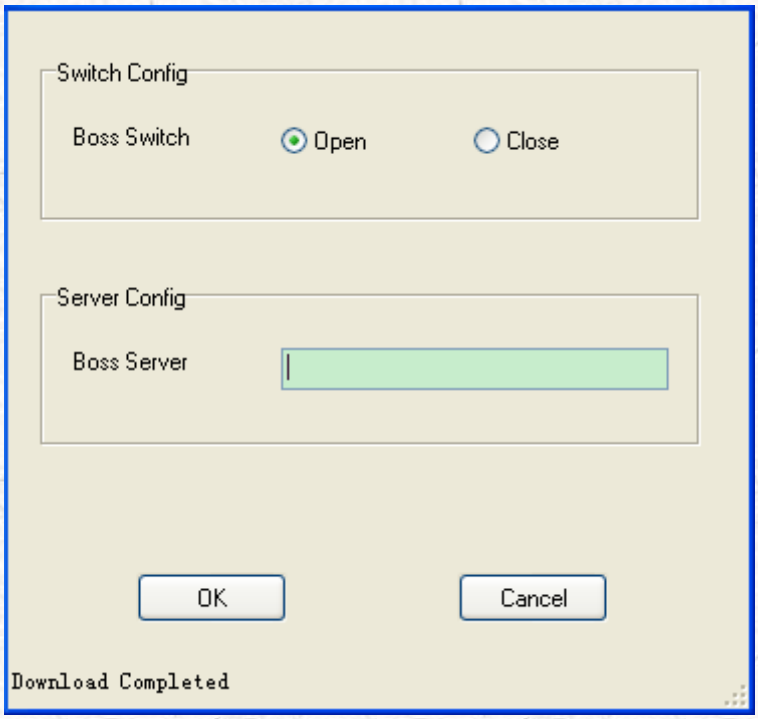


Picture 9-27Topo privilege management

Interface, the user can select can browse the files, but can also be set with user groups operating authority.

9.5 EOC BOSS

Related configuration EOC BOSS server, open interface as shown below



Picture 9-28EOC BOSS

Switch Configuration: Authentication switch is turned BOSS

BOSS server configuration: Choose BOSS authentication server.

9.6 Log configuration

Log configuration module is mainly used to set the server, client, and alarm forwarding, the main module running

information. Including:

1, the output switch

2, the output file

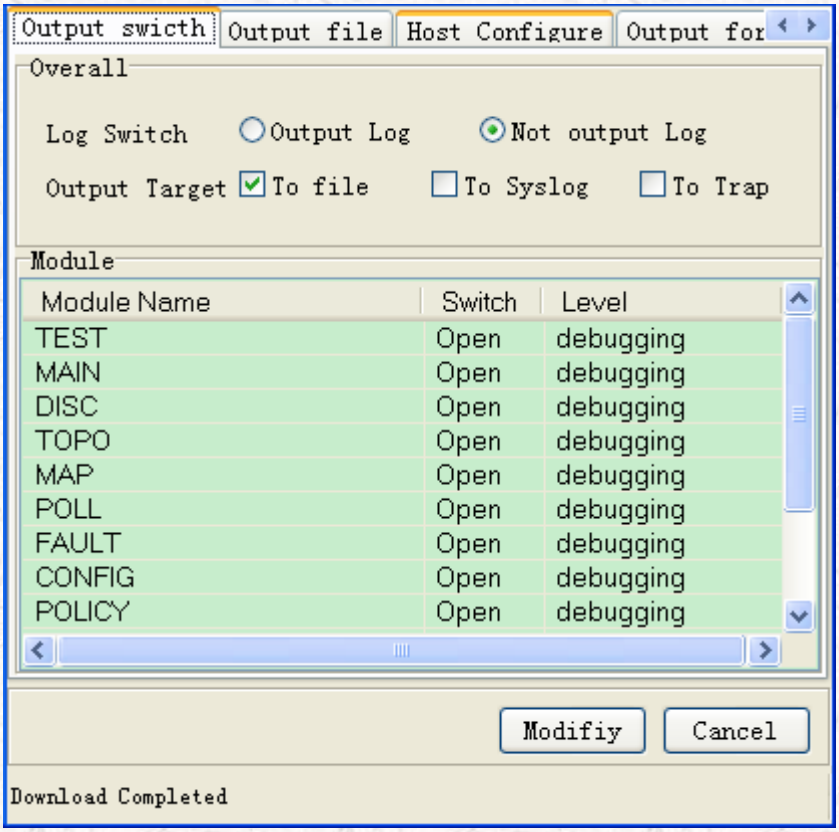
3, the host configuration

4, the output format

In the log server configuration, for example, the client and the server log configuration the same way. The difference is that the log server configuration information retrieved from the server. Log level can be configured in the server, the client configuration for log operations related to the need to restart the corresponding end to take effect.

9.6.1 Output

The output switch includes the log output switch, the output target selection and the log level settings, as shown below.



Picture 9-29Output

Log output switch: if the output log.

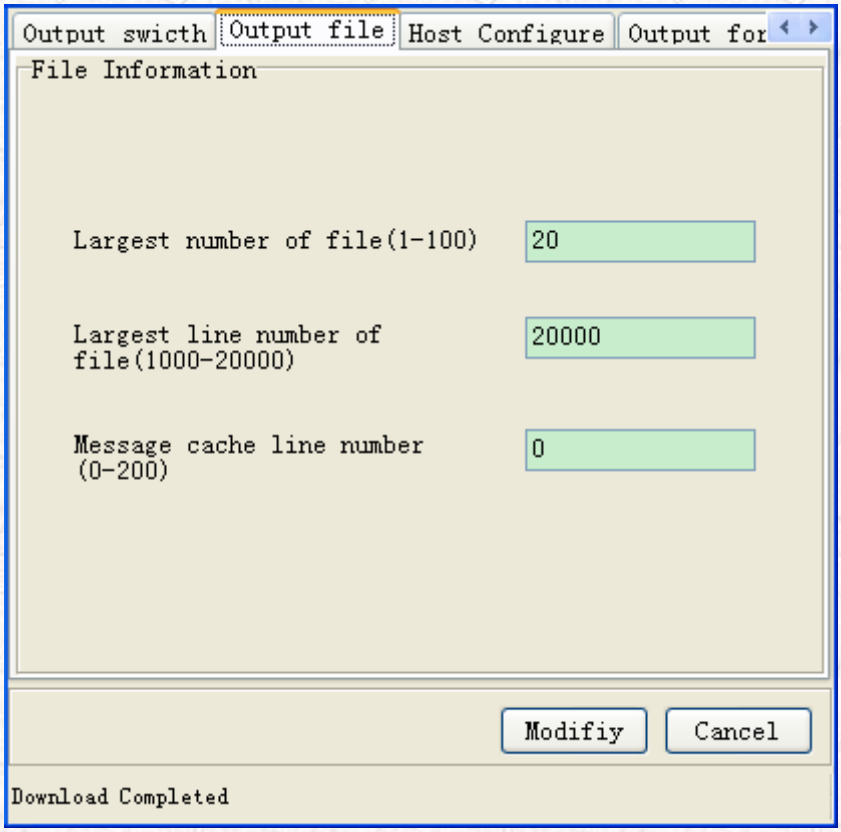
Output target selection: Target options include "Print to File", "output to Syslog" and "output to Trap" these three, you can multi-select.

Log Level: used to set the system TEST MAIN DISC TOPO MAP POLL FAULT CONFIG POLICY SECURITY SERVER TFTP these twelve modules logging output switch

and level.

Output file

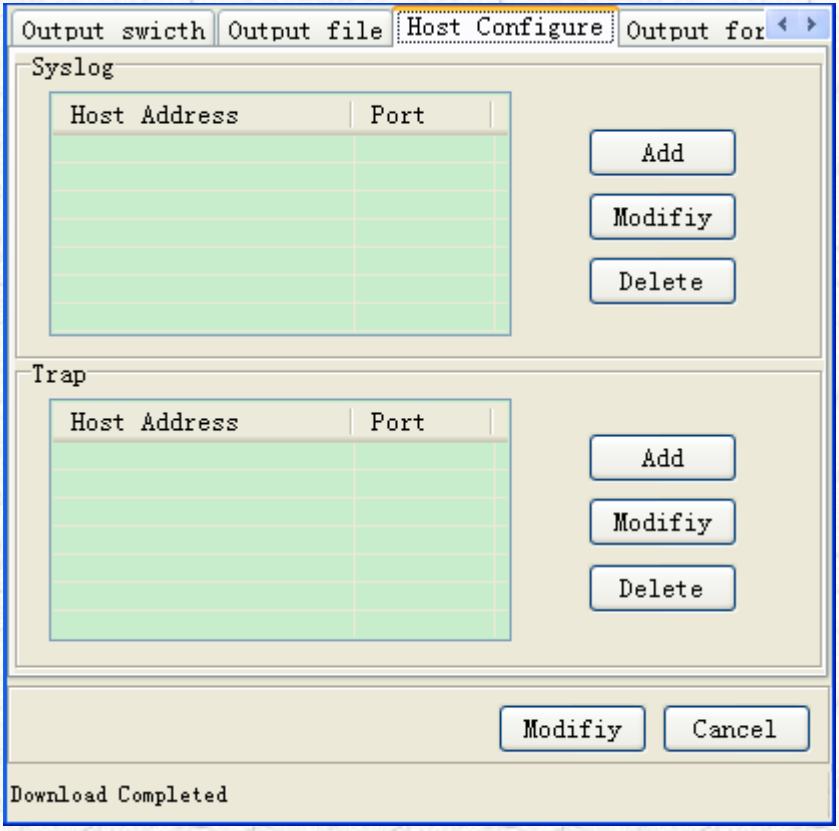
The output file is used to control the maximum number of log files, each file maximum number of rows and rows message buffer, as shown below.



Picture 9-30Output file

9.6.2 Host configuration

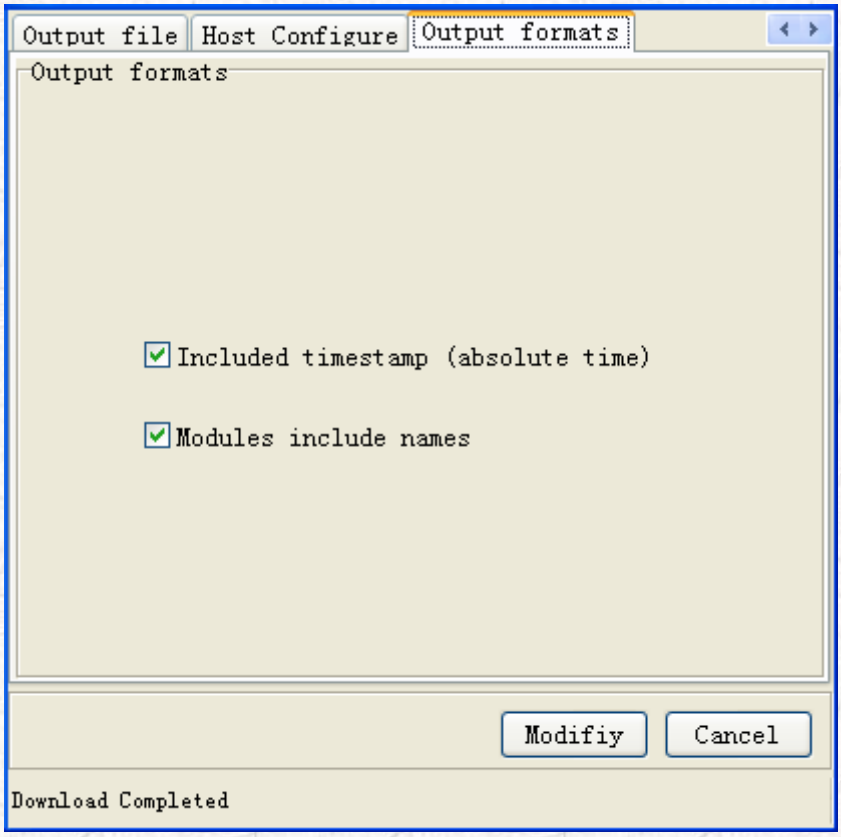
Host Configuration to configure Syslog and Trap host address and port number, and the number and Syslog Trap hosts are not over 15. As shown below.



Picture 9-31Host configuration

9.6.3 Output format

Output formats used to configure whether to include a global serial number, time stamp, and the module name, as shown below.



Picture 9-32Output format

9.7 Manage configuration log

Configuration log management primarily used to record when a user which device configuration management operations, and saved configuration item configuration.

9.7.1 Monthly log

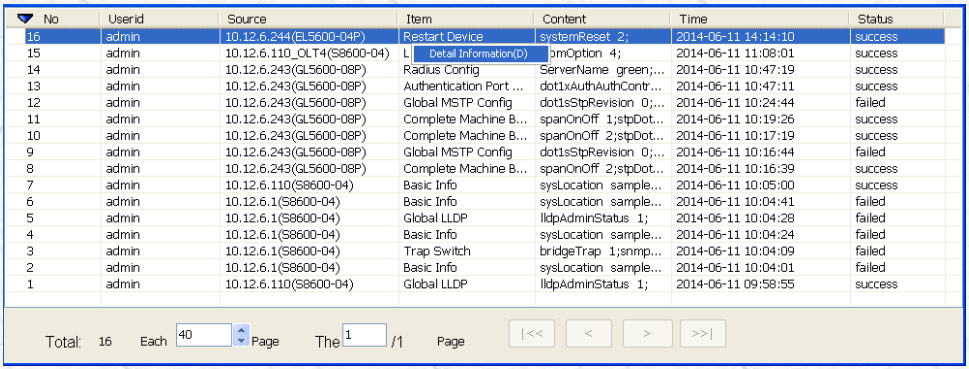
Log month view shows a list of each configuration operation number, user name, device IP (type), action items, configure content, time and status.

No	Userid	Source	Item	Content	Time	Status
16	admin	10.12.6.244(EL5600-04P)	Restart Device	systemReset 2;	2014-06-11 14:14:10	success
15	admin	10.12.6.110_OLT4(S8600-04)	Light parameter exa...	OpmOption 4;	2014-06-11 11:08:01	success
14	admin	10.12.6.243(GL5600-08P)	Radius Config	ServerName green;...	2014-06-11 10:47:19	success
13	admin	10.12.6.243(GL5600-08P)	Authentication Port ...	dot1xAuthAuthContr...	2014-06-11 10:47:11	success
12	admin	10.12.6.243(GL5600-08P)	Global MSTP Config	dot1sStpRevision 0;...	2014-06-11 10:24:44	failed
11	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 1;stpDot...	2014-06-11 10:19:26	success
10	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 2;stpDot...	2014-06-11 10:17:19	success
9	admin	10.12.6.243(GL5600-08P)	Global MSTP Config	dot1sStpRevision 0;...	2014-06-11 10:16:44	failed
8	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 2;stpDot...	2014-06-11 10:16:39	success
7	admin	10.12.6.110(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:05:00	success
6	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:41	failed
5	admin	10.12.6.1(S8600-04)	Global LLDP	lldpAdminStatus 1;	2014-06-11 10:04:28	failed
4	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:24	failed
3	admin	10.12.6.1(S8600-04)	Trap Switch	bridgeTrap 1;snmp...	2014-06-11 10:04:09	failed
2	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:01	failed
1	admin	10.12.6.110(S8600-04)	Global LLDP	lldpAdminStatus 1;	2014-06-11 09:58:55	success

Total: 16 Each 40 Page The 1 /1 Page |<< < > >>|

Picture 9-33Monthly log

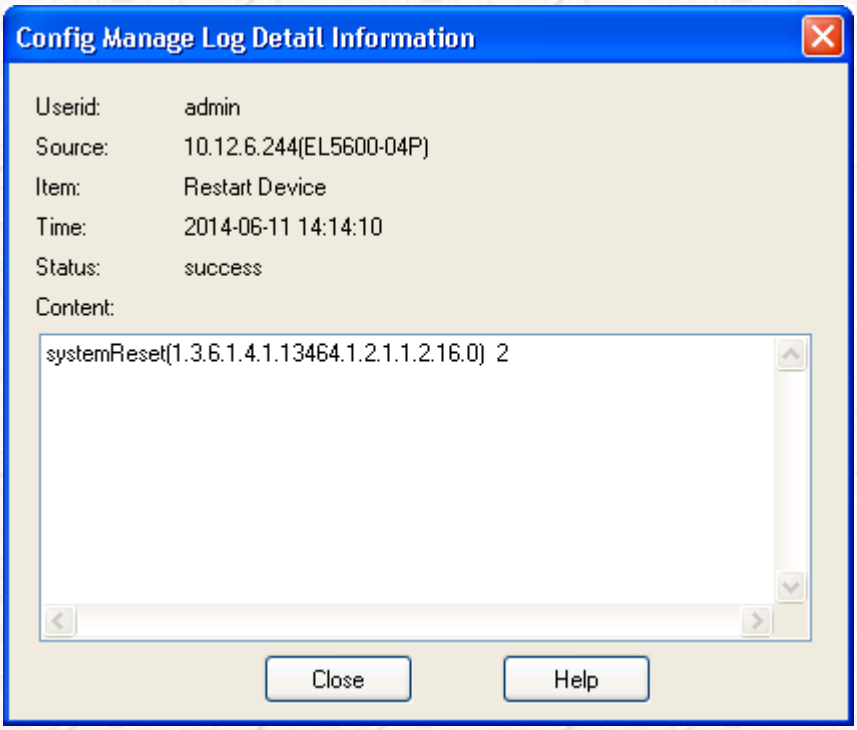
Menu shown below will appear when you right.



No	Userid	Source	Item	Content	Time	Status
16	admin	10.12.6.244(EL5600-04P)	Restart Device	systemReset 2;	2014-06-11 14:14:10	success
15	admin	10.12.6.110_OLT4(S8600-04)	L Detail Information(D)	omOption 4;	2014-06-11 11:08:01	success
14	admin	10.12.6.243(GL5600-08P)	Radius Config	ServerName green;...	2014-06-11 10:47:19	success
13	admin	10.12.6.243(GL5600-08P)	Authentication Port ...	dot1xAuthAuthContr...	2014-06-11 10:47:11	success
12	admin	10.12.6.243(GL5600-08P)	Global MSTP Config	dot1sStpRevision 0;...	2014-06-11 10:24:44	failed
11	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 1;stpDot...	2014-06-11 10:19:26	success
10	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 2;stpDot...	2014-06-11 10:17:19	success
9	admin	10.12.6.243(GL5600-08P)	Global MSTP Config	dot1sStpRevision 0;...	2014-06-11 10:16:44	failed
8	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 2;stpDot...	2014-06-11 10:16:39	success
7	admin	10.12.6.110(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:05:00	success
6	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:41	failed
5	admin	10.12.6.1(S8600-04)	Global LLDP	lldpAdminStatus 1;	2014-06-11 10:04:28	failed
4	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:24	failed
3	admin	10.12.6.1(S8600-04)	Trap Switch	bridgeTrap 1;snmp...	2014-06-11 10:04:09	failed
2	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:01	failed
1	admin	10.12.6.110(S8600-04)	Global LLDP	lldpAdminStatus 1;	2014-06-11 09:58:55	success

Total: 16 Each 40 Page The 1 /1 Page |<< < > >>|

Picture 9-34Right button menu



Picture 9-35Details

User Name: The user name of the management of the device.

