



ООО «ГК «Сети»
Поставщик DWDM SFP оборудования, проектирование сетей,
оптимизация и поддержка ИТ-инфраструктуры.
<https://dwdm-sfp.ru/>

Оптическая транспортная платформа NewNets NS-DWDM-OP0xx

Web Network Management User Manual

2022



Content

Network Management System	3
Web Network Management System	3
1. Web Network Management Login Default Information	3
2. Web Network Management Login Conditions.....	3
3. Web Network Management Login Step.....	4
4. Web Network Management Page Layout.....	5
5. Equipment General View	6
6. View the Information EDFA Card	7
7. Alarm Management	7
8. IP Address Configuration.....	9
9. SNMP Configuration.....	10
10. Equipment Maintenance.....	11
11. Network Management System Restart.....	14
12. Network Management System Upgrade.....	15
13. Unit Card Upgrade	17

Network Management System

Web Network Management System

In order to facilitate the user's maintenance and configuration of the EDFA card, the device provides a Web network management function. Users can log in to the web system through HTTP and use the web interface to manage and maintain the device. The running environment of the web system is as shown in the following figure:

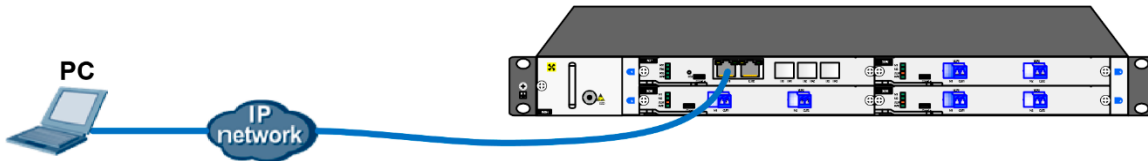


Figure 4.1 Web Network management running environment

1. Web Network Management Login Default Information

The HTTP service is enabled by default when the device leaves the factory, and the default web login information is set. Users can use the default login information to log in to the web interface of the device through the HTTP service.

The default web login information includes:

- User name: webadmin
- Password: admin
- The default IP address of the device: 192.168.1.100

2. Web Network Management Login Conditions

- Before logging in to the web system, the route between the network management PC and the device is reachable.
- The operating systems supported by the web system include: Windows Server 2008, Windows 7, Windows 8, Windows 10, and Windows Server 2012.
- Browser supported by the web network management system: Google Chrome 61.0.3163.100 and above, using other browsers may cause the page to display abnormally. This manual uses Google Chromc163.100 as an example.
- After the software version of the device is changed, users are advised to clear the cached data of the browser before logging in to the device through the web system. Otherwise, the content of the web system may not be displayed correctly.
- Please click Customize and Control Google Chrome in Google Chrome, select "More Tools > Clear Browsing Data", check "Cache and Pictures and Files" and "Cookies", click "Clear Browsing Data", clear your browser. The above option location is illustrated by Google Chrome 61.0.3163.100.

3. Web Network Management Login Step

The steps for logging in to the device using Web are as follows:

- (1) Connect the device and PC

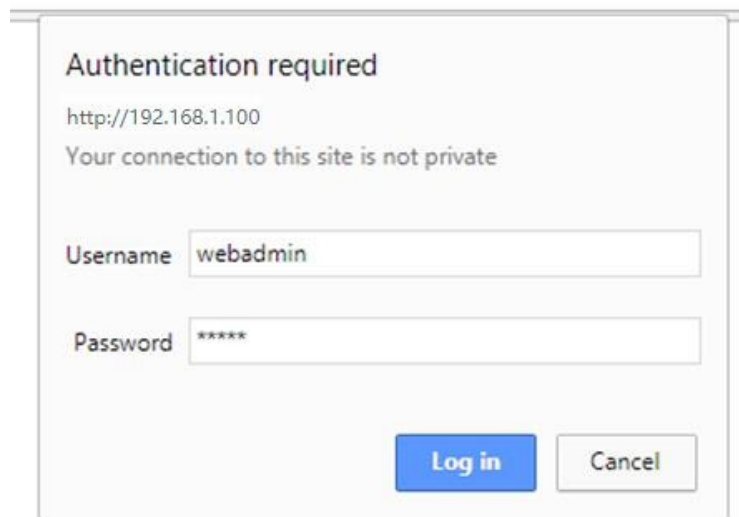
Connect the PC to the Ethernet port (ETH1 or ETH2) on the device with a straight-through or crossover Ethernet cable.

- (2) Configure an IP address for the PC to ensure communication with the device.

Modify any address in the network segment with IP address 192.168.1.0/24 (except 192.168.1.100). It cannot be duplicated with the default network management IP address, for example, 192.168.1.2

- (3) Start Google Chrome and enter the login information.

Start Google Chrome on your PC, enter "http://192.168.1.100" in the address bar and press Enter. You can enter the web login page of the device and enter the username "webadmin" and password "admin". Click the <Login> button to log in. As shown below:



Authentication required

http://192.168.1.100

Your connection to this site is not private

Username

Password

Figure 4.1.3 Web network management system login interface

4. Web Network Management Page Layout

The web network management page is divided into two parts: the navigation bar and the configuration area, as shown in the following figure.