Device IP (type): IP address and the corresponding types of equipment.

Action Item: How to configure conducted.

Time: Configuration time is up.

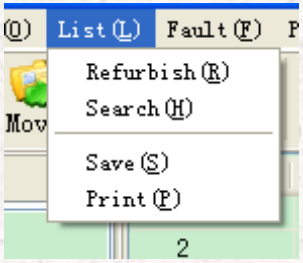
Status: success.

Configure Content: detailed display configuration.

9.7.2 List menu

9.7.2.1 Refresh

Select "List" in the main menu ➔ "Refresh", you can refresh the current log browse list.

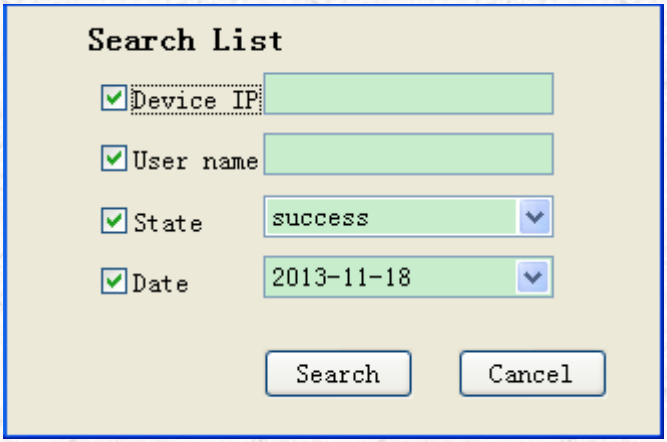


Picture 9-36List menu

9.7.2.2 Search

Select "List" in the main menu ➔ "Find", then pop up

dialog box to find below.

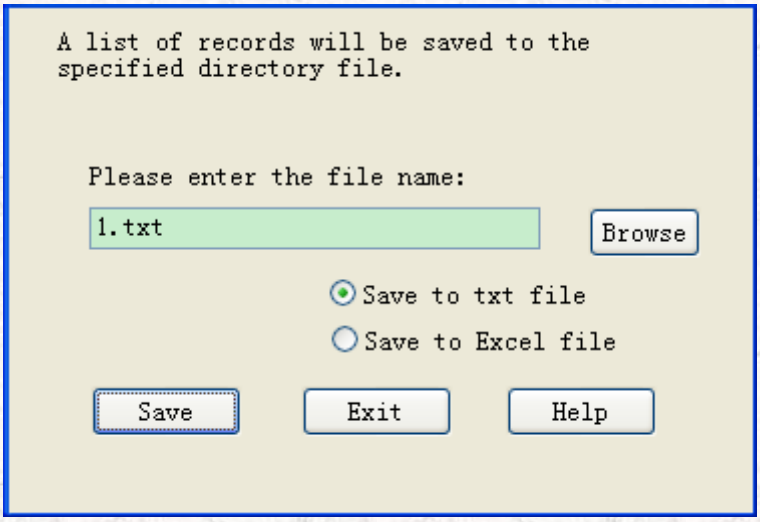


Picture 9-37Search

There are four query, equipment IP, user name, status and time on list query dialog. After the query is set up, click the "Search" button to search.

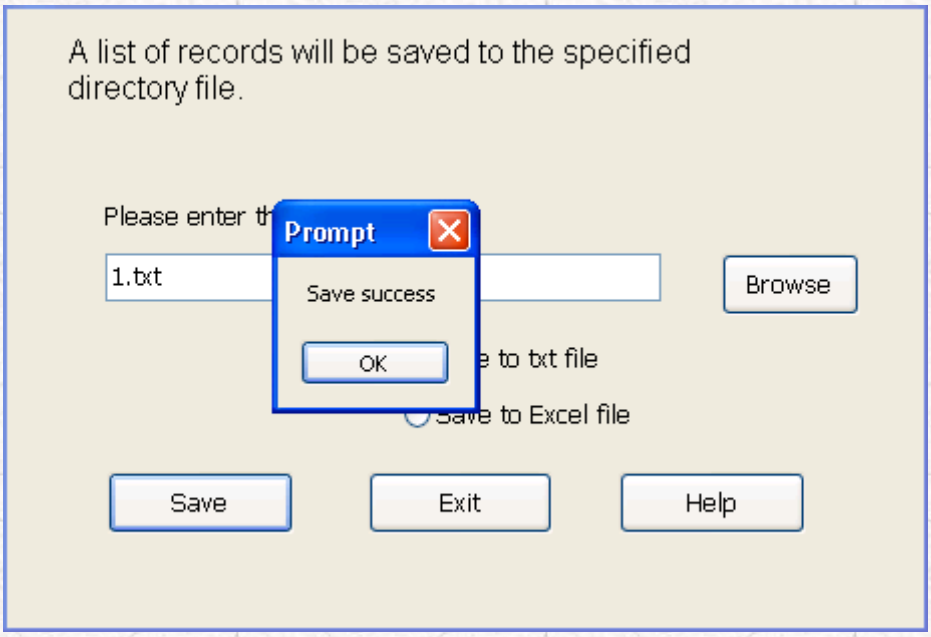
9.7.2.3 Save

Select "List" in the main menu ➔ "Save", you can browse the list to save the current log information to a file. When you select this menu, the dialog box will pop up as shown below.



Picture 9-38save

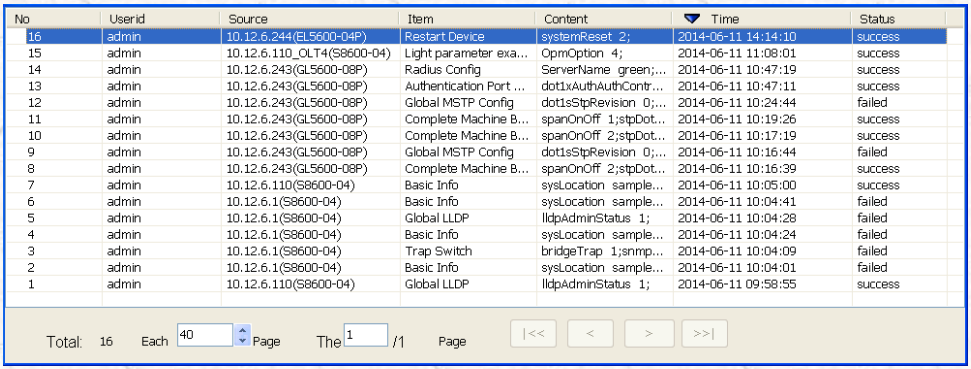
Fill in which you need to save the file name, and choose to save the file type, set the save path. Save the file after the operation is successful, there is prompt box as shown.



Picture 9-39Save successful

9.7.3 Monthly log order

During the current log browsing, the mouse can click the browse list header, the data for the currently displayed page in ascending or descending order. Use the mouse to click on the appropriate header entries after sorting, the blue arrow will appear after the head of the table entries. As shown below, as at the "Time" field on the results page displayed in ascending order.



No	Userid	Source	Item	Content	Time	Status
16	admin	10.12.6.244(EL5600-04P)	Restart Device	systemReset 2;	2014-06-11 14:14:10	success
15	admin	10.12.6.110_OLT4(S8600-04)	Light parameter exa...	OpmOption 4;	2014-06-11 11:08:01	success
14	admin	10.12.6.243(GL5600-08P)	Radius Config	ServerName green;...	2014-06-11 10:47:19	success
13	admin	10.12.6.243(GL5600-08P)	Authentication Port ...	dot1xAuthAuthContr...	2014-06-11 10:47:11	success
12	admin	10.12.6.243(GL5600-08P)	Global MSTP Config	dot1sStpRevision 0;...	2014-06-11 10:24:44	failed
11	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 1;stpDot...	2014-06-11 10:19:26	success
10	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 2;stpDot...	2014-06-11 10:17:19	success
9	admin	10.12.6.243(GL5600-08P)	Global MSTP Config	dot1sStpRevision 0;...	2014-06-11 10:16:44	failed
8	admin	10.12.6.243(GL5600-08P)	Complete Machine B...	spanOnOff 2;stpDot...	2014-06-11 10:16:39	success
7	admin	10.12.6.110(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:05:00	success
6	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:41	failed
5	admin	10.12.6.1(S8600-04)	Global LLDP	lldpAdminStatus 1;	2014-06-11 10:04:28	failed
4	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:24	failed
3	admin	10.12.6.1(S8600-04)	Trap Switch	bridgeTrap 1;snmp...	2014-06-11 10:04:09	failed
2	admin	10.12.6.1(S8600-04)	Basic Info	sysLocation sample...	2014-06-11 10:04:01	failed
1	admin	10.12.6.110(S8600-04)	Global LLDP	lldpAdminStatus 1;	2014-06-11 09:58:55	success

Total: 16 Each 40 Page The 1 /1 Page |<< < > >>|

Picture 9-40Ascending

9.7.4 History log

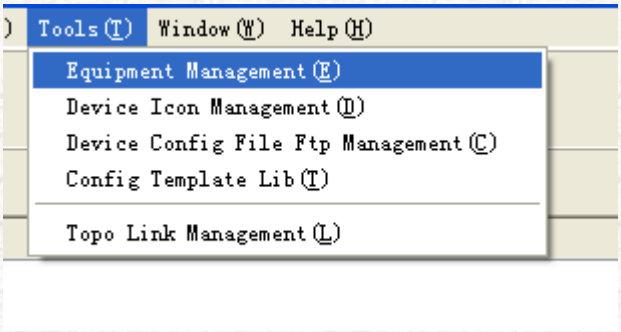
History log in the form of Web pages, records the user to configure the device management operations results.

The default time set in **"plan task"** ➔ "configure management log backup**4"** is every 1st 5:00am

Chapter 10 Tool

10.1 Tool Menu

The tool management menu as shown below:



Picture 10-1Tool Menu

10.2 Equipment Asset Management

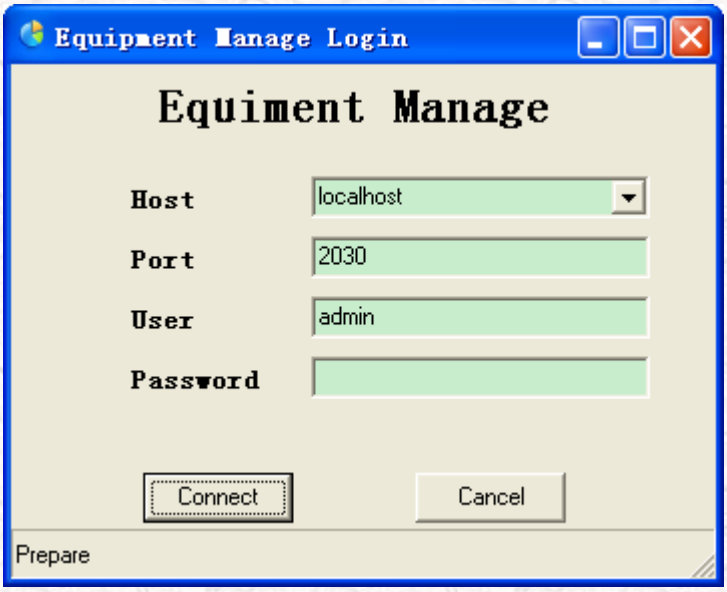
10.2.1 Equipment Asset Management Overview

When the user performing network management, in addition to the operation of the network devices to monitor settings, but also hope to network equipment as its own asset

management equipment, to maintain its position distribution, asset number, replacing the records and other information. Therefore, asset management systems is added to the platform as integrated network management system.

10.2.2 Login asset management interface

Asset management login interface is same to the client login interface, also need to enter the server address, port, and user names and passwords, using the username and password are consistent with NMS system, but can also work with a client login interface, like automatic recording used server address, the interface is shown below.

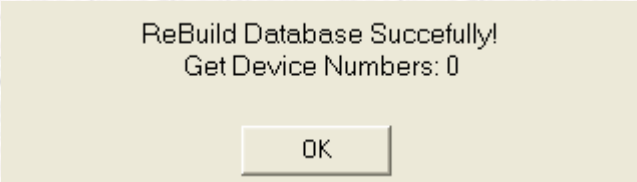


Picture 10-2Asset management login screen

10.2.3 The main interface displays

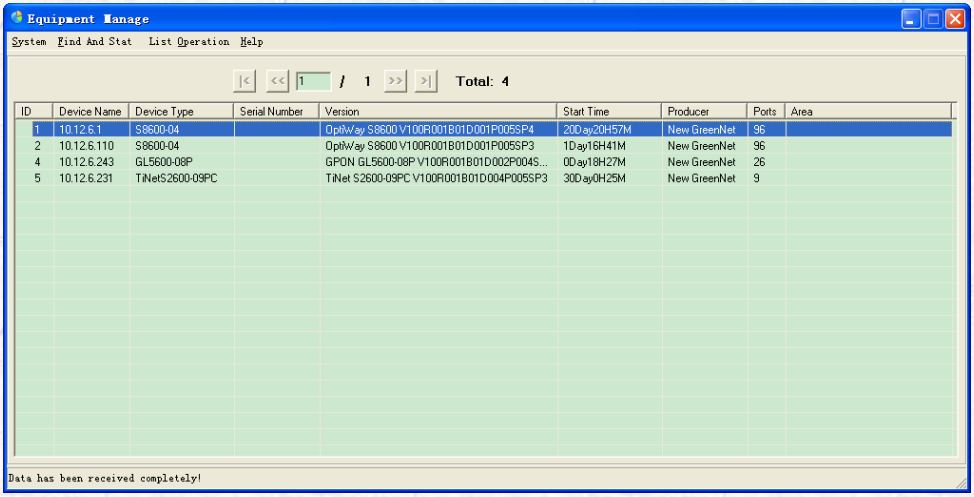
10.2.3.1 The main interface overview

Enter the correct server information and user information in the login screen, and click the "Connect" button to enter the main interface device asset management. If this is the first time to enter the asset management module, the module will automatically detect the system memory in the device information, and it can also be the main client interface tools ➔ Device Asset Management, as shown in the following figure appears after clicking.



Picture 10-3Device Information Update Alerts

Click the "OK" button to enter the main interface, as shown below.



Picture 10-4Equipment Management Main Interface

The main interface is divided into two parts, namely the menu bar, and data browsing. Menu of four, including the control of the equipment assets of the list. View the data is divided into two parts, the upper browsing control, the lower is the device asset data lists.

In addition, clicking the right mouse on the assets list, you

can open the pop-up menu that content and operation of the menu bar menu interface identical.

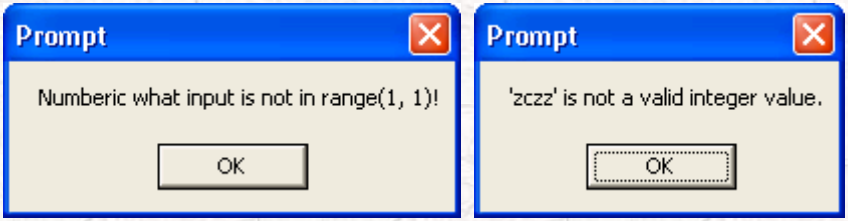
10.2.3.2 Data List View Control

Data section contains a list view control buttons to control and manipulate data and so on, from left to right are:

First button, click the button will automatically display the first page of the list of data, if the current data shows the first page, the button is invalid:

Previous button, click the button to display the previous page shows the current data table page, if the current data shows the first page, the button is invalid;；

Jump page input box, the input box contains two parts, namely the total number of pages and page input box label, in two parts using the "/" separator, you can enter the input box on the left to jump directly to the page number in the data table, after hitting the Enter key to automatically jump to the page number, if not a number or enter a page number exceeds the total number of the right side of the page, an error message will appear as shown in the following figure.



Picture 10-5Page jump box input error

Next button that appears after clicking Next list the contents of the data, if the data currently displayed as a list of the last page, the button is invalid

Last Page button, which when clicked displays a list of the last page of content data, if the data currently displayed as a list of the last page, the button is invalid;

Next button that appears after clicking the last page lists the contents of the data, if the data currently displayed list of the last page, the button is invalid

The Total label shows the total data contained in the list of the current number.

10.2.3.3 Equipment Asset Data List

Equipment asset data list contains nine items

ID, serial number identifies the device in the device asset module database, the number is automatically assigned when

the device will automatically delete old vacancy, will not fill the vacancy left by the old equipment when a new device is added;

Device name, device directly in the network management system using the name used in the system to add new devices automatically from a database management system, in general, the IP address for the device;

Device type, the device is recognized by the network management system when the system is added to the type;

Serial number, the project when the device is first added to the Asset Management module is empty, asset management requires the user to manually enter the serial number of the device number or the number specified by the user content

Version displays the version number of the device;

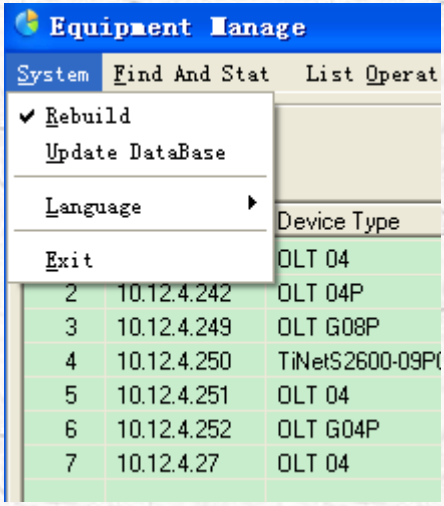
Start time, the device is currently running time, the timing of polling data acquired by the network management system platform;

Producer, seme to the device types, corresponding to the information obtained from the device management system;

Ports: Ports of device.

Area, the device is automatically generated within the network management system based on the set location, usually composed of five levels of location information from the merger.

10.2.3.4 Asset management system menu



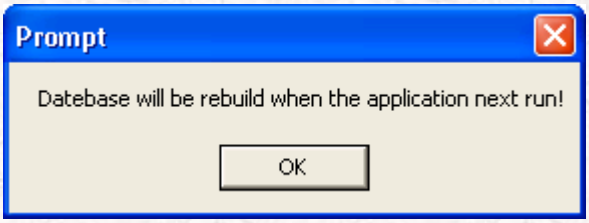
Picture 10-6System Menu

Including four menus,Rebuild,Update Database,Language,Exit.

Menu item is automatically updated when you start the Asset Management module is set to start in the first state, so that when you restart the asset management module, network management system will automatically add the device to the

asset management module to achieve the updated asset the effect of data management module.

Selecting this menu item will be prompted, as shown below.

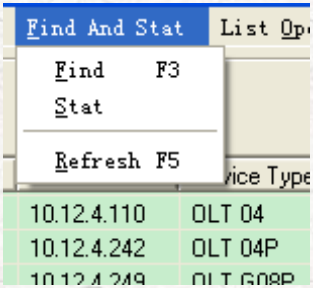


Picture 10-7Prompted to select the database updated

Language：Currently supports Chinese and English.

Exit：Click the menu will exit asset management module.

10.2.3.5 Find And Stat



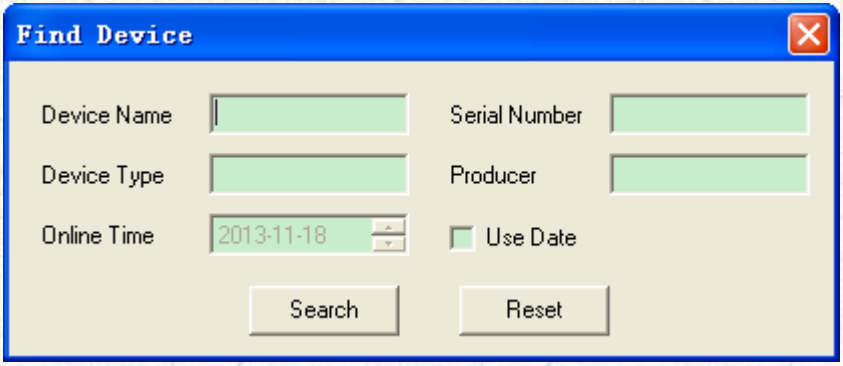
Picture 10-8Find And Stat Menu

Including there menus ,Find,Stat,Reftrsh.

10.2.3.5.1Find

Click on the menu item will exit asset management

module.



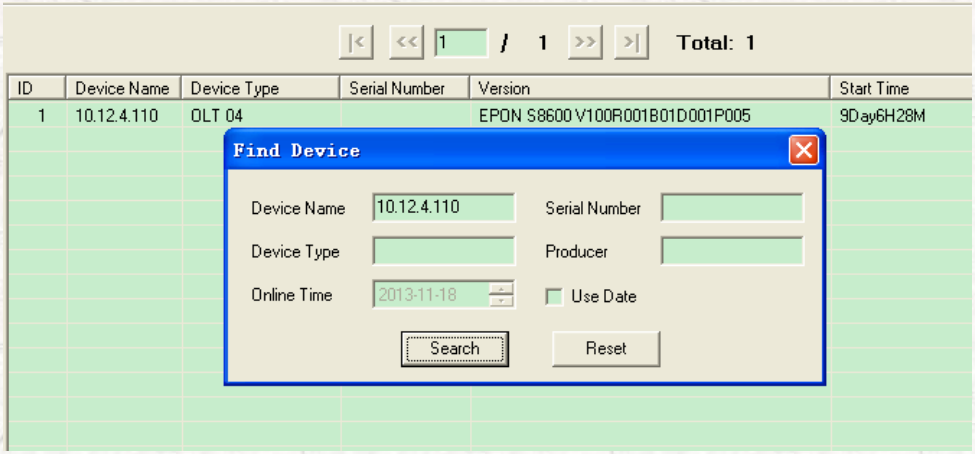
Picture 10-9Find Interface

Input one or more items of Device Name,Serial Number,Device Type,Producer,Online Time,you can find the information you want.

In addition to the on-line time, various search criteria using fuzzy find, the findcriteria among the "and" relationship, only data for each meet the findcriteria will be finded.

Note: Only click the option to use on-line time to time over the line as the search criteria.

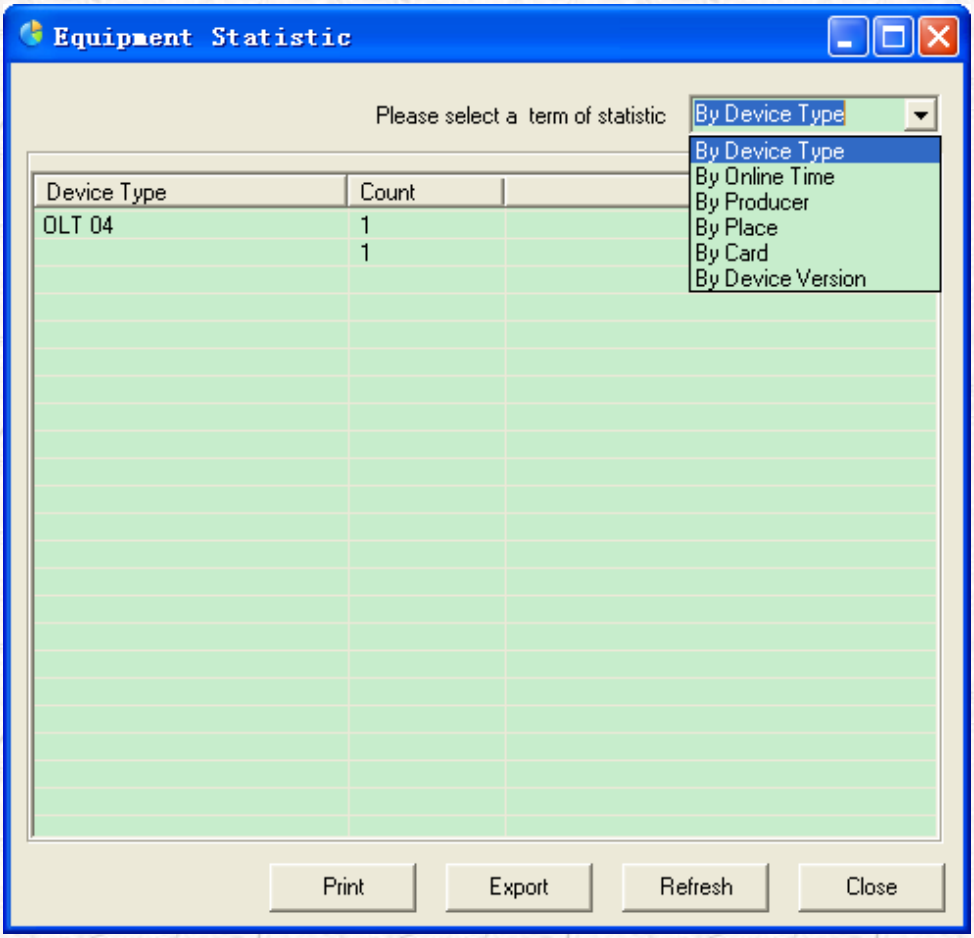
Search results will be displayed in the data list, as shown below。



Picture 10-10Search results

10.2.3.5.2Stat

Statistics menu items for a variety of conditions on the data according to a list of statistics and output, as shown below.



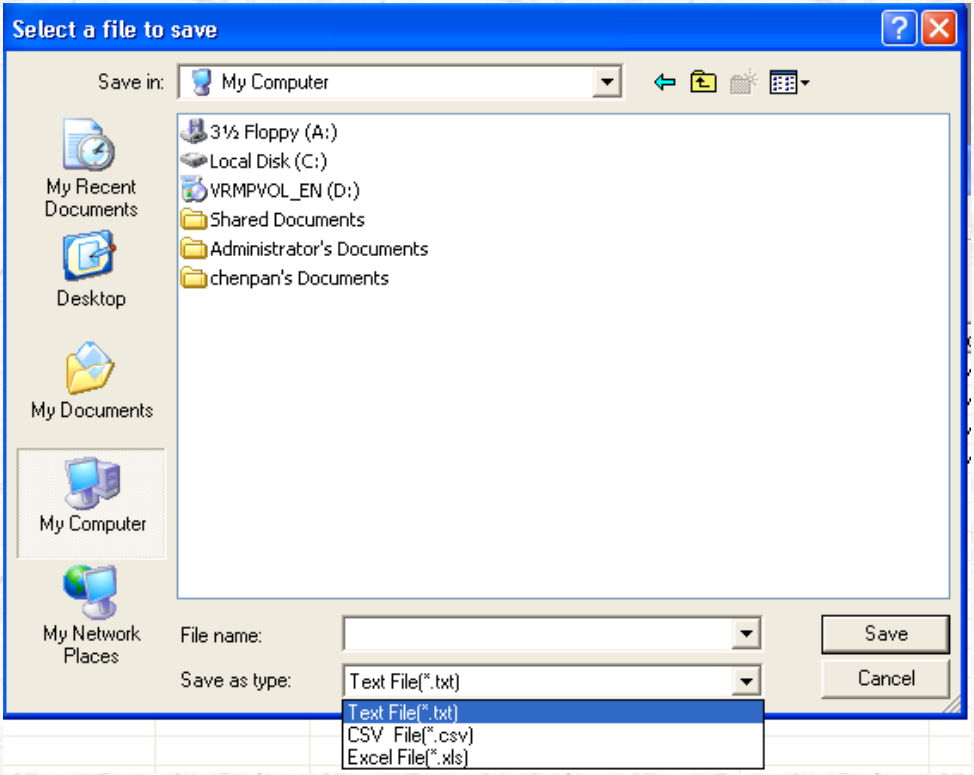
Picture 10-11Stat Interface

Stat has six Conditions, namely by Device Type, By Online Time, By Producer, By Place, By Card, By Device Version.

Select any one of the statistical conditions, all equipment assets will be calculated in the list of data statistics, and the

statistical results are displayed in a list of statistics in the interface

In addition to the statistical results observed in the statistics list, you can also export the data to a file by clicking the Export button. Currently statistical results support export to html files and xls files, save the file by choosing different types shown in the file to determine ways to save.



Picture 10-12Statistical Results Save

After which the content is saved as html file as follows.

EquipMent ManageMent Statistic

By Device Type--2013-11-18

Device Type	Count
OLT 04	3
OLT 04P	1
OLT G04P	1
OLT G08P	1
TiNetS2600-09PC	1
	7

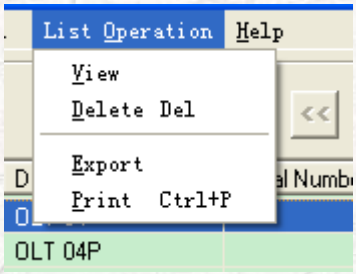
Picture 10-13Html file saved statistical results

You can also click the Print button to print out tables.

10.2.3.5.3Refresh

Refresh operation from the database to reacquire the device data sheet information assets.

10.2.3.6 Serial management operations menu



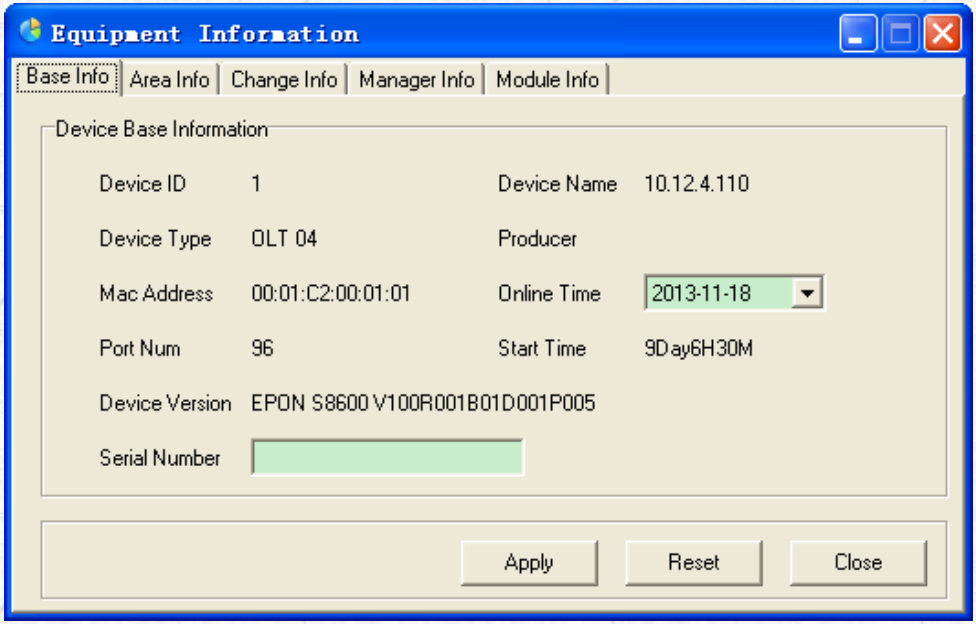
Picture 10-14List Operation Menu

Tip: When data is not displayed in the list, select any line, equipment details and delete the two menu items will be unavailable.

10.2.3.6.1Device View

When selecting a recording device in the list, and then

click the Device Details menu item or double-click on the record, will open the Device Details screen, as shown below.



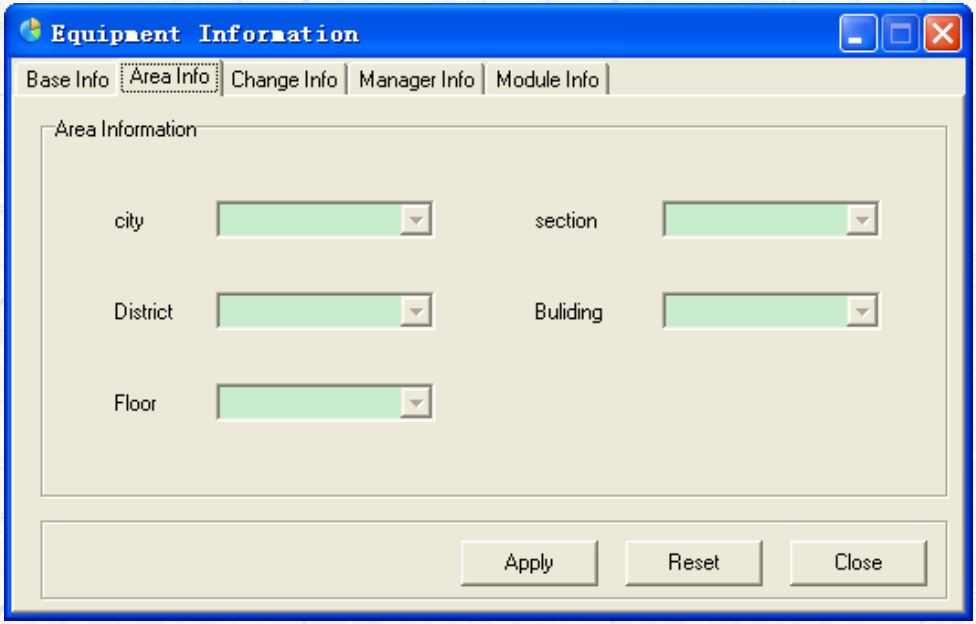
Picture 10-15Equipment Information Interface

Including five pages,Base Info,Area Info,Change Info,Manager Info,Module Info.

Base information includes some basic data devices, such as ID, name, manufacturer, etc., specifically as shown above, the page provides asset number and on-line time editing features, click the Apply button after modifications, modifications to the database will be updated.

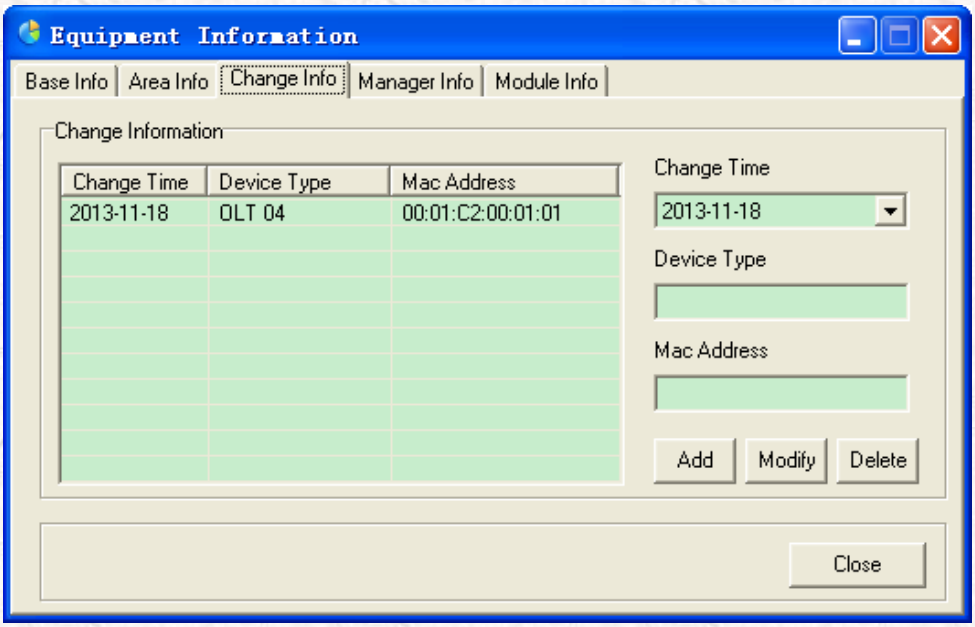
Area information display device location information is

divided into five grades display, namely city, district, section, buildings and floor, as shown below。



Picture 10-16Device location information interface

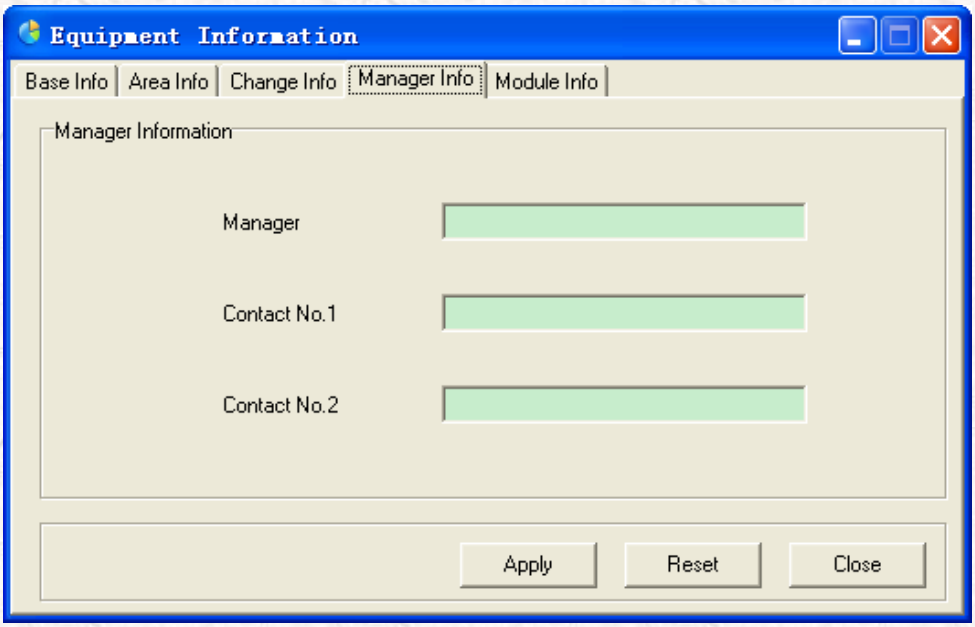
Replacing the device information is displayed at runtime update / replacement, including device type, and device update Mac address, the interface provides relevant information on replacement operations, including add, modify or delete.