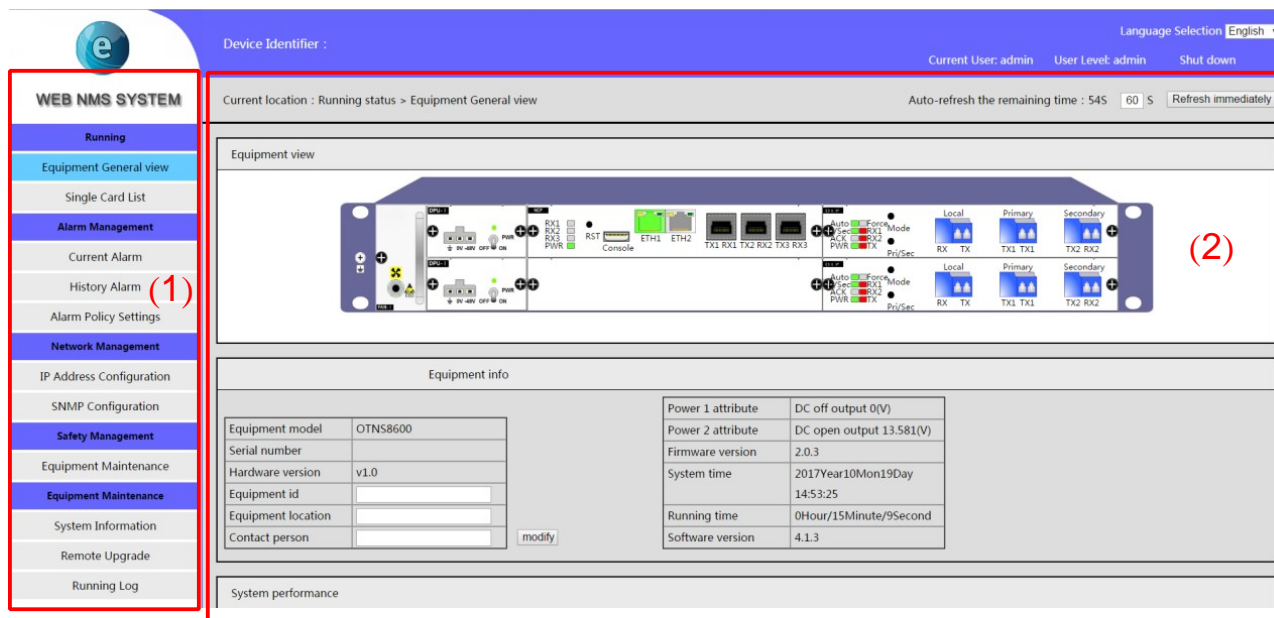
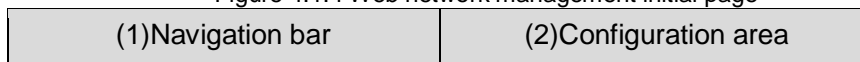


Figure 4.1.4 Web network management initial page



- Navigation bar: Organize the web network management function menu of the device in the form of a navigation tree. The user can conveniently select the function menu in the navigation bar, and the selection result is displayed in the configuration area.
- Configuration area: the area where users configure and view.

5. Equipment General View

On the web platform page, click the <Equipment General view> button in the left navigation bar. The configuration area on the right side of the page displays the device view and basic device information, as shown in the following figure:

WEB NMS SYSTEM

Device Identifier : _____ Language Selection: English

Current User: admin User Level: admin Shut down

Current location : Running status > Equipment General view Auto-refresh the remaining time : 54S 60 S Refresh immediately

Equipment view

(1)

Equipment info

Click on the name of each slot in the device view, and the card details page will pop up.

Equipment model	OTNS8600	Power 2 attribute	DC open output 13.581(V)
Serial number		Power 2 attribute	DC open output 13.581(V)
Hardware version	v1.0	System time	2017Year10Mon19Day 14:53:25
Equipment id		Running time	0Hour/15Minute/9Second
Equipment location		Software version	4.1.3
Contact person			

(2)

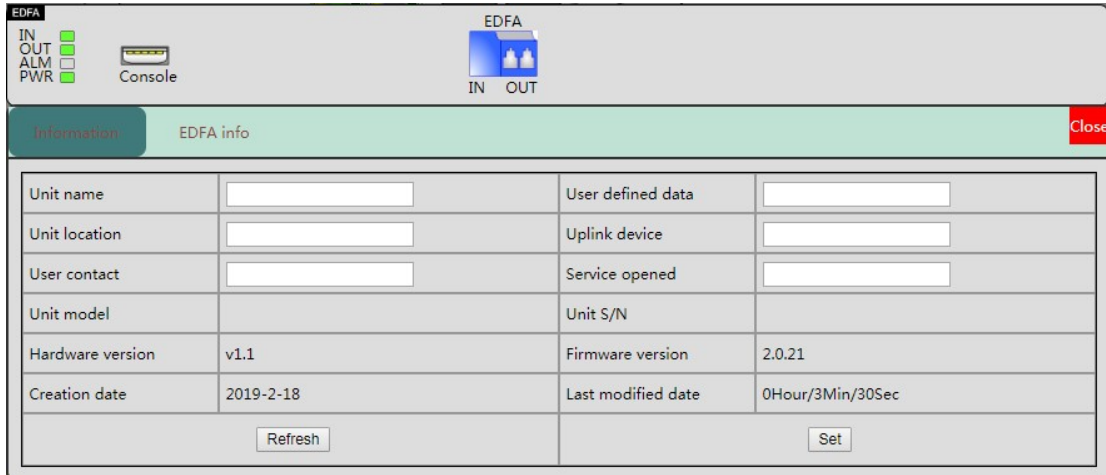
System performance

Note:

- (1) Device view: The device view is the same as the physical display. Users can view the card configuration of the current device and the current working status indicator of the device.
- (2) Device information: displays the current device model, software/hardware version number, power supply properties, and running time. Users can enter remark information in the device ID, device location, and contact pop-up boxes to distinguish each node device.

6. View the Information EDFA Card

- (1) Click the name of the EDFA card in the device view. The detailed information display page of the card is displayed, as shown in the following figure:

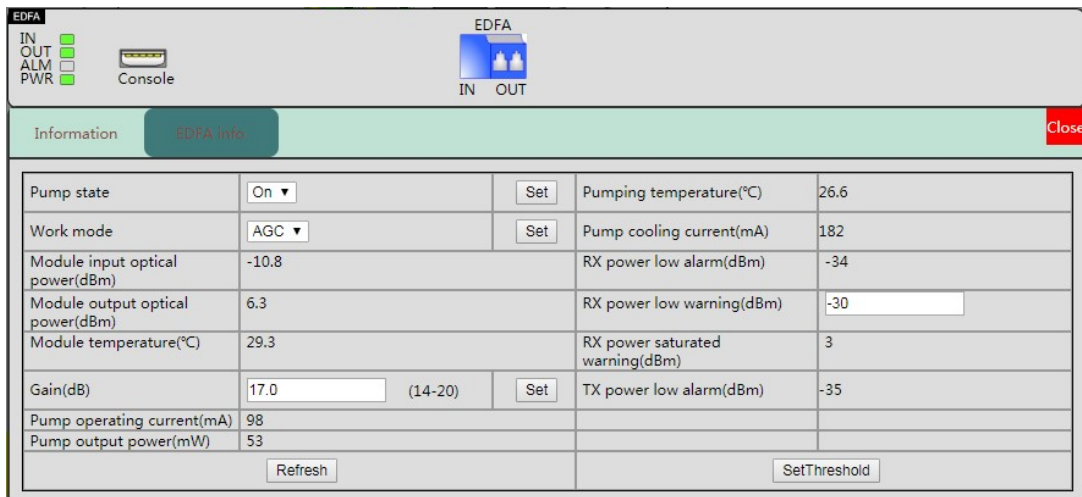


Unit name	<input type="text"/>	User defined data	<input type="text"/>
Unit location	<input type="text"/>	Uplink device	<input type="text"/>
User contact	<input type="text"/>	Service opened	<input type="text"/>
Unit model		Unit S/N	
Hardware version	v1.1	Firmware version	2.0.21
Creation date	2019-2-18	Last modified date	0Hour/3Min/30Sec

Refresh Set

Note: This page is the basic information page of the EDFA card. It mainly displays the EDFA card model, serial number, hardware version, firmware version, and creation date. You can also enter various remarks in the blank padding area.