Picture 10-17Change Info Interface

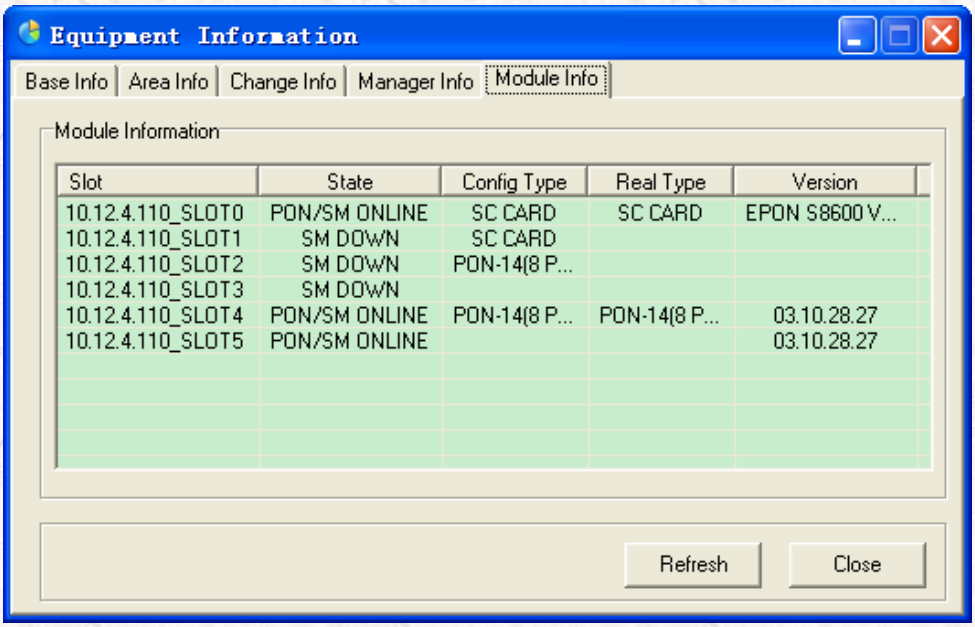
Tip: After the device information is added to the asset management system, the information will be automatically added as a replacement to replace the initial information, the replacement time for the on-line time

Managers information includes case management and maintenance of the equipment staff, including the name and contact information, as shown below.



Picture 10-18Manager Info Interface

Including Slot,State,Config Type,Real Type,Version.



Picture 10-19Module Info Intergface

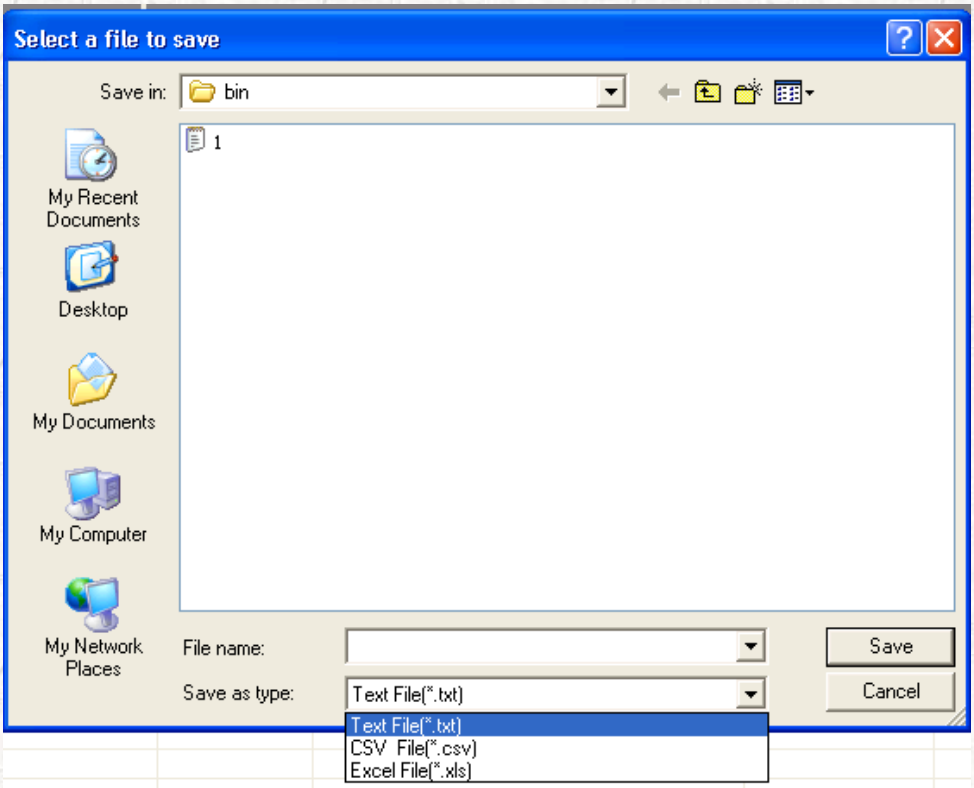
10.2.3.6.2Delete

Select the delete operation, the current selected device data is deleted from the asset management database, you can restore the data by updating the way, but the asset number previously entered, replacement records can not be recovered.

10.2.3.6.3Export

Export menu item provides information on the current list of export backup all data on the device functions can be exported as txt, csv and xls files in three formats, the file via the pop-up box set file name and choose the file type you can,

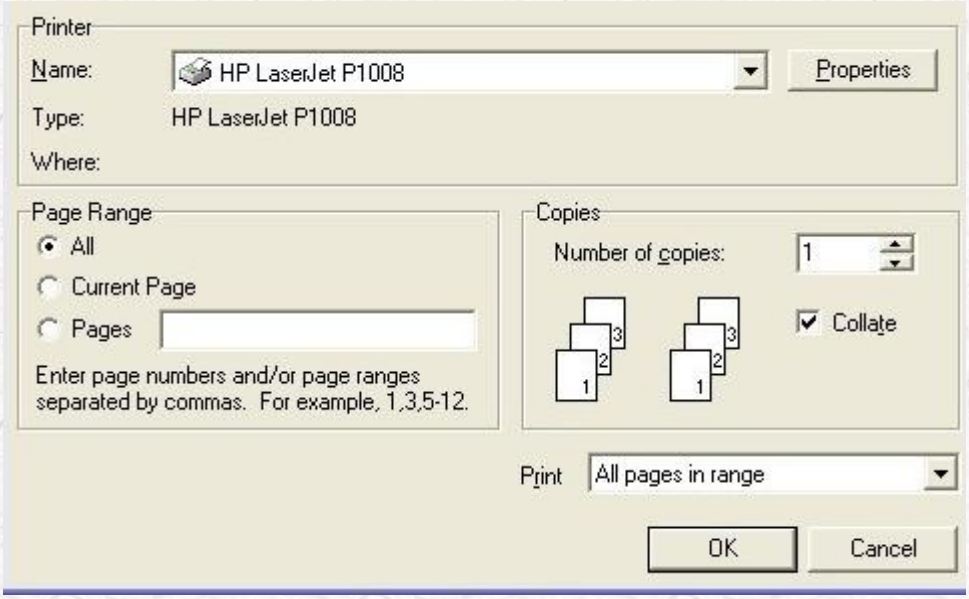
as shown below shown.



Picture 10-20List Export Interface

10.2.3.6.4Print

Print menu item will open systems printing interface that provides a list of devices currently displayed will print out the function, as shown below.



Picture 10-21Print Interface

10.2.3.7 Help

Picture 10-22Help Menu

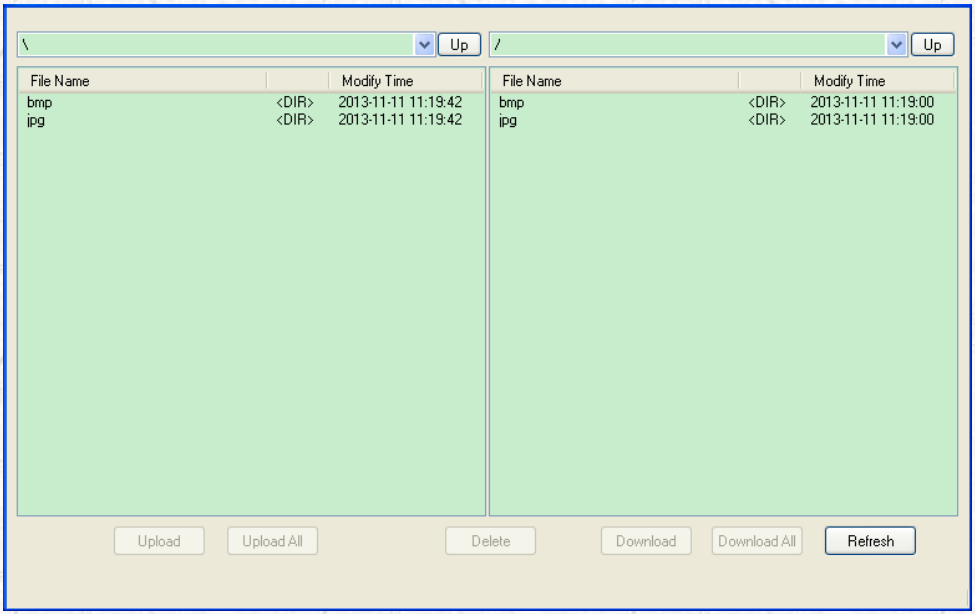
The Help menu contains two menu items

About menu item, display the copyright on software asset management module and other information.

Help menu item will open the online help documentation.

10.3 Device Icon Management

Select the menu "Tools" ➔ "Device Icon Management." If the prompt "Connect FTP server failed!", Then close the form, make sure the servers running FTP server and then open, as shown below



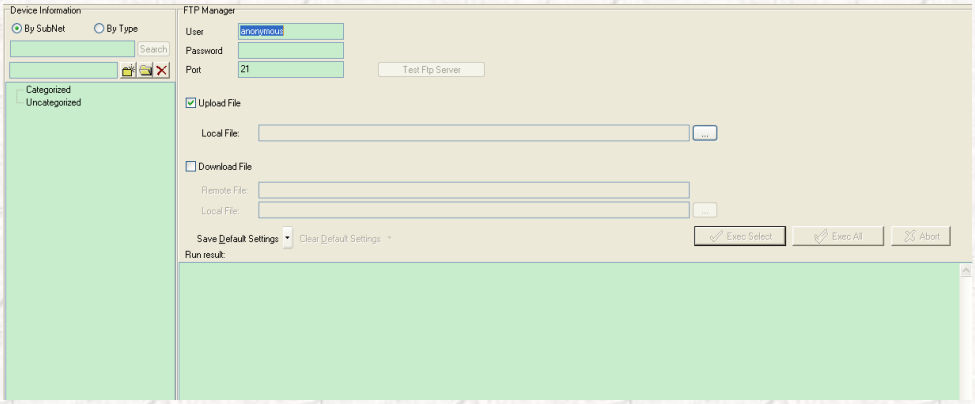
Picture 10-23Device Icon Management Interface

You can upload pictures to the local device to the server, you can put the device on the server to download the picture to your local. Display device icon to use, you can right-click the device popup menu "Looklup Atrribute" ➔

"Basic Atrributes" to make changes。

10.4 Device Configuration File FTP Management

Ftp server for managing the user name and password, as shown below, you can view FTP。



Picture 10-24FTP management interface device profiles

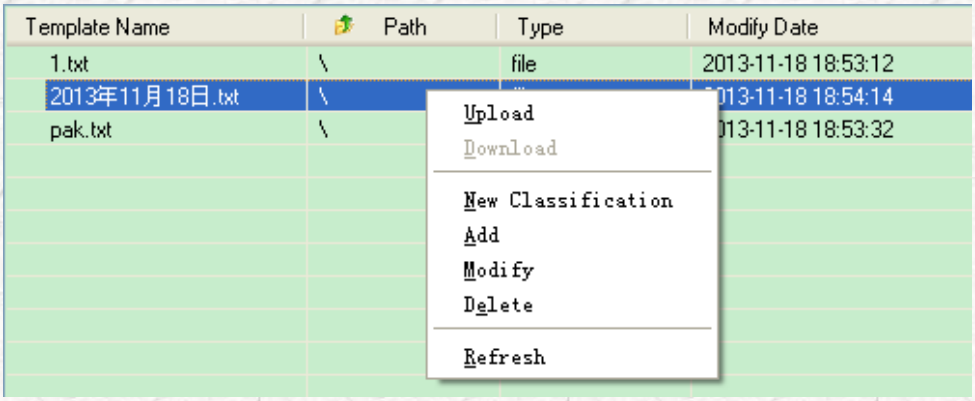
10.5 Config Template Lib

10.5.1 Configuration template file

System main menu item "Tools" ➔ "Confi Template Lib" Open. List of configuration files can be uploaded for others to download; You can also download the configuration file to the

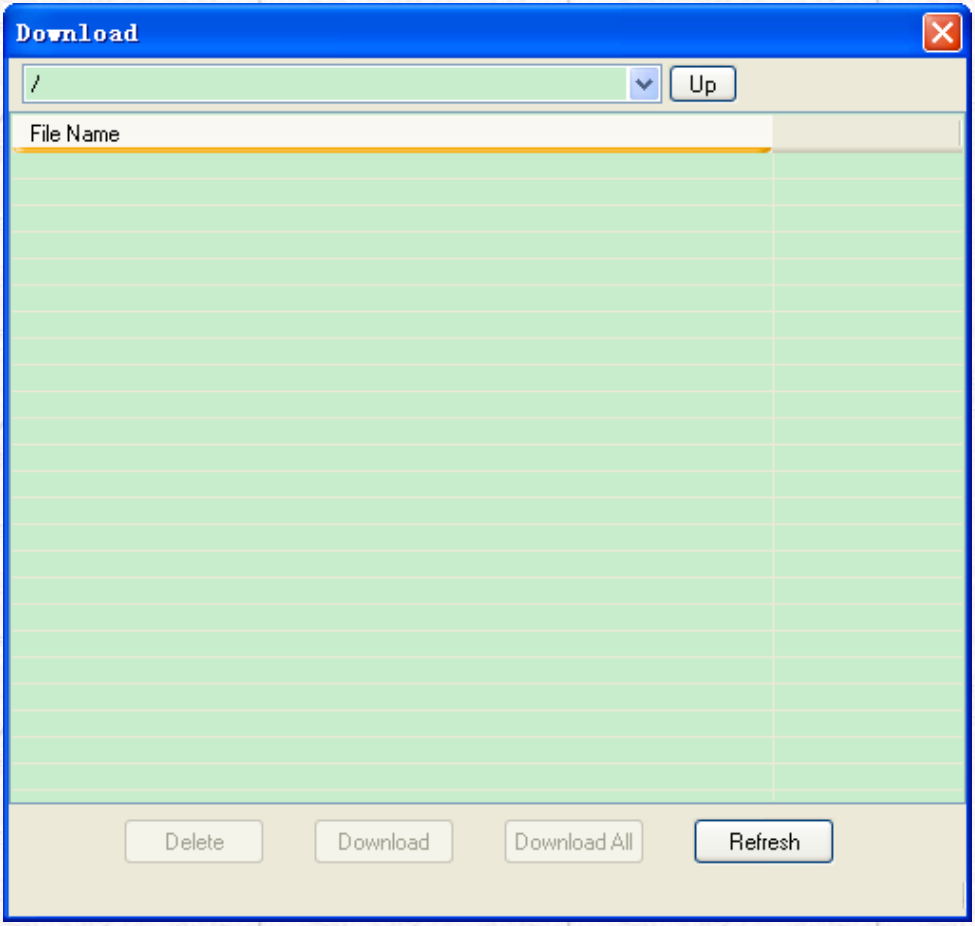
currently selected path.

Double-click the folder, and displays all files and folders under the path of the folder; click on the title of the list of the "path" to show case a directory on the file under the current path. Double-click the file, you can select the file to be modified for the operation. Right-click pop-up menu as shown below



Picture 10-25Template Library Management Interface

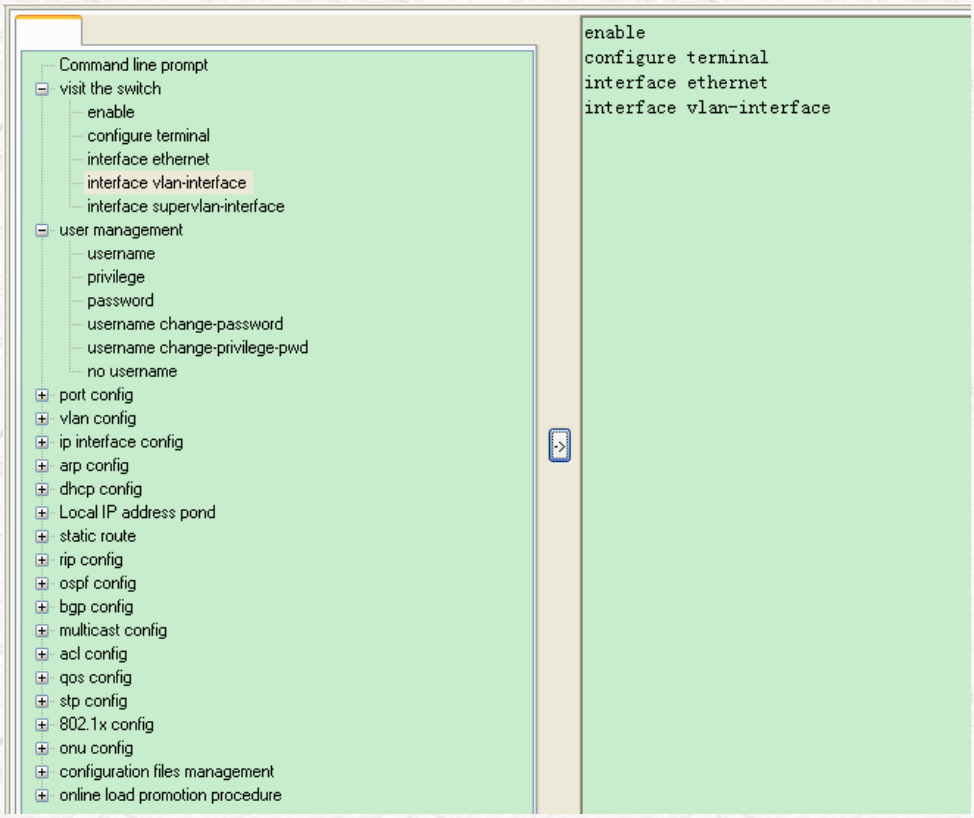
In the list of the blank, right-click the menu option "Download", its interface is shown below.



Picture 10-26Download Interface

10.5.2 Command File

Right-Click and two menu appear, 'Add' or 'Modify'.



Picture 10-27Command File Interface

The left side of the interface provides a command-line prompt. Select a command, click the "➔" is displayed to the right of the command-line display. The left side of the command line interface prompt trees, providing right-click menu item "New Command Line / create new directory / modify / delete".

10.5.3 Applicable Scope

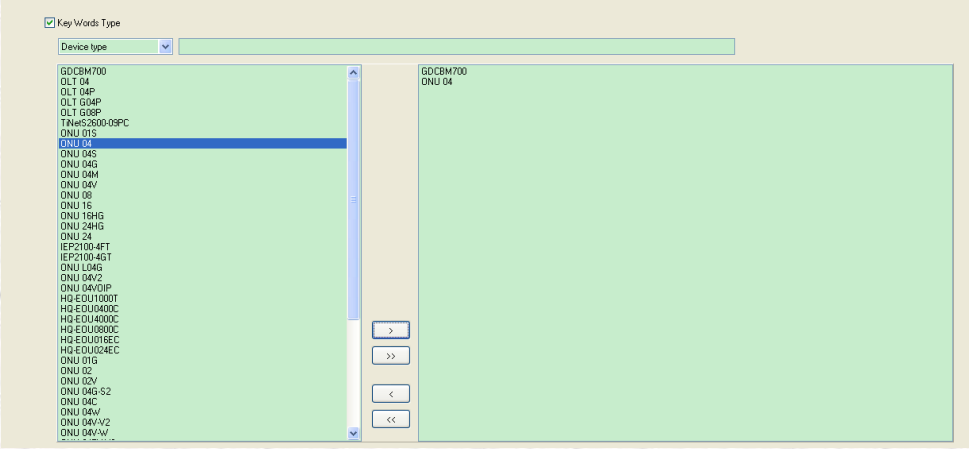
“Applicable Scope” is used to “Bacth Config”, it can judge whether the file is adapt to the device.

Click the "Applicable Scope", the interface is shown below. Scope provide "keyword type" and "Brower Rule" are two options, the current "rule" is not supported. "Keyword Type" including "Device Type" and "Producer"

Select "Device Type", said the current command line of the file is only applicable to these types of choices. During "batch configuration", the current device type and save the file command line type for comparison. If the type is not found in the file, then import the file command line does not apply to the type of equipment.

Choose "Producer", said the current command line of the file is only applicable to the vendor equipment. During "batch config", corresponding to the type of the current device equipment manufacturers [correspondence can "discover configure - can discover the appearatus tabulation" from the command line to get] file saved equipment manufacturers for comparison. If manufacturers names do not match, then the

file into the command line does not apply to this type of device.



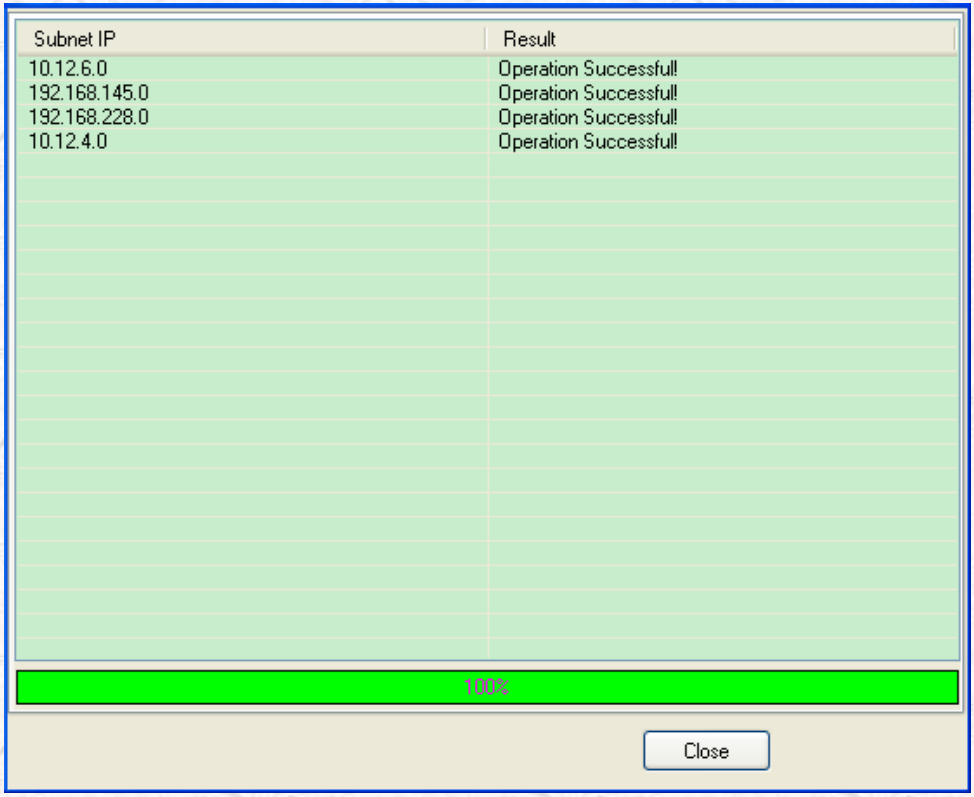
Picture 10-28Applicable Scope

10.6 Topo Link Management

Choose menu“Tools” ➔ **“Topo Link Management”,As shown below.**

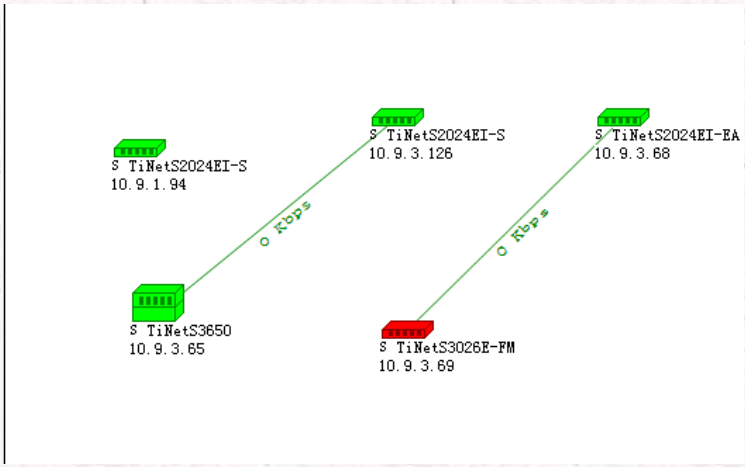
Picture 10-29Topo Link Management Interface

Choose the network you want,Click the ‘Next’,as shown below.



Picture 10-30Topo Link Management Result Interface

When adding a node in the topology view, such as connection management node in the topology, select the IP subnet, then if a connection exists between the device will automatically display the relationship between devices connected. Example: Add a new topology view widely Xinyuan district (hz), add a node, select the subnet 10.9.1.64 10.9.3.64 all devices within and click OK, as shown below.

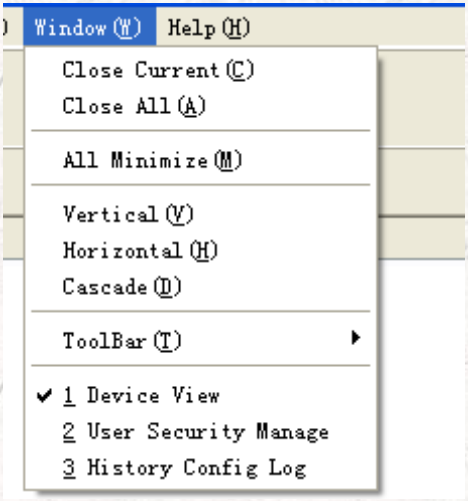


Picture 10-31Topo View Interface

Chapter 11 Window and Help

11.1 Window

Including Close Current,Close All,All Minimize,Vertical,Horizontal,Cascade,ToolBar,as shown below



Picture 11-1Window Menu

Function menu items are described below:

Close Current: Close the current open windows.

Close All: Close all windows which have been opened.

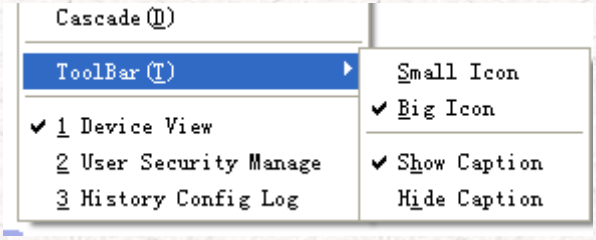
All Minimize：It makes the windows witch have been opened in all the minimized state

Vertical：It makes all the windows have been opened on the panel, horizontal tile

Horizontal: It makes the already opened all the windows on the panel vertically tiled.

Cascade: It makes the already opened all the windows on the panel, stacked display.

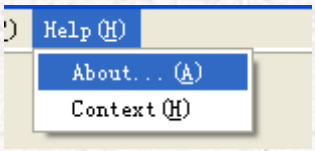
ToolBar：Display icon size, and whether to hide title, etc.



Picture 11-2ToolBar

11.2 Help

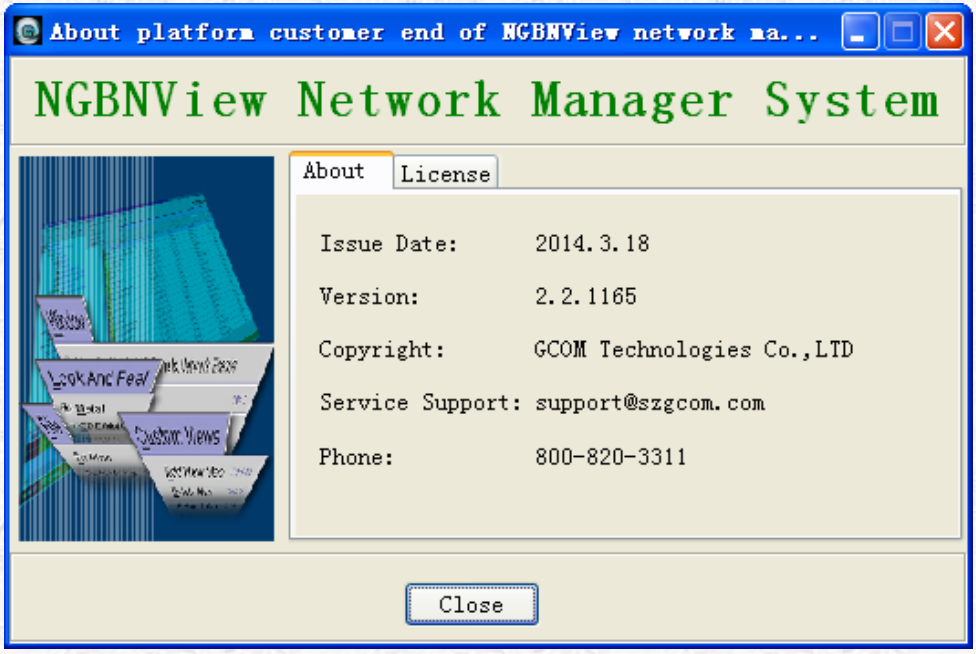
Including ‘About’ and ‘Context’,as shown below



Picture 11-3Help Menu

Function menu items are described below：

About：It shows about dialog box of NMS.



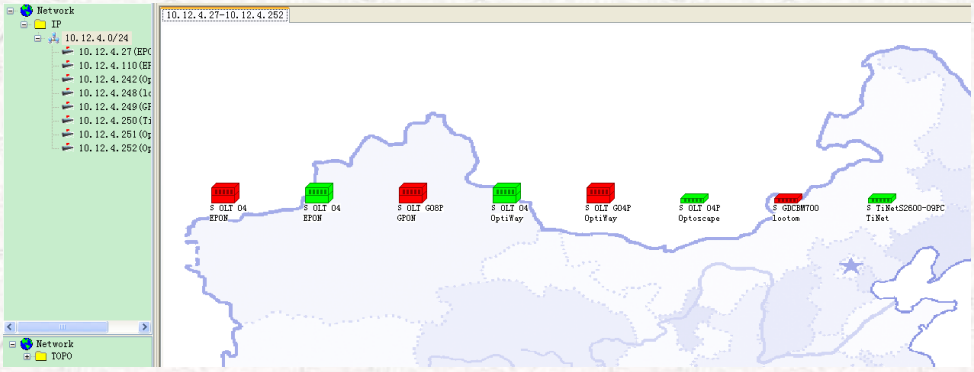
Picture 11-4Ablout Dialog

Help：Open the Help of NMS.

Chapter 12 View

12.1 Physics View

Click the navigation tree on the physical half of the IP navigation tree, then in the right window is open subnet view, subnet view of the device according to the subnet organized manner for display, rather than show the physical topology of the device. As shown below.



Picture 12-1Physics View Interface

Subnet views are automatically added, that added to the network management system based on the current system's equipment and automatically organize and generated.

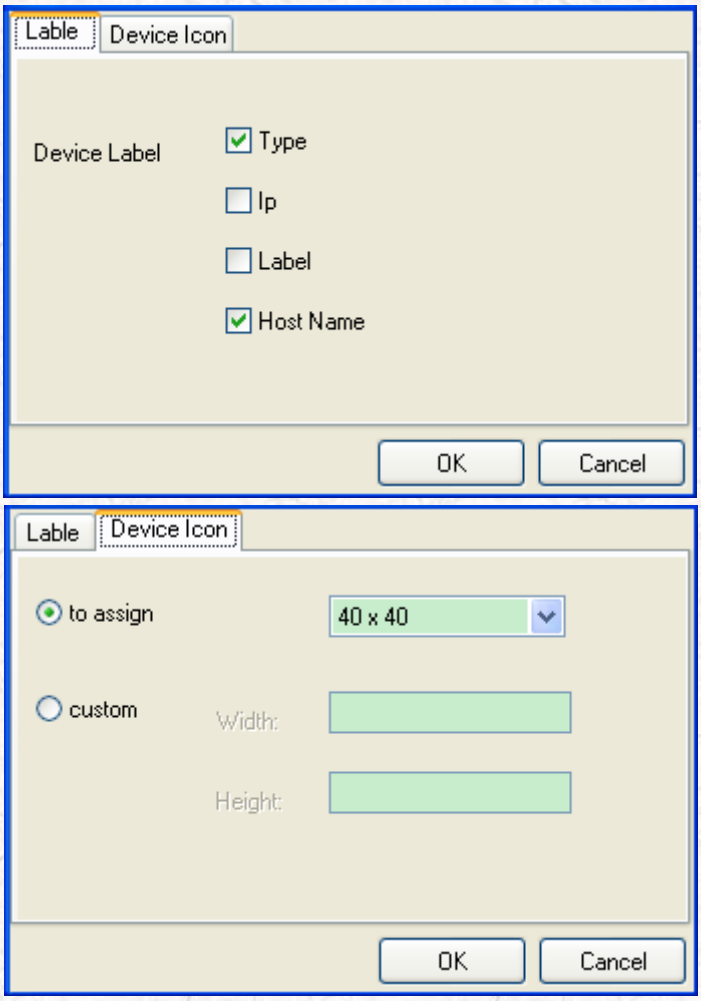
Subnet to subnet view, organize equipment, considering the large number of devices is not easy to observe, and therefore take the form of paging display with 50 units of paging devices. And indicate the range of the device within the page address in the view of the top of the page field.

Above diagram view provides the appropriate buttons, from left to right are’Slelect’,"Airscape view", "settings", "add node", "Delete Node", "Add Link", "Add Auto Link", "TOPO Search", "select all", "layout" function.

Select：The default mouse function button, you can click the mouse and marquee equipment;

AirScape：Showing AirScape view, in miniature display the contents of the entire view.

Settings：Open the View Settings interface, you can set the size of the device icon, the view of the display device icon labels, as shown.



Picture 12-2Setting Interface

Select All：Select all devices;

Layout：When two devices are selected,  Layout button to use. The layout of the equipment, including automatic, mesh, bus, single star, binary star, ring, cutting

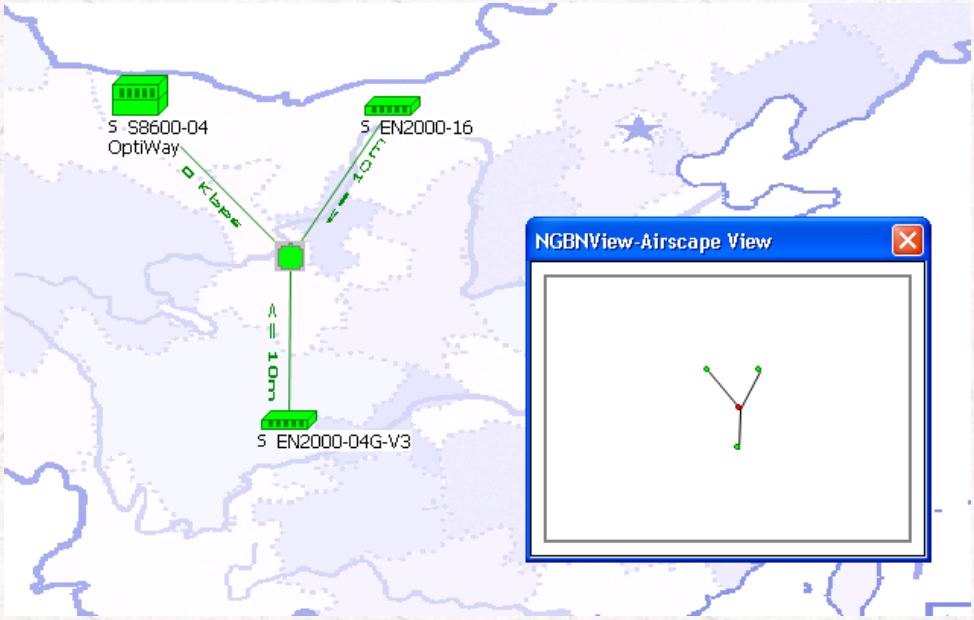
ring, hierarchical tree, tree and hybrid divergent.

There are several options that will be involved in the topology view, there is no longer repeat.

12.2 Topo View

12.2.1 Topo View Interface

Physical topology navigation tree view navigation tree Ministry can open topology view, as shown below.



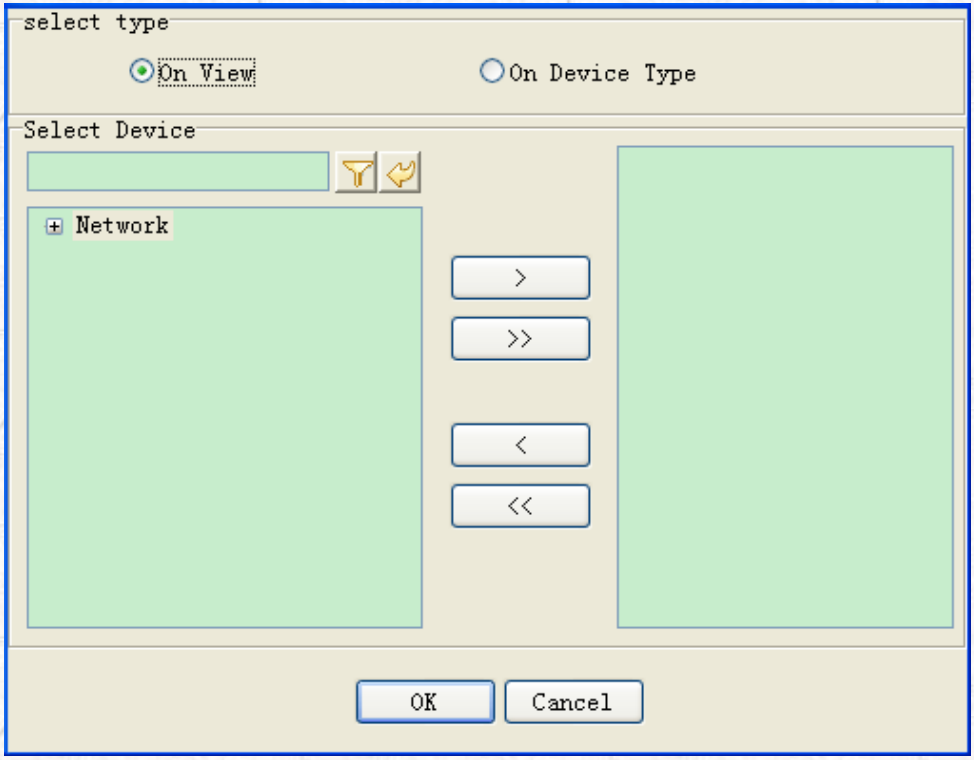
Picture 12-3Topo View

12.2.2 Menu View

From the picture we can kown,tcompared to the subnet View, Toolbars more 6 function buttons, from left to right are "View Save", "Add node", "Delete Node", "Add Link" "Adding auto link, "Add Virtual Nodes" function.