- (2) Click <EDFA info> on the card details display page to view the current working status of EDFA, as shown in the following figure:



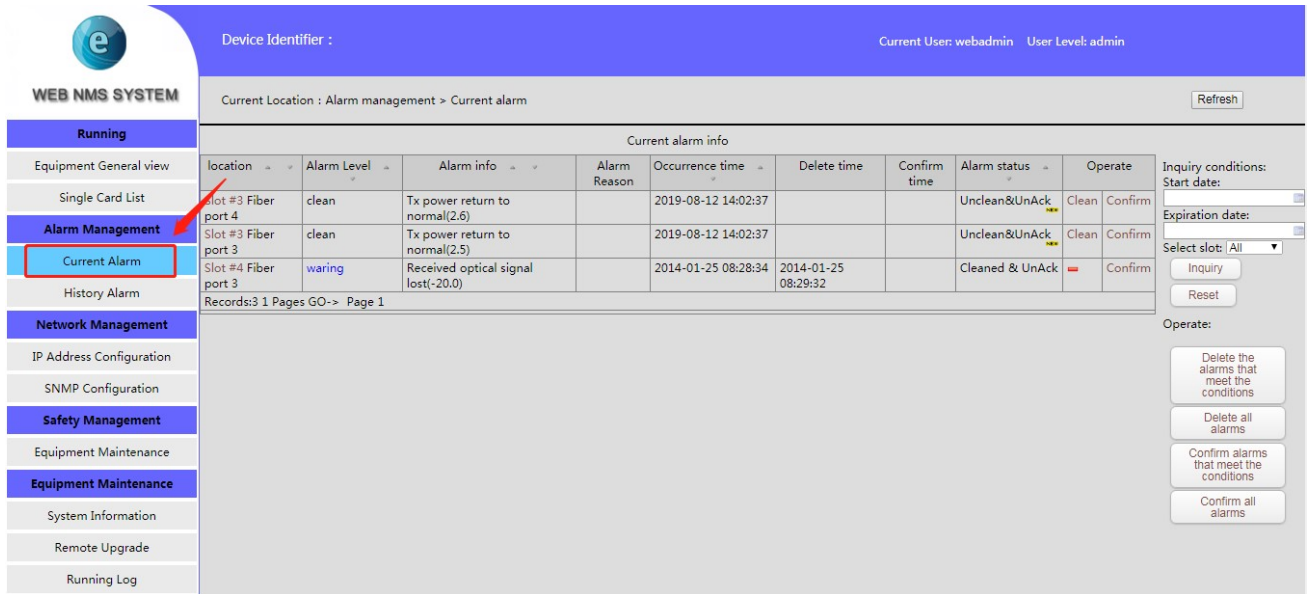
Pump state	On	Set	Pumping temperature(°C)	26.6
Work mode	AGC	Set	Pump cooling current(mA)	182
Module input optical power(dBm)	-10.8		RX power low alarm(dBm)	-34
Module output optical power(dBm)	6.3		RX power low warning(dBm)	-30
Module temperature(°C)	29.3		RX power saturated warning(dBm)	3
Gain(dB)	17.0	(14-20) Set	TX power low alarm(dBm)	-35
Pump operating current(mA)	98			
Pump output power(mW)	53			

Refresh SetThreshold

Note: This page is the EDFA working status information page. It mainly displays the input optical power, output optical power, temperature and other info of the EDFA card.

7. Alarm Management

- 1) On the web network management page, click the <Current Alarm> button in the left navigation bar. The current configuration area of the device will display the current alarm information of the device, as shown in the following figure.:



Device Identifier : Current User: webadmin User Level: admin

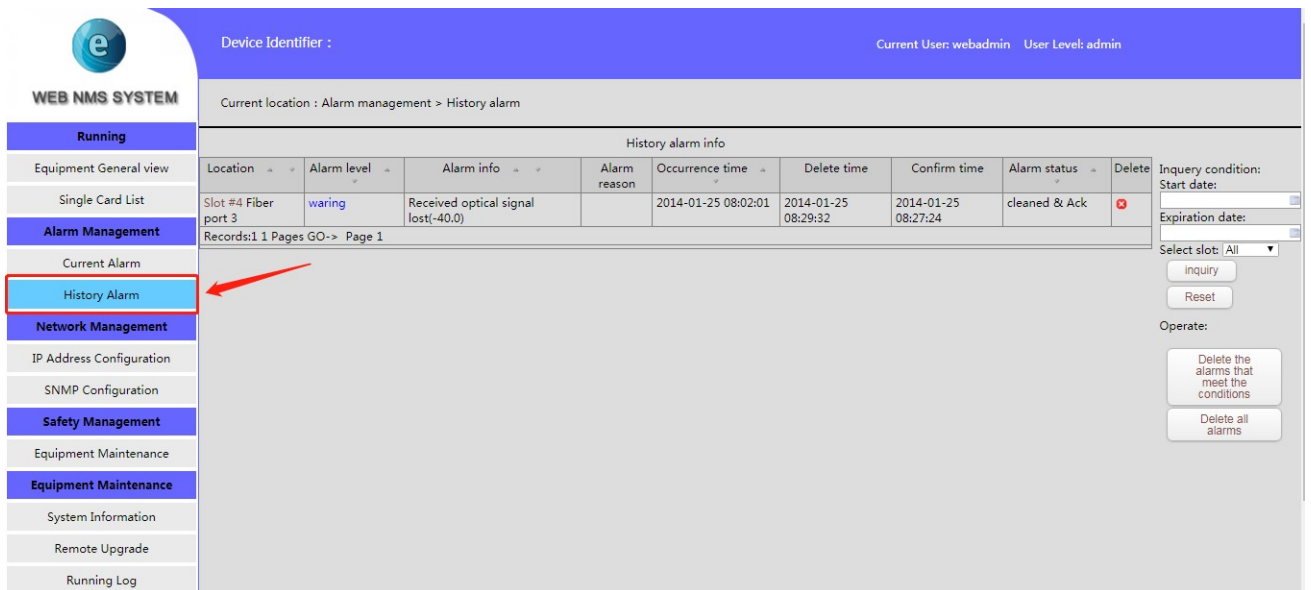
Current Location : Alarm management > Current alarm