View Save:saving the current topo view

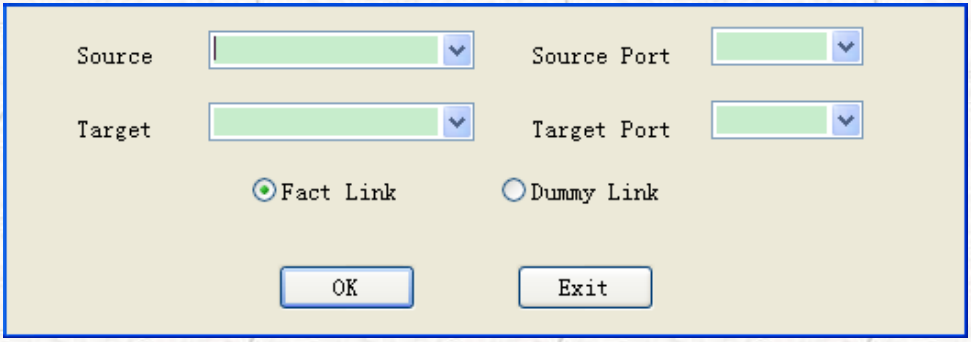
Add Node:Open the Add node interface, you can choose to add a node to the topology view, as shown below, select the device interface on the left side to the right, you can add it to the topology view;



Picture 12-4Add Node For Topo View

Delete Node:Deleting one node from the topo view;

Add link: Add a connection to the topology of the two nodes, as shown below, select two nodes, click the button, it will automatically join the two devices in an open interface to add the connection, the two sides set up the connection port, select after the connection type and click OK to add the completed;



Picture 12-5Add Link for the topo view

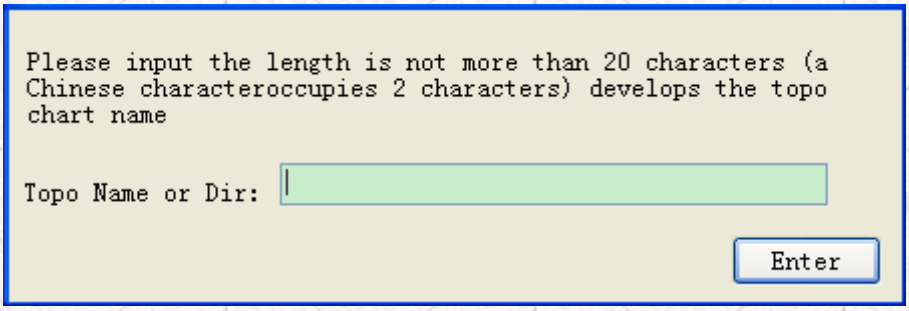
Add Auto Link:If a connection already exists in the database, then click on the Connect button will automatically be added to the topology view;；

Add Virtual Node:Some can not manage network nodes may be added to the mode of the virtual node to the topology map in order to better organize the topology.

12.2.3 Add Topo View

Subnet view different topology view must be created manually by the user in the navigation tree topology, there are three types of nodes, one root node "network management system", the node unique and actionable; II is a directory, its node formerly with the icon of a folder; three are topology view, before its node name also has a special icon. To add a

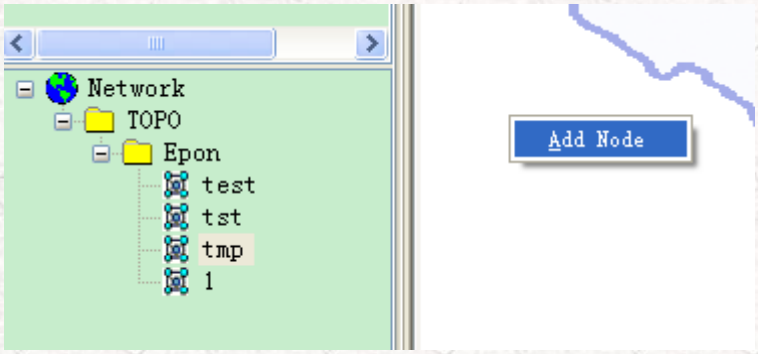
topology view, only in the second category, which is carried on the catalog node operation, select a directory node, click the right mouse button in the pop-up menu, select "New" menu item, you can open the Add topology view interface, as follows below.



Picture 12-6Add Topo View

Input view name here, click OK, you can add a node in the topology view in the selected directory .

The view node you just added is blank, you can increase the device node through its toolbar topology view. Right-click in the view column which appears to increase node, a node can add a step down, as shown below.



Picture 12-7Add Node

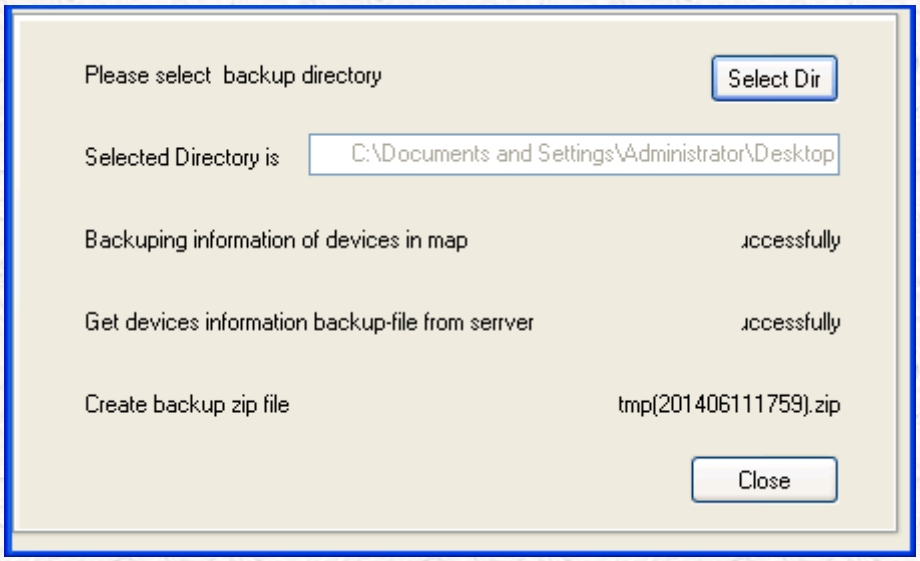
In the catalog node popup menu, select "New Folder", you can create a subdirectory under the directory.

12.2.4 Topo View Operation

Node in the topology view, click the right mouse button, you can operate in a pop-up menu, including the "Restore Map", "backup Map", "delete", "rename" and "Reinit Tree" five functions.

Restore Map: The topoof the backup file into the topoview

Backup Map: The selected node topology navigation tree topology corresponds to backup information to a compressed. Map file format, saved in the specified directory, as shown below.



Picture 12-8TOPO Backup

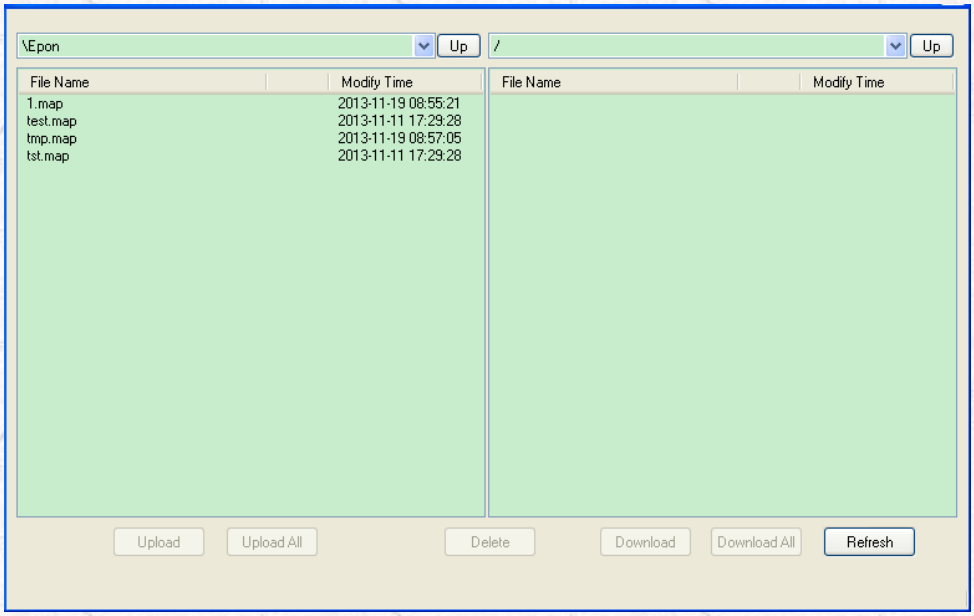
Delete: Click on the menu system will delete the current topo view

Rename: It will rename the name of the topo voew

Reinit Tree: Get the conformation of topo again.

12.2.5 Share Map

The node and catalog node topo view pop-up menu, are available through the menu item "Share Map" to open the Map shared interface, as shown below.



Picture 12-9Share Map Interface

Map shared interface on the left to save the topo view local client files and the corresponding directory, the right to the back-end server topo view files saved and the corresponding directory, open the interface menus on different nodes, the local left of the interface directory will have some differences.

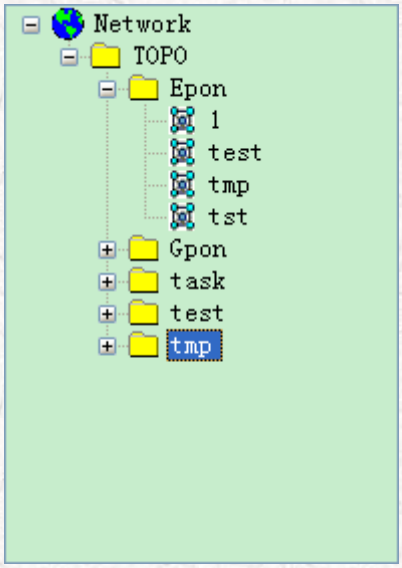
Through the interface to select the file or directory can be uploaded to the server to be shared, can also be downloaded to a local, so that you can display the corresponding local topology view.

Different users can access different topology view and corresponding operations, specifically with reference to the security log management section description.

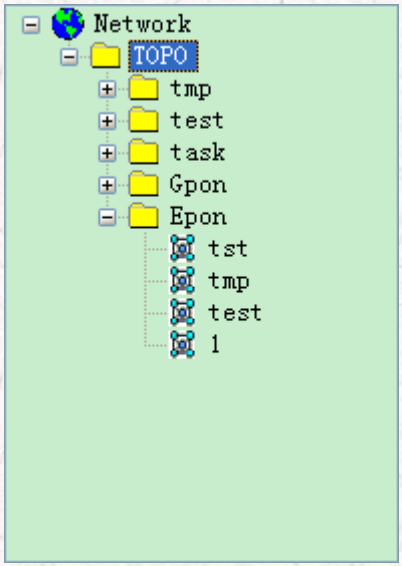
Note: You must ensure that the back-end server starts an FTP server, you can start in the back-end server interface tool menu when sharing Map.

12.2.6 TOPO PinYin Sort

The node and catalog node topology view pop-up menu, are available through the menu item "TOPO Figure alphabetical order" sub-menu item "ASC" or "DASC" to control TOPO view order catalog node is displayed, as shown below.



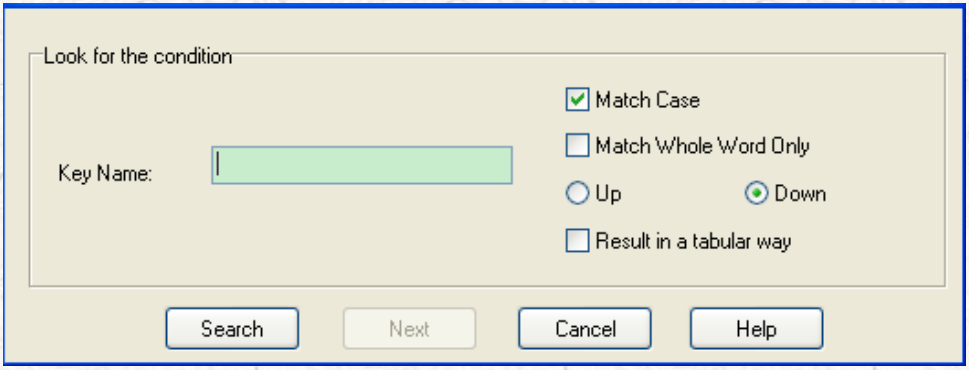
Picture 12-10TOPOASC View



Picture 12-11TOPODASC View

12.2.7 Query TOPO

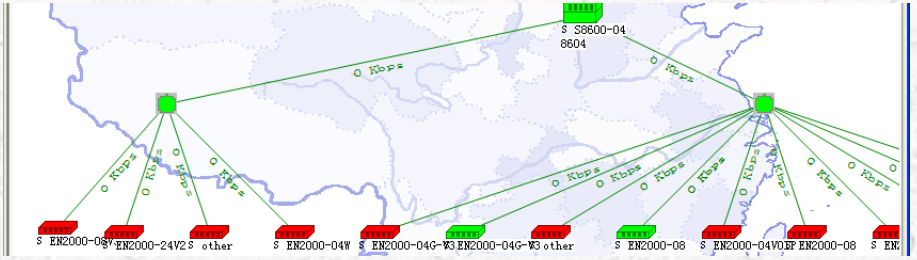
TOPO view inquiry is to find a node in the current TOPO viewnavigation tree, its interface as shown.



Picture 12-12TOPOView Query Interface

Display the results in a list of search results is used to control the display position, if the item is selected, the interface change

Double-click on the table at this time a node, then the node is selected in the navigation tree, as shown below.



Picture 12-13Select the Node in the Tree

If you choose not to display the results list, then select the search to the first node in the navigation tree.

If you check out the multiple results, you can view by clicking on the next button, you can automatically select the next one, if the list is to display the results, it is both the list and the navigation tree selected. Up and down radio button control to see when the next traverse direction, traversing the last one will return to the front one.。

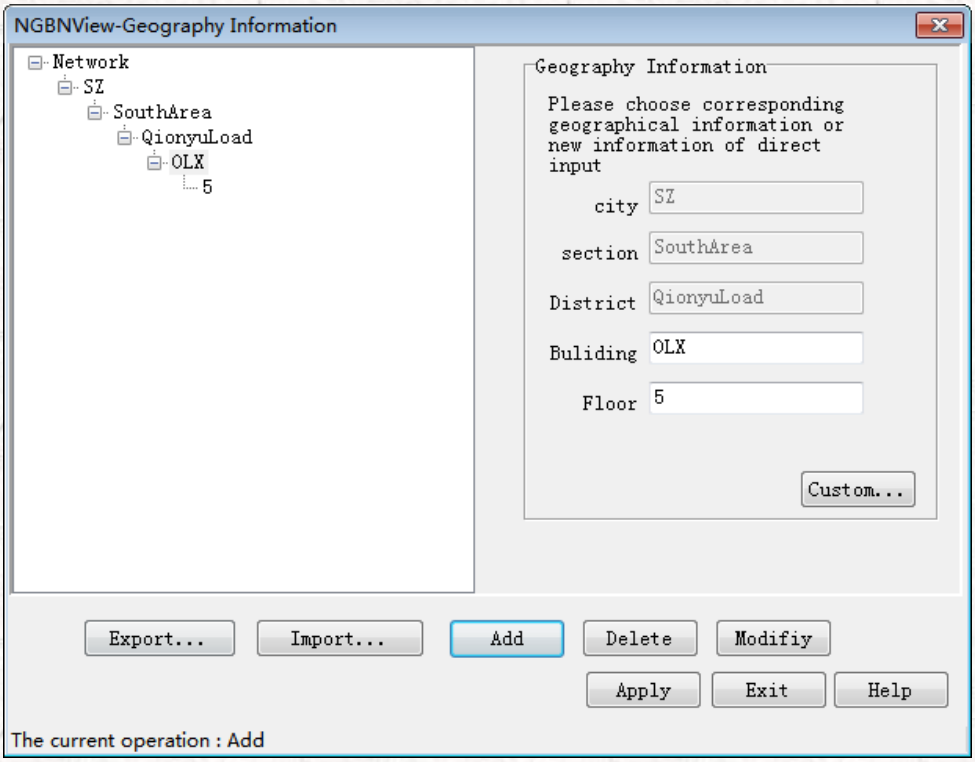
12.3 Geography View

12.3.1 Geography View Overview

Geography view is mainly for the convenience of users using non-IP management model to manage the device, the device specified by the user's own rules the way the organization is set to constitute yourself. After the system is installed, users need to manually add geographic view.

12.3.2 Construct Geography View Tree

Click “**View”** ➔”Geography Information” as shown below



Picture 12-14Geography Information interface

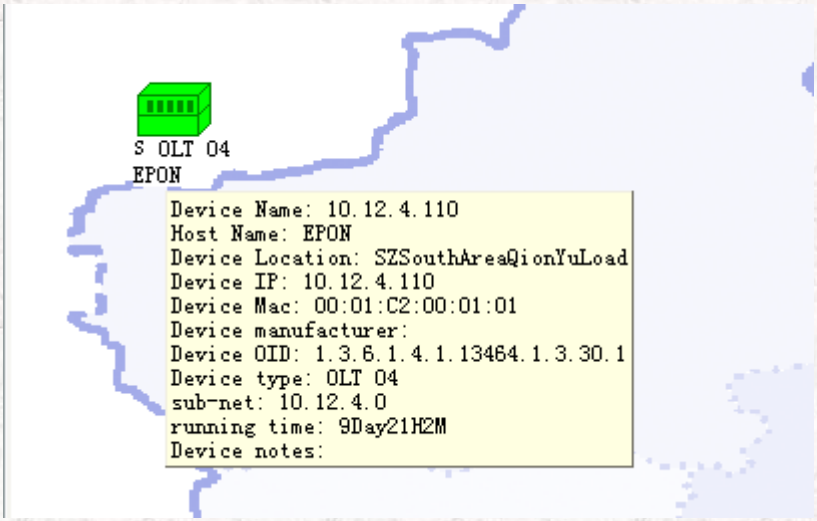
First at the interface with the mouse click position the left navigation tree nodes increases, then the right side of the interface, enter or select a geographic information-related information. Confirmation fill is correct, click Add, you can find the newly added node in the left part of the interface navigation tree. Users can edit tree nodes through the interface below the "delete", "modify" button.

It also can use the "Import", "Export" button in the form of Excel tables directly into geographic information specific file format can be exported after understanding.

Note: Select the node to be deleted in the geographic information in the navigation tree, click the Delete button to complete the deletion. This node removal only removes the node in the navigation tree, does not remove its representative from the platform of the device.

12.3.3 Fill Geography View Data

Device settings selected geographic information for the first node in the physical view navigation tree, and then display the device view, select the device you want to display the geographic view, right-click "Lookup Attribute". Click "Modify", the corresponding node can be geographical view, find the device view to the device. The mouse on the icon on the device, there are as shown information display.



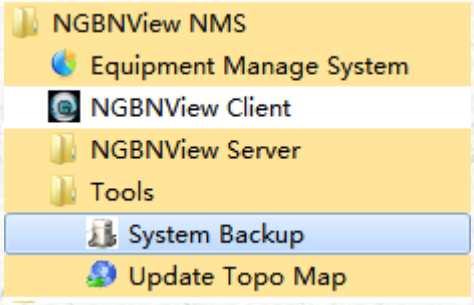
Picture 12-15Device Information

Chapter 13 System Backup

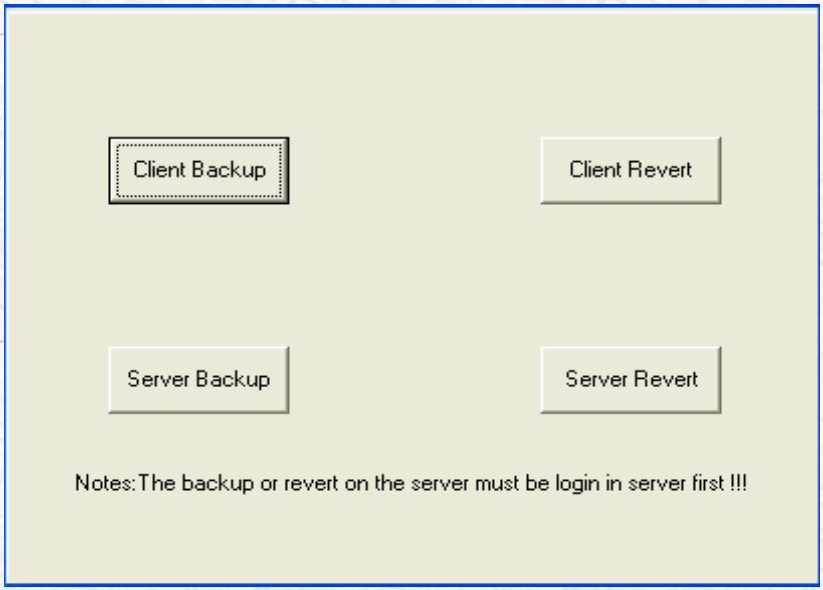
System manual backup server module via FTP protocol (File Transfer Protocol), a variety of files between the client, server required for transmission.

13.1 System Backup Overview

As shown below



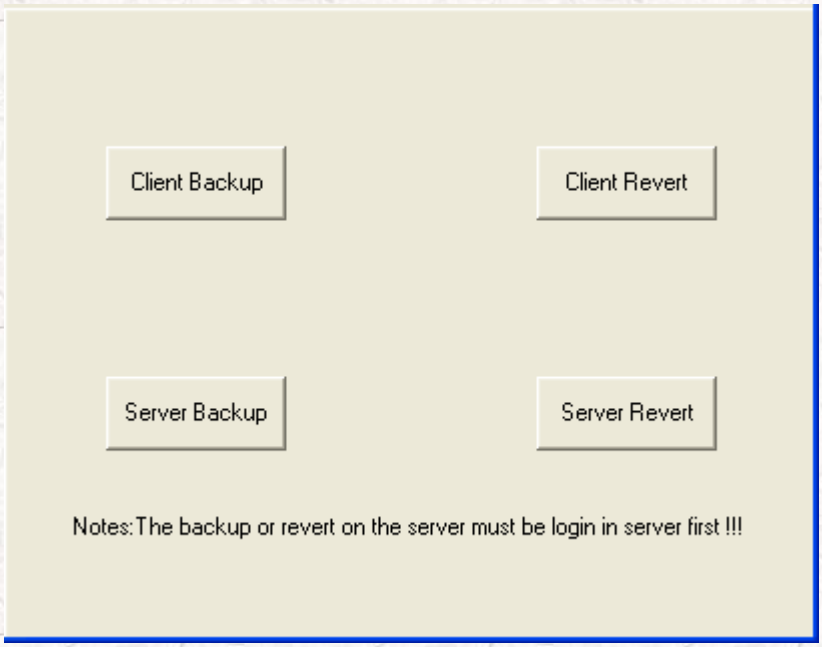
Picture 13-1Open The Backup Interface



Picture 13-2System Backup Main Interface

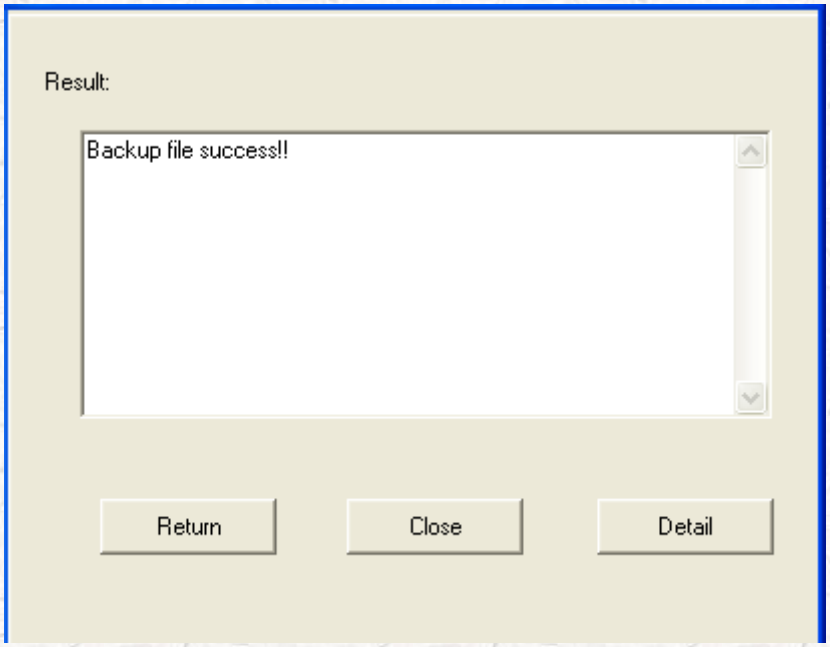
13.2 Client Backp

Client Backup Includs：Device Icon、Topo Map、Background Image and Config File.Completed by a compressed backup information. Select what you want to back up, click Next, as shown below.



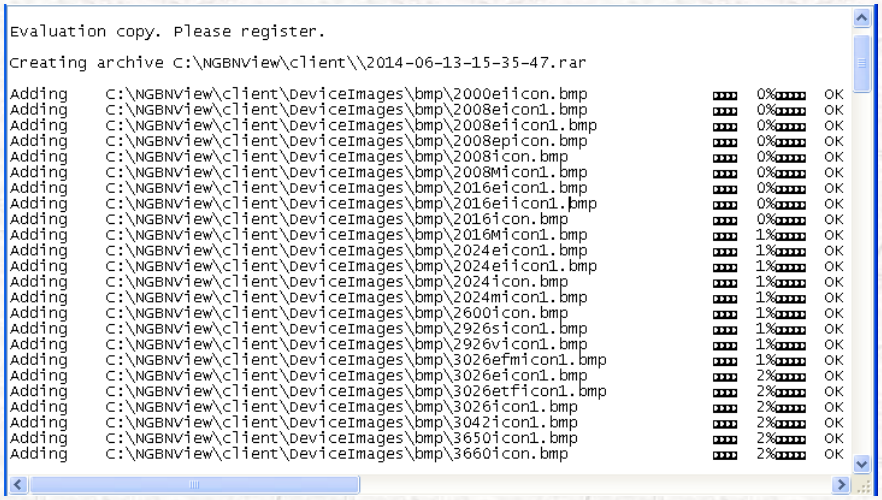
Picture 13-3Client Backup Interface

Click the Next button,



Picture 13-4Client Backup Result Interface

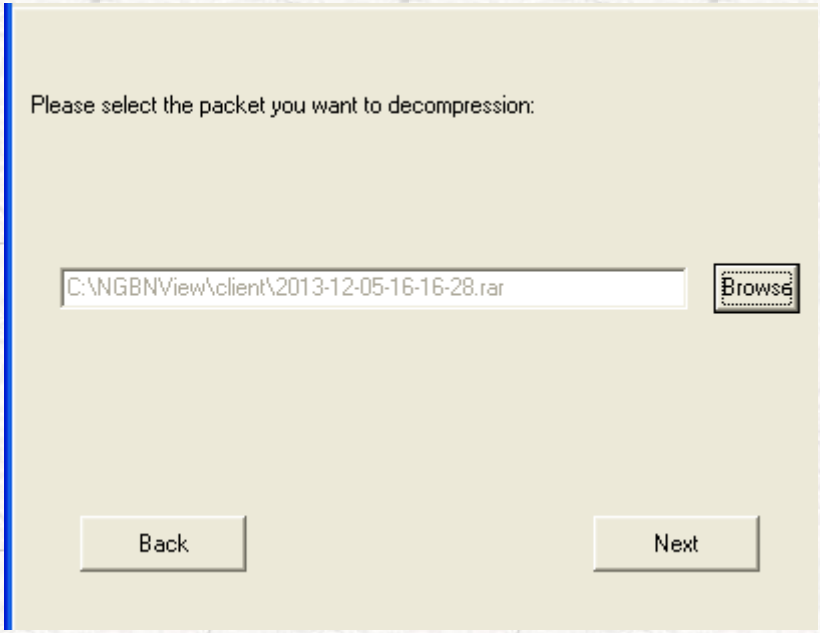
Clickl the ‘Detail’,as shown below



Picture 13-5Detail Interface

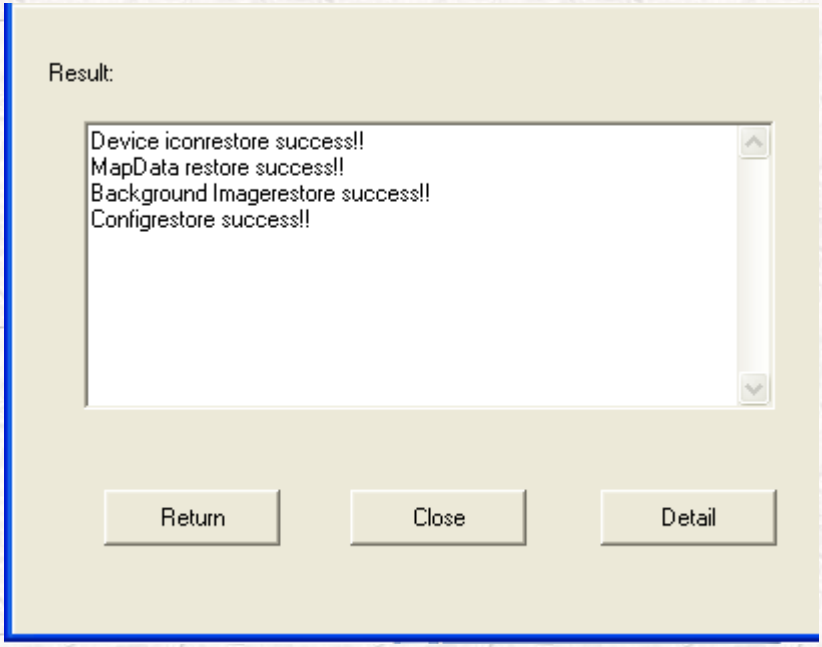
13.3 Client Revert

Client Revert Includs：Device Icon、Topo Map、Background Image and Config File.Completed by a compressed revert information. Select what you want to revert, click Next, as shown below.



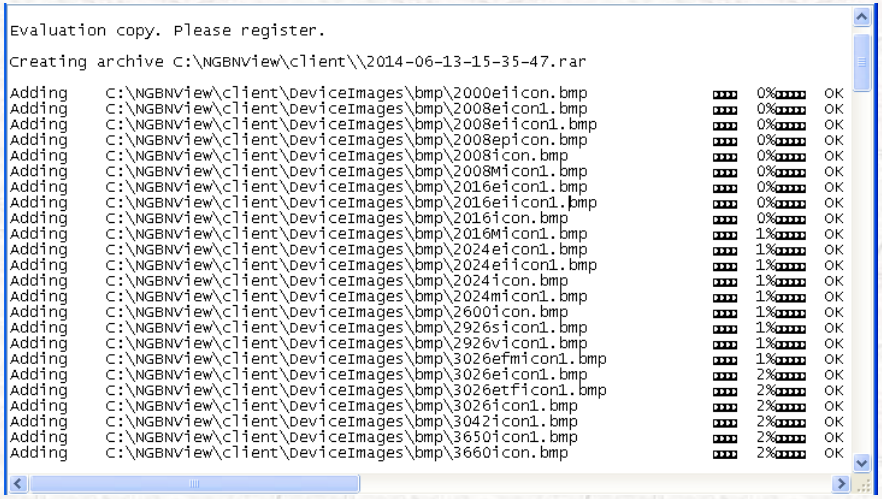
Picture 13-6Client Revert Interface

Click the ‘Next’,it will show ‘Do you want to delete current data before restoration’,as shown below



Picture 13-7Client Resert Result Interface

Clickl the ‘Detail’,as shown below

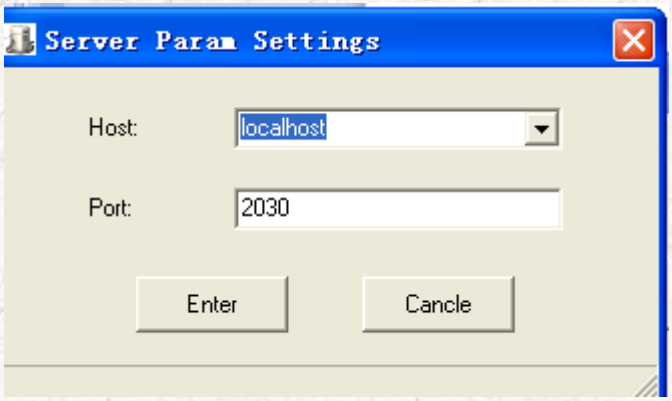


```
Evaluation copy. Please register.

Creating archive C:\NGBNview\client\\2014-06-13-15-35-47.rar

Adding    C:\NGBNview\client\DeviceImages\bmp\2000eiicon.bmp          0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2008eicon1.bmp          0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2008eiicon1.bmp         0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2008epicon.bmp          0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2008icon.bmp            0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2008Micon1.bmp          0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2016eicon1.bmp          0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2016eiicon1.bmp         0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2016icon.bmp            0%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2016Micon1.bmp          1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2024eicon1.bmp          1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2024eiicon1.bmp         1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2024icon.bmp            1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2024micon1.bmp          1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2600icon.bmp            1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2926sicon1.bmp          1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\2926vicon1.bmp          1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3026efmicon1.bmp        1%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3026eicon1.bmp          2%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3026etficon1.bmp        2%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3026icon1.bmp           2%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3042icon1.bmp           2%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3650icon1.bmp           2%  OK
Adding    C:\NGBNview\client\DeviceImages\bmp\3660icon.bmp            2%  OK
```

Picture 13-8Detail Interface

13.4 System Backup and Revert Interface

Server System Backup and restore client login interface similar to the login screen, the same need to enter Host, Port. While the client can log in with the same interface used by the server automatically records the address of the interface as shown below.



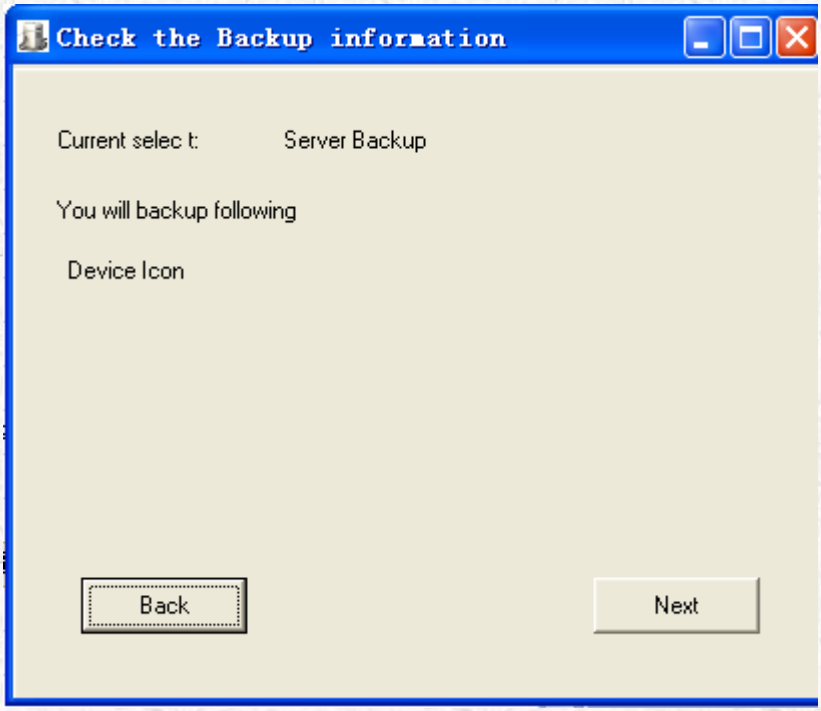
Picture 13-9Server System Login Interface

Server Backup and Revert ,you nend to start the server and FTP.