location	Alarm Level	Alarm info	Alarm Reason	Occurrence time	Delete time	Confirm time	Alarm status	Operate
Slot #3 Fiber port 4	clean	Tx power return to normal(2,6)		2019-08-12 14:02:37			Unclean&UnAck	Clean Confirm
Slot #3 Fiber port 3	clean	Tx power return to normal(2,5)		2019-08-12 14:02:37			Unclean&UnAck	Clean Confirm
Slot #4 Fiber port 3	waring	Received optical signal lost(-20,0)		2014-01-25 08:28:34	2014-01-25 08:29:32		Cleaned & UnAck	Confirm

Records:3 1 Pages GO-> Page 1

Note: This page can view the current alarm information generated by the current device, including the alarm location, alarm name, alarm status, alarm occurrence time, etc. Click the <Confirm> and <Clear> buttons in the operation column on the right side of each alarm to confirm and clear, the confirmed and cleared alarm information will be transferred to the historical alarm list; or click the rightmost <confirm all alarms> and <clear all alarms> to confirm and clear the current alarm information

2) On the web platform page, click the <History Alarm> button in the navigation tree on the left. The device in the configuration area on the right of the page displays the device history alarm information, as shown in the following figure.:



Device Identifier : Current User: webadmin User Level: admin

Current location : Alarm management > History alarm

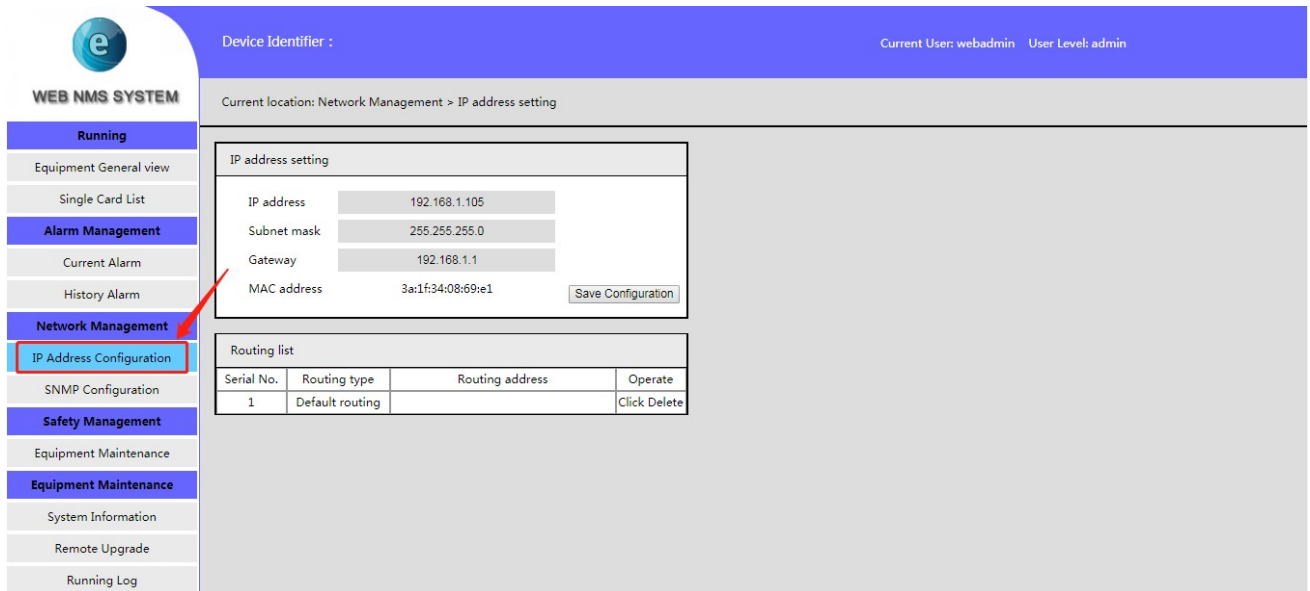
Location	Alarm level	Alarm info	Alarm reason	Occurrence time	Delete time	Confirm time	Alarm status	Delete
Slot #4 Fiber port 3	waring	Received optical signal lost(-40,0)		2014-01-25 08:02:01	2014-01-25 08:29:32	2014-01-25 08:27:24	cleaned & Ack	Delete

Records:1 1 Pages GO-> Page 1

Note: This page allows users to view the historical alarm information generated by the current device. Click the <Delete> button in the rightmost operation column of each alarm to delete the alarm. Users can also click the rightmost <Delete all alarms> to delete all historical alarm information.

8. IP Address Configuration

On the NMS page, click the <IP Address Configuration> button in the left navigation bar. The configuration area on the right side of the page will display the device IP address setting page, as shown in the following figure.:



Device Identifier : Current User: webadmin User Level: admin

Current location: Network Management > IP address setting

WEB NMS SYSTEM

Running

- Equipment General view
- Single Card List

Alarm Management

- Current Alarm
- History Alarm

Network Management

- IP Address Configuration**
- SNMP Configuration

Safety Management

- Equipment Maintenance

Equipment Maintenance

- System Information
- Remote Upgrade
- Running Log

IP address setting

IP address: 192.168.1.105

Subnet mask: 255.255.255.0

Gateway: 192.168.1.1

MAC address: 3a:1f:34:08:69:e1

Routing list

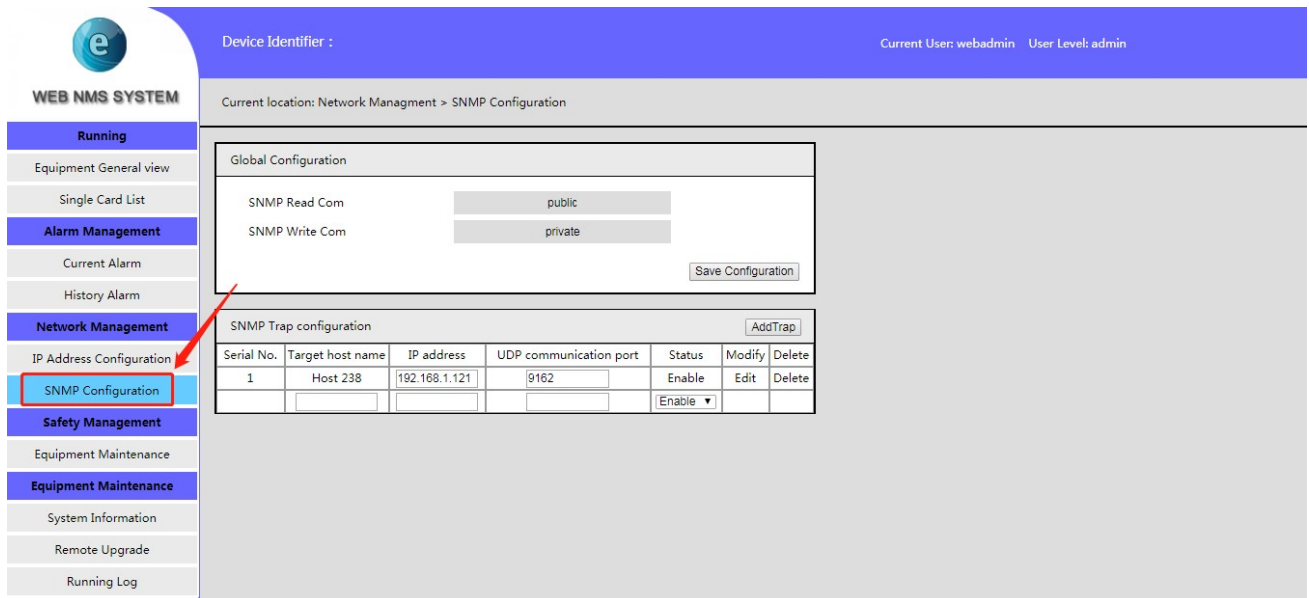
Serial No.	Routing type	Routing address	Operate
1	Default routing		Click Delete

Note:

- IP address: Users can log in to the device through the IP address. The default IP address is 192.168.1.100
- Subnet mask: Subnet mask of the device IP address. By default, the mask is 24 bits
- Gateway: The device is connected to the default gateway in the network. By default, the gateway is 192.168.1.1
- Port: The port number of the web system that is accessed through HTTP. By default, the port number is 9091
- After the IP configuration information is input, click the “Save Configuration” button, and wait for the page feedback to pop up the “Setup Successful” prompt, the device network management will restart and start the completed network settings

9. SNMP Configuration

- 1) On the NMS page, click the <SNMP Configuration> button in the left navigation bar. The SNMP configuration page will be displayed in the configuration area on the right side of the page, as shown in the following figure:



Device Identifier : Current User: webadmin User Level: admin

Current location: Network Management > SNMP Configuration

Running

- Equipment General view
- Single Card List
- Alarm Management**
 - Current Alarm
 - History Alarm
- Network Management**
 - IP Address Configuration
 - SNMP Configuration**
- Safety Management**
 - Equipment Maintenance
- Equipment Maintenance**
 - System Information
 - Remote Upgrade
 - Running Log

Global Configuration

SNMP Read Com: public

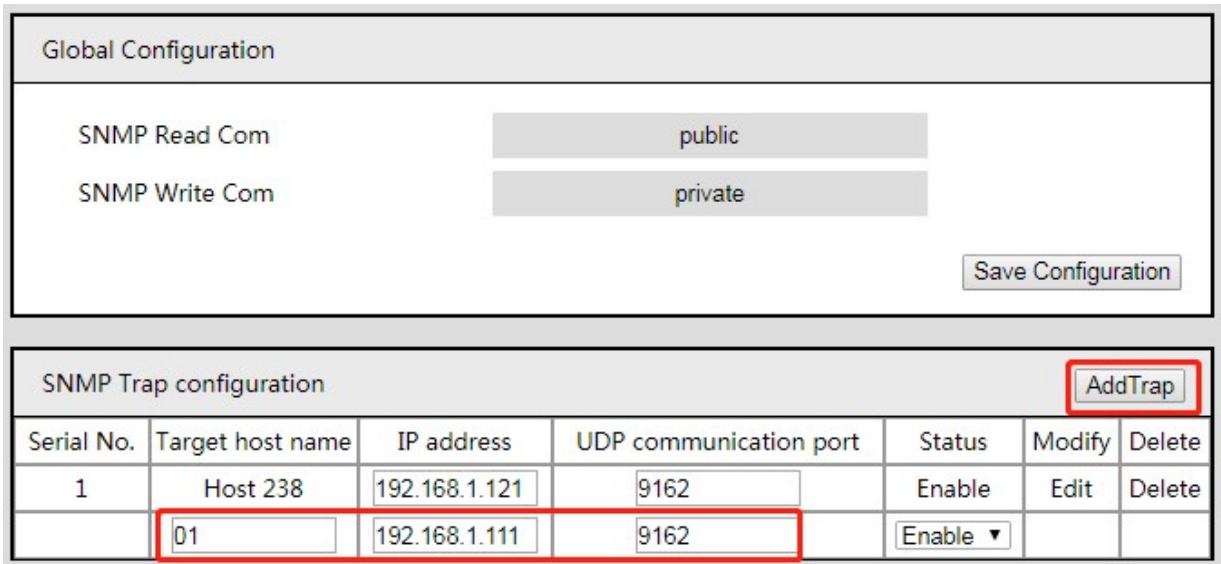
SNMP Write Com: private

Save Configuration

SNMP Trap configuration AddTrap

Serial No.	Target host name	IP address	UDP communication port	Status	Modify	Delete
1	Host 238	192.168.1.121	9162	Enable	Edit	Delete

- 2) The SNMP read/write community can be modified in the global configuration. The default read community: public, write community: private; SNMP alarm target host can be set in the SNMP Trap configuration, as shown in the following figure:



Global Configuration

SNMP Read Com: public

SNMP Write Com: private

Save Configuration

SNMP Trap configuration AddTrap

Serial No.	Target host name	IP address	UDP communication port	Status	Modify	Delete
1	Host 238	192.168.1.121	9162	Enable	Edit	Delete
	01	192.168.1.111	9162	Enable ▾		