13.5 Server Backup

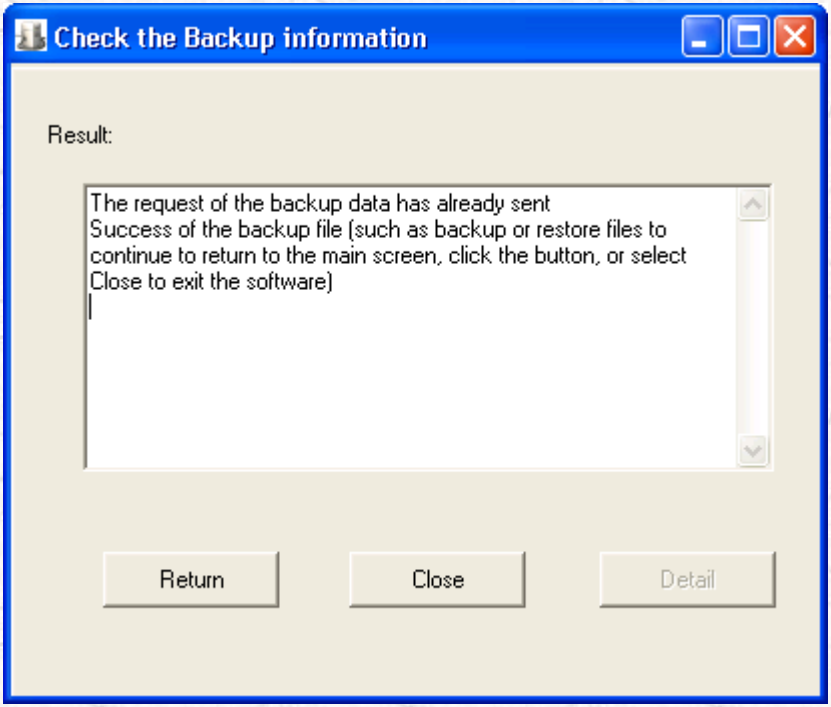
Server Revert includs：Device Icon、Topo Map、Config

FIle、Database、soft Lib、Alert File、Config Log、Report、Server Log.Server through a directory to save, which were compressed after each project there is a corresponding backup directory, the directory and the directory name is not available, the presence of a fixed directory. Select what you want to back up, click Next, as shown below.



Picture 13-10Server Backup Interface

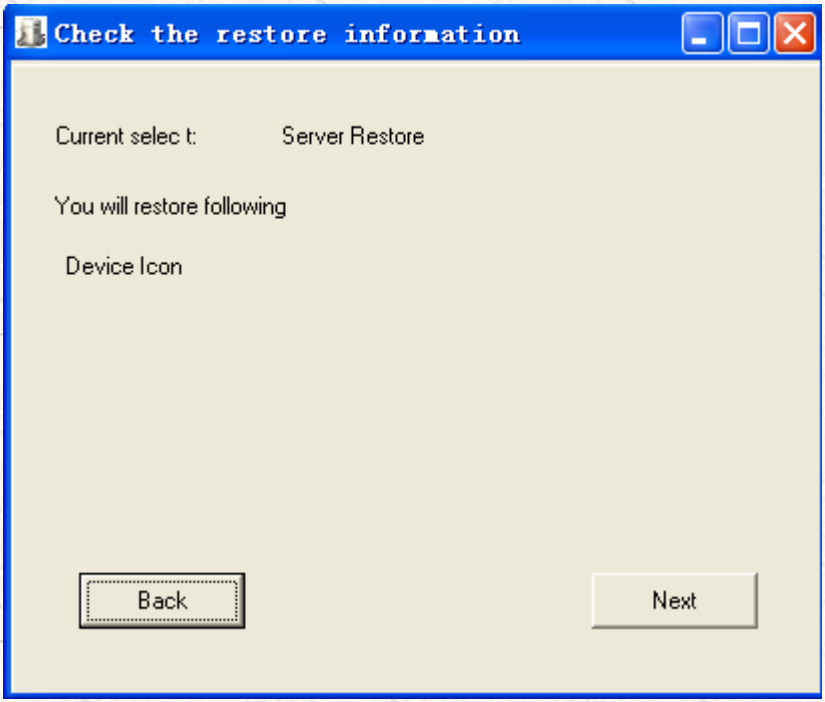
Click Next, as shown below.



Picture 13-11Server Backup Result Interface

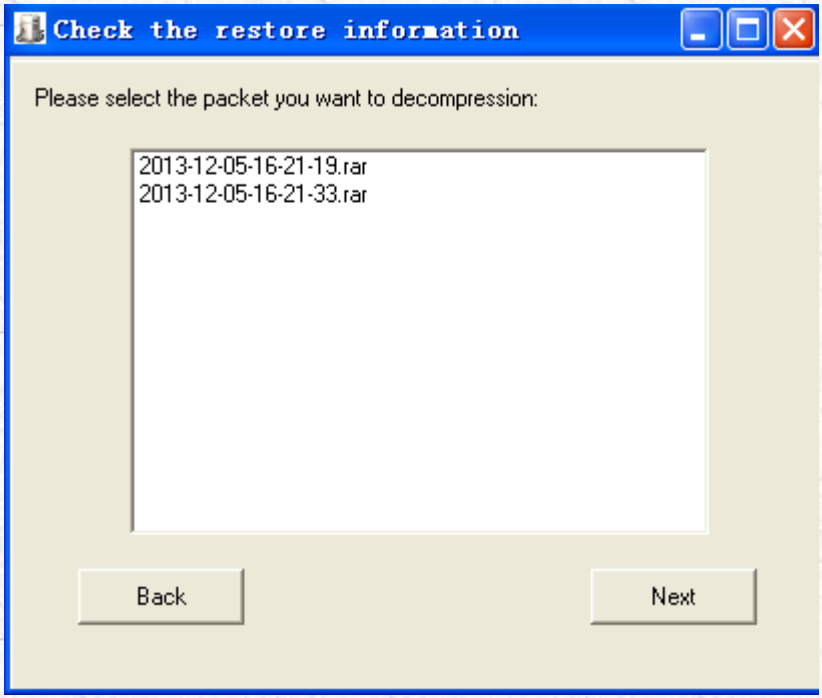
13.6 Server Revert

Server Revert includs：Device Icon、Topo Map、Config FIle、Database、soft Lib、Alert File、Config Log、Report、Server LogSelect the items you want to revert, click Next, as shown below.



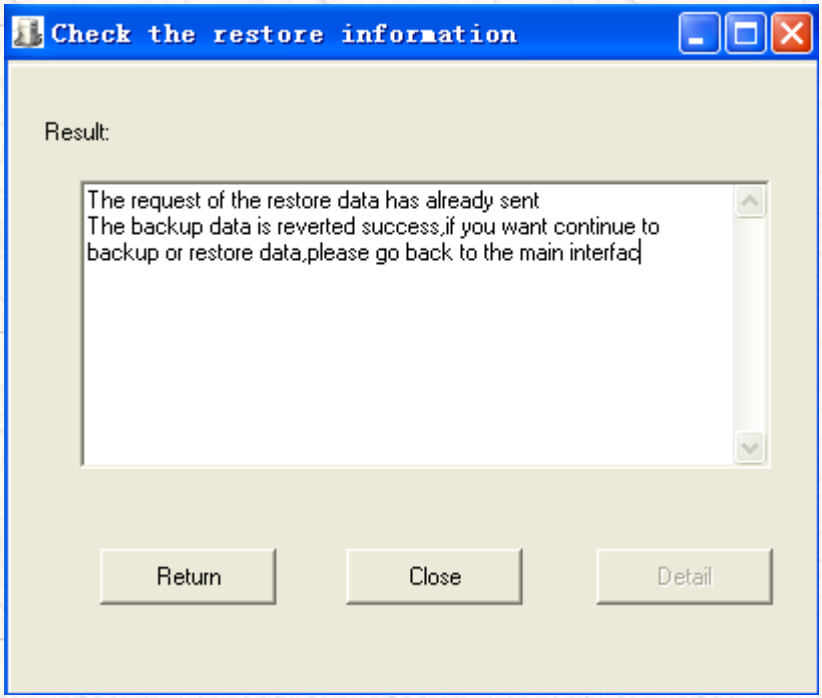
Picture 13-12Server Revert Interface

Click Next to compress the backup server reads the directory of fixed package file, choose to restore compressed, as shown below.



Picture 13-13Server Revert Result Interface

Click Next,as shown below.

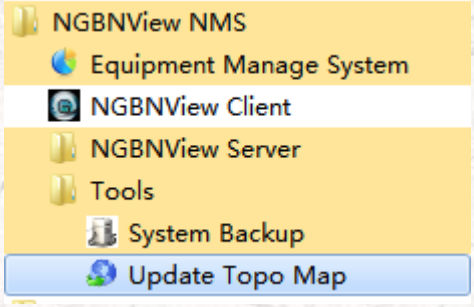


Picture 13-14Server Revert Result Interface

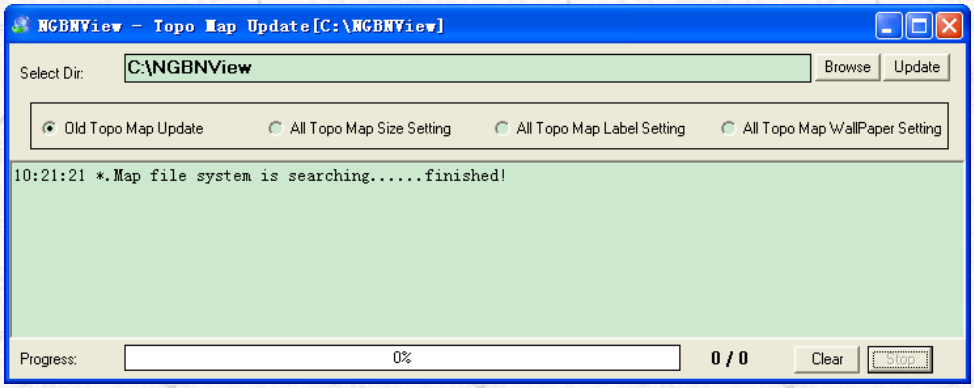
Chapter 14 Update TOPO

14.1 Update TOPO Overview

This chapter is mainly on topology operation, mainly for bulk operations topology, without a set or an upgraded main functions are to upgrade the old version of the topology map, set the size of the topology map, as well as on the topology of the device tagging, you can set the background color for the topology view. Open the upgrade topology is as follows.



Picture 14-1Open Update Topo Interface



Picture 14-2Update TOPO Interface

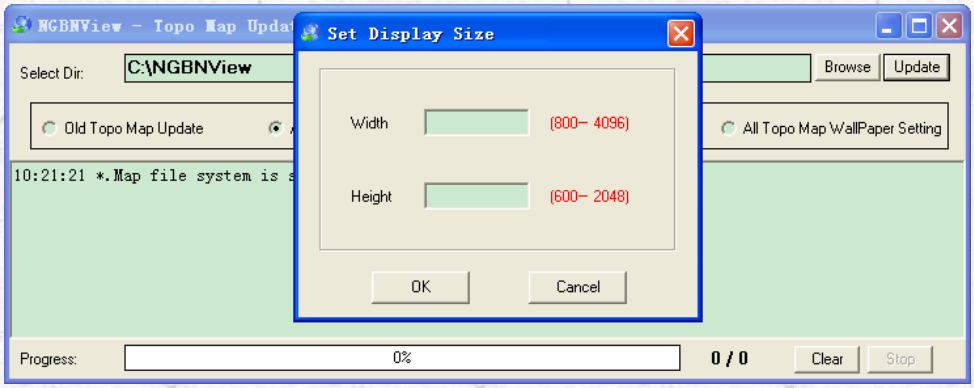
Brower：To upgrade the topology of the topology of the storage location. Can be found by browsing the file folder where the topology.

14.2 Update Previous TOPO

The upgrade is mainly for upgrading the previous topology to meet the requirements of the new version of the topology map.

14.3 Set All TOPO Size

Topofor the folder to re-set the size, select this option and then click on the upgrade, as shown below.

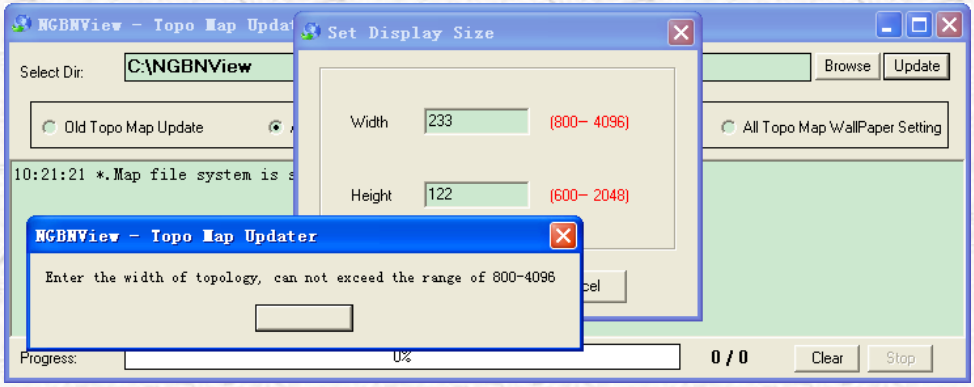


Picture 14-3Set Size of TOPO

Width：length，range from 800 to 4098

Height：range from 600 to 208

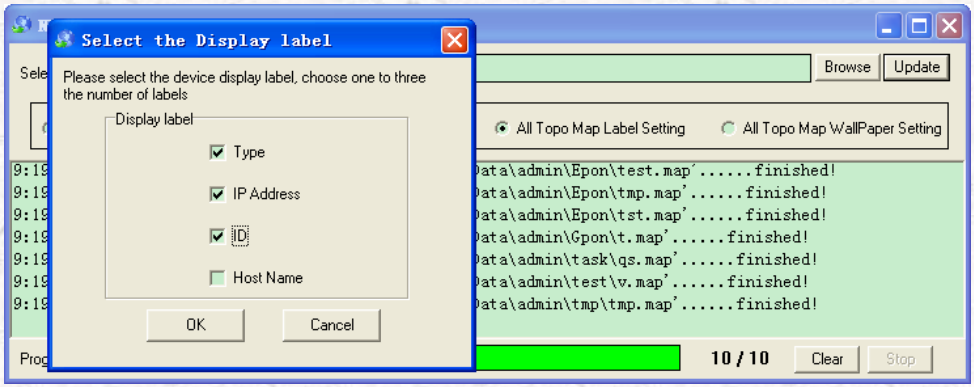
If outside this range, the message will appear, as shown below.



Picture 14-4Message

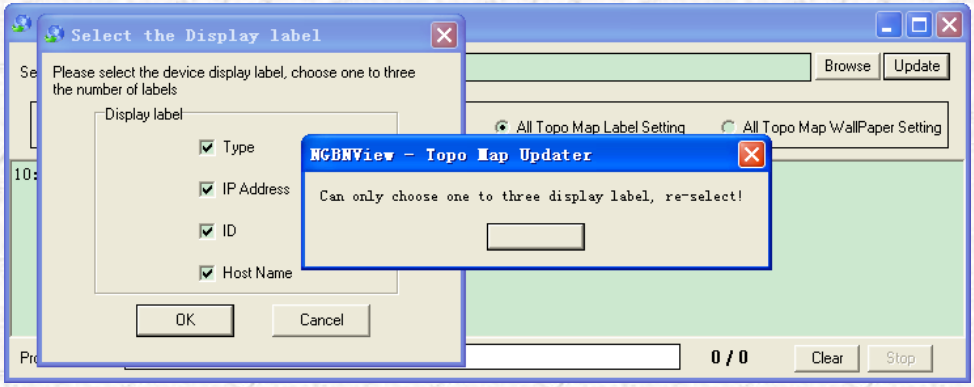
14.4 Set All Topo Label

Some labeled topology, as shown below



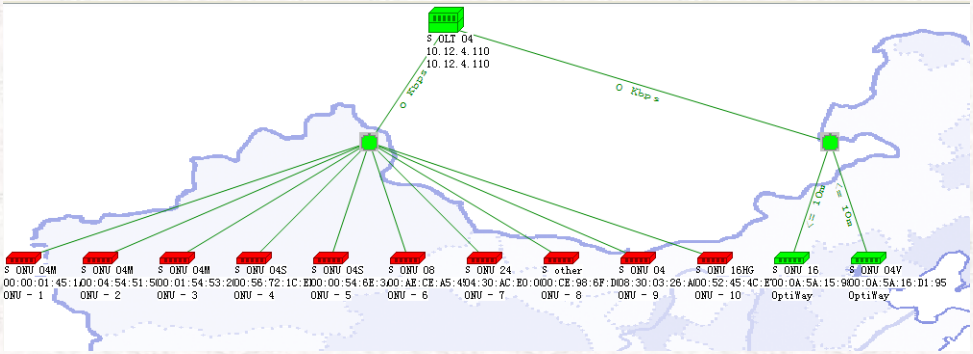
Picture 14-5Setting all Topo Label

In the topo ,there are Type IP Address,ID,Host Name.Select at least one, select up to three, if multiple choice, the following information appears.



Picture 14-6Multiple Choice Message

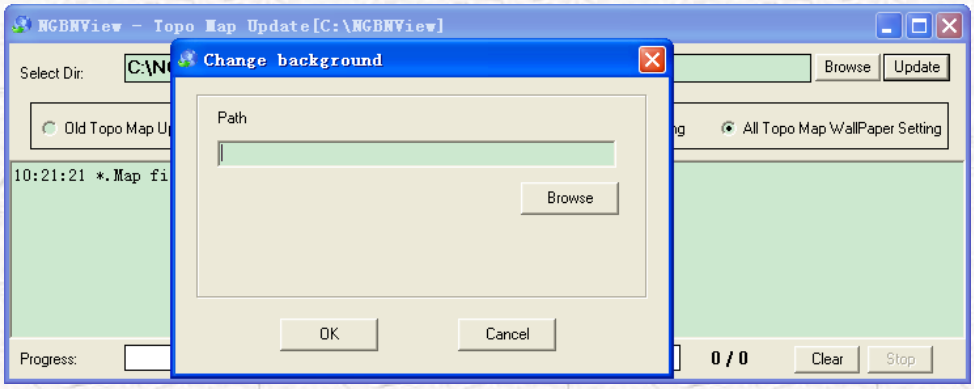
Set up to display the label, click OK, then update the topology map, updated results are shown below.



Picture 14-7TOPO Label Upgrade Result Interface

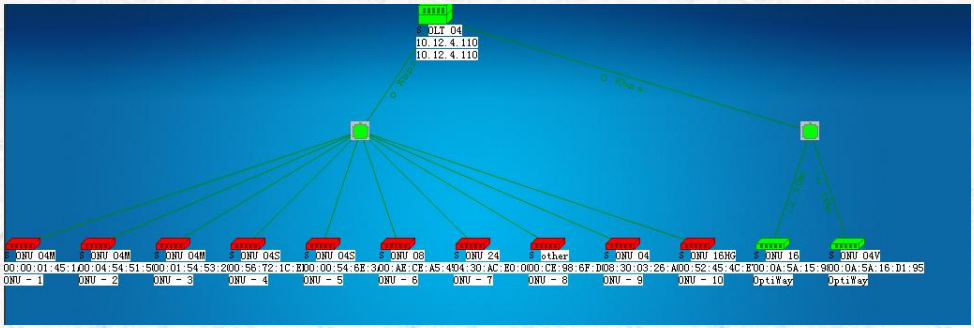
14.5 Set topology background

The function is as the background color to set the topology map to open as shown below



Picture 14-8Set TOPO background Color

Path：Select your desired background color, the picture only support. Jpg and. Bmp format images. After selecting the image, click OK to be upgraded, as shown below.



Picture 14-9Update TOPO Color