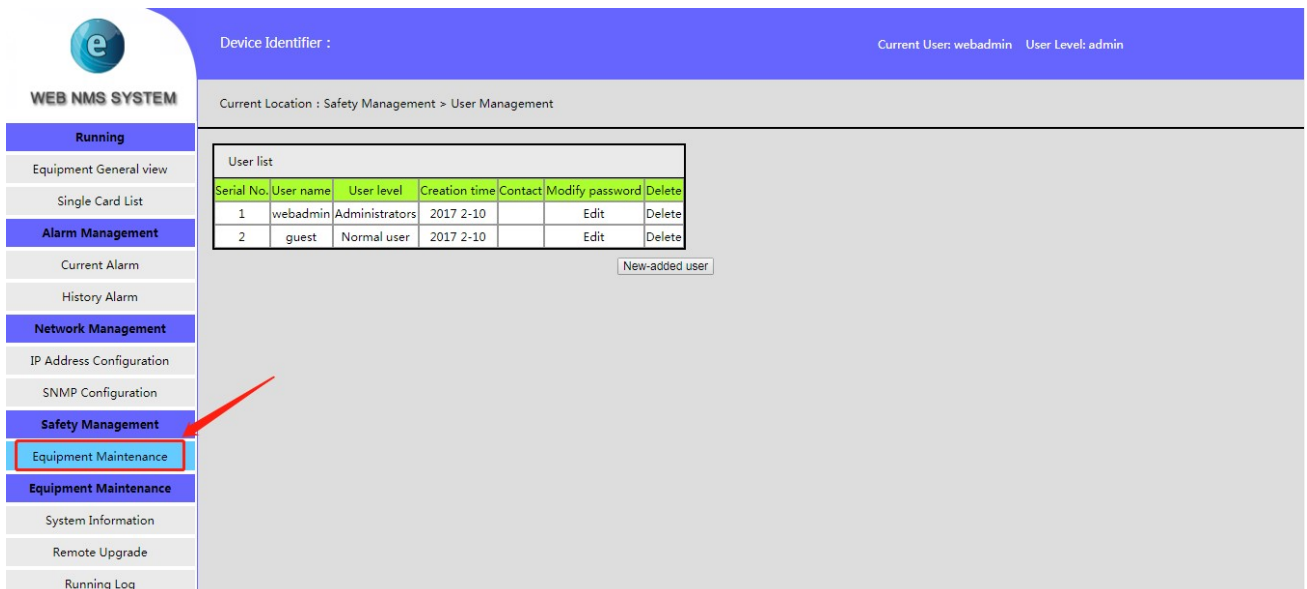
Note:

- The global configuration is not recommended to modify. The global configuration of the device NE must be consistent with the global configuration in the NMS

- Only when the alarm target host is added to the SNMP Trap configuration can the alarm information be pushed to the network management host in real time, and the alarm prompt is popped up in the NMS network management system on the host in real time
- Add multiple alarm target host: First click the <Add Trap> button in the SNMP Trap configuration interface, a new table will be added in the alarm target host list, enter the host name, IP address and UDP communication port, then click <Add Trap> button once, waiting for the page feedback to pop up the “Setup Successful” prompt

10. Equipment Maintenance

- 1) On the NMS page, click the <Equipment Maintenance> button in the left navigation bar. The user management settings page will be displayed in the configuration area on the right side of the page, as shown in the following figure.:



Device Identifier : Current User: webadmin User Level: admin

Current Location : Safety Management > User Management

WEB NMS SYSTEM

Running

- Equipment General view
- Single Card List

Alarm Management

- Current Alarm
- History Alarm

Network Management

- IP Address Configuration
- SNMP Configuration

Safety Management

- Equipment Maintenance**

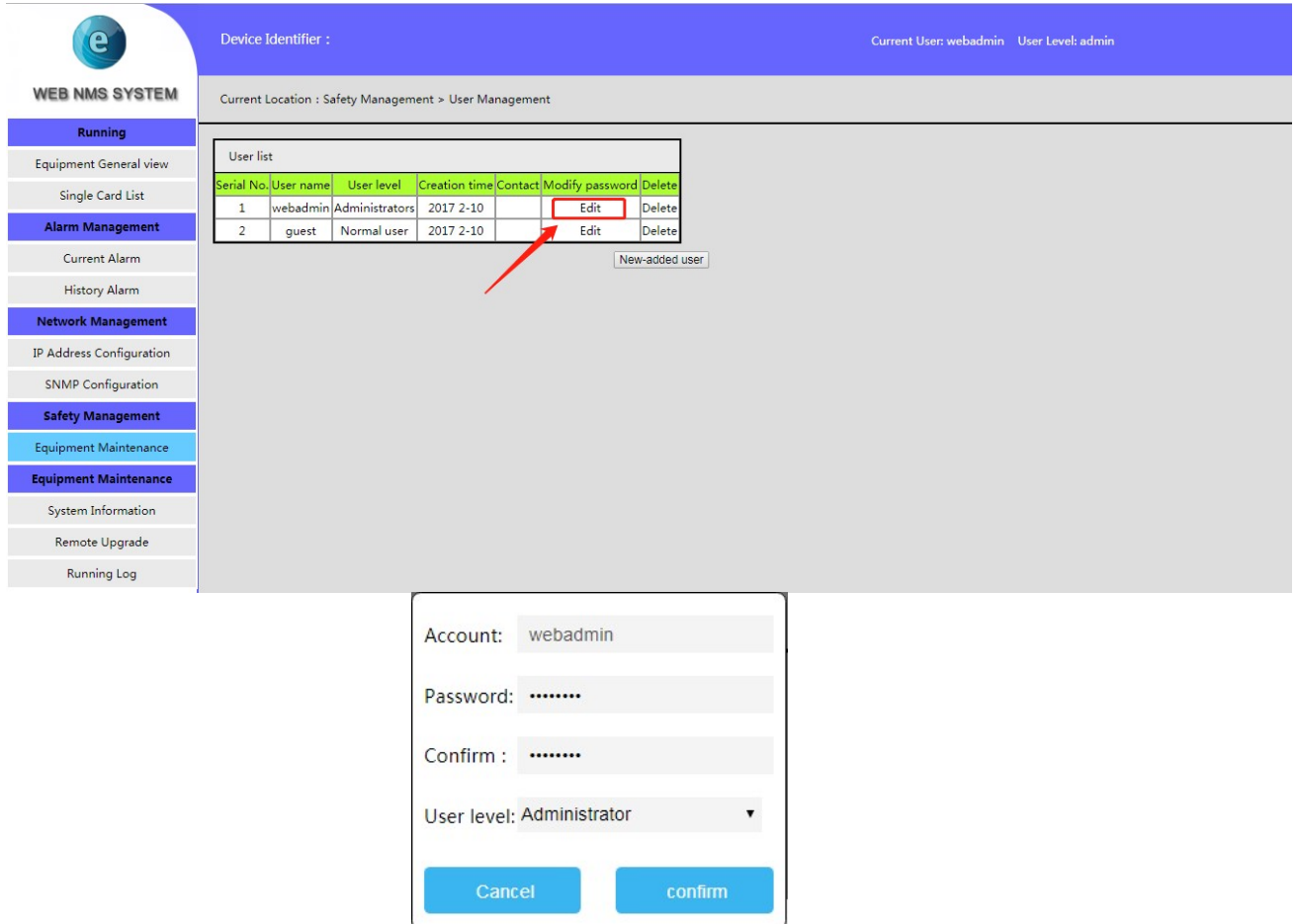
Equipment Maintenance

- System Information
- Remote Upgrade
- Running Log

Serial No.	User name	User level	Creation time	Contact	Modify password	Delete
1	webadmin	Administrators	2017 2-10		Edit	Delete
2	guest	Normal user	2017 2-10		Edit	Delete

New-added user

- 2) Change password: Click the “click to modify” button after the corresponding user name to enter the password modification page. After the modification is completed, click OK, as shown in the figure below.:



The screenshot shows the WEB NMS SYSTEM interface. The top navigation bar includes "Device Identifier :", "Current User: webadmin", and "User Level: admin". The breadcrumb trail is "Current Location : Safety Management > User Management".

The left sidebar contains the following menu items:

- Running
 - Equipment General view
 - Single Card List
- Alarm Management
 - Current Alarm
 - History Alarm
- Network Management
 - IP Address Configuration
 - SNMP Configuration
- Safety Management
 - Equipment Maintenance
- Equipment Maintenance
 - System Information
 - Remote Upgrade
 - Running Log

The main content area displays a "User list" table:

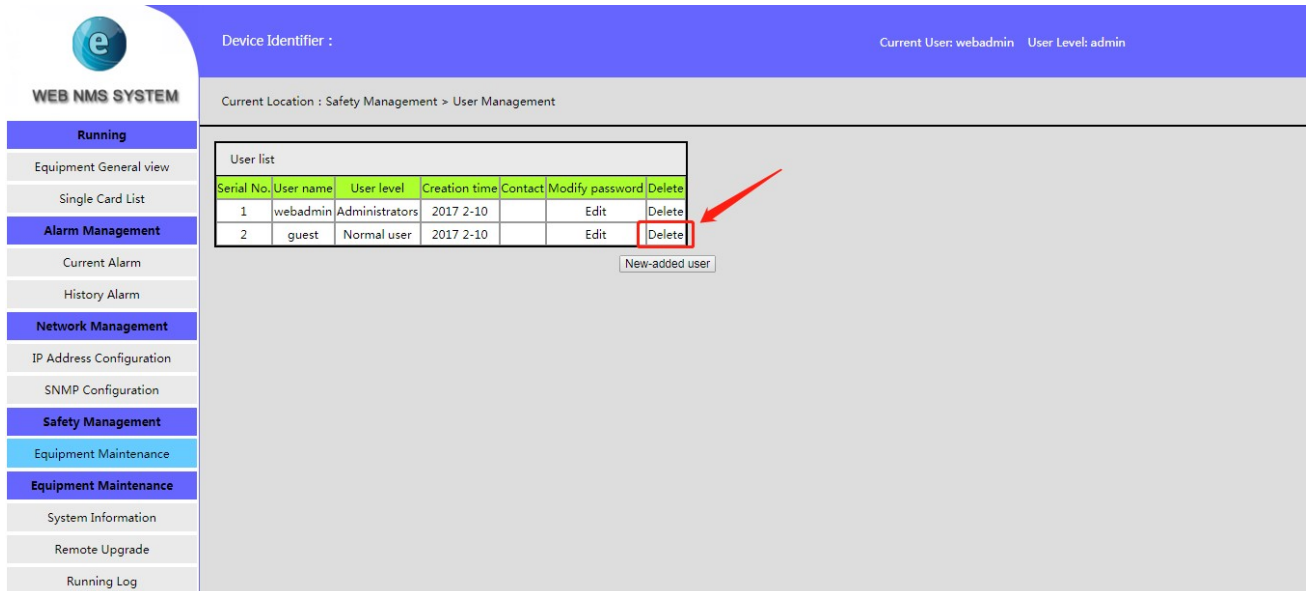
Serial No.	User name	User level	Creation time	Contact	Modify password	Delete
1	webadmin	Administrators	2017 2-10		Edit	Delete
2	guest	Normal user	2017 2-10		Edit	Delete

A red arrow points to the "Edit" button in the "Modify password" column for the "webadmin" user. A "New-added user" button is also visible below the table.

The modal window for password modification is open, showing the following fields:

- Account: webadmin
- Password:
- Confirm :
- User level: Administrator (dropdown menu)
- Buttons: Cancel, confirm

- 3) Delete User: Click the "Click Delete" button after the corresponding user name to delete the user, the web interface will pop up a page deletion success prompt, click the "Confirm" button to delete successfully; webadmin is the default administrator account for the device manufactured, and cannot be deleted.



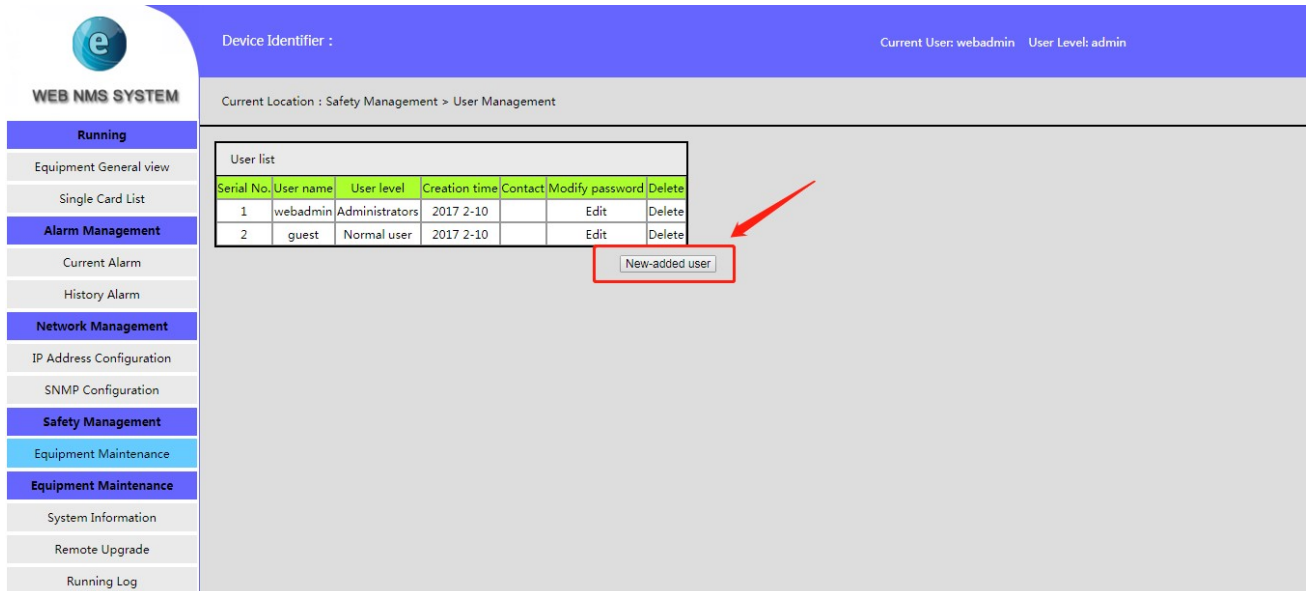
Device Identifier : Current User: webadmin User Level: admin

Current Location : Safety Management > User Management

Serial No.	User name	User level	Creation time	Contact	Modify password	Delete
1	webadmin	Administrators	2017 2-10		Edit	Delete
2	guest	Normal user	2017 2-10		Edit	Delete

New-added user

- 4) Add a new user: Click the “Add User” button to enter the new user page. Enter the information and click OK. The operation mode is as shown below:



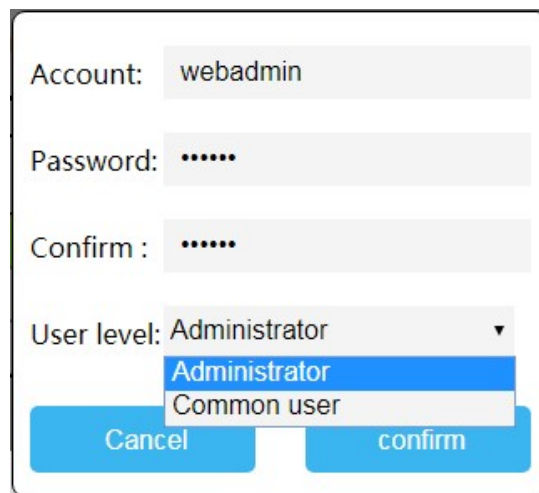
WEB NMS SYSTEM

Device Identifier : Current User: webadmin User Level: admin

Current Location : Safety Management > User Management

Serial No.	User name	User level	Creation time	Contact	Modify password	Delete
1	webadmin	Administrators	2017 2-10		Edit	Delete
2	guest	Normal user	2017 2-10		Edit	Delete

New-added user



Account: webadmin

Password:

Confirm :

User level: Administrator

Administrator

Common user

Cancel confirm

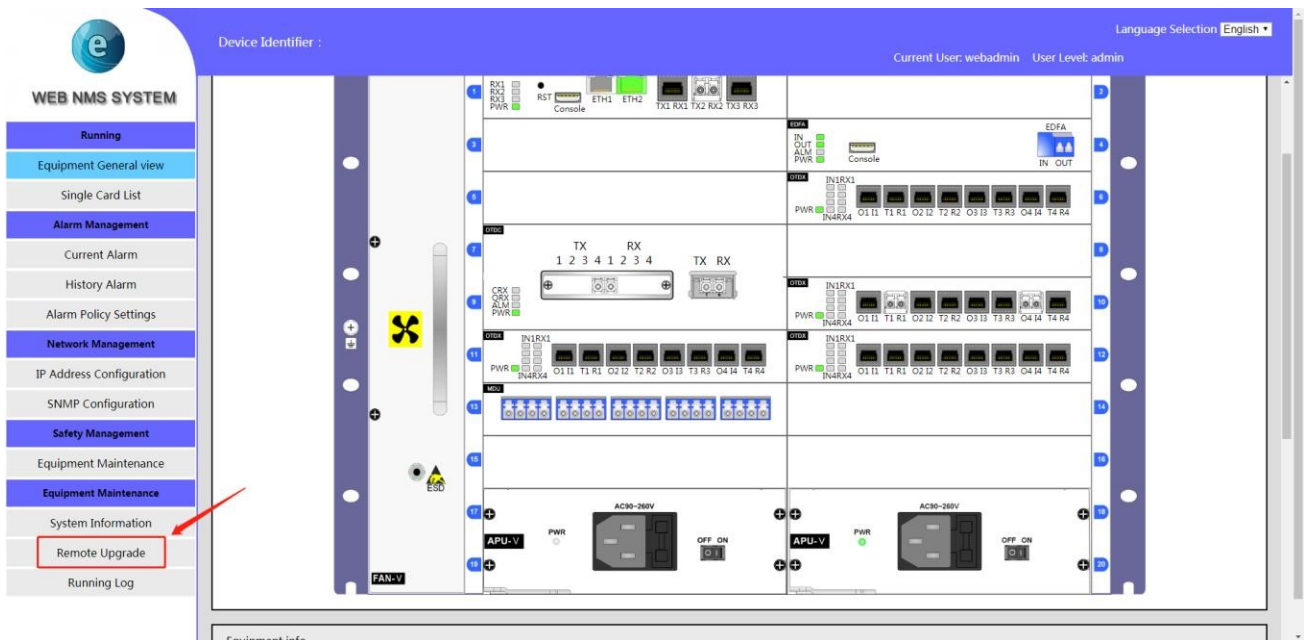
11. Network Management System Restart

- 1) Click the <Remote Upgrade> button in the left navigation bar on the NMS page, and the system configuration page will be displayed in the configuration area on the right side of the page.
- 2) Click <Restart> in the system configuration page to switch to the network management system restart interface.
- 3) Click <Restart> in the network management system restart interface. The web interface will pop up the network management system restart confirmation or cancel the prompt box. After clicking the “confirm” button, the network management system will restart.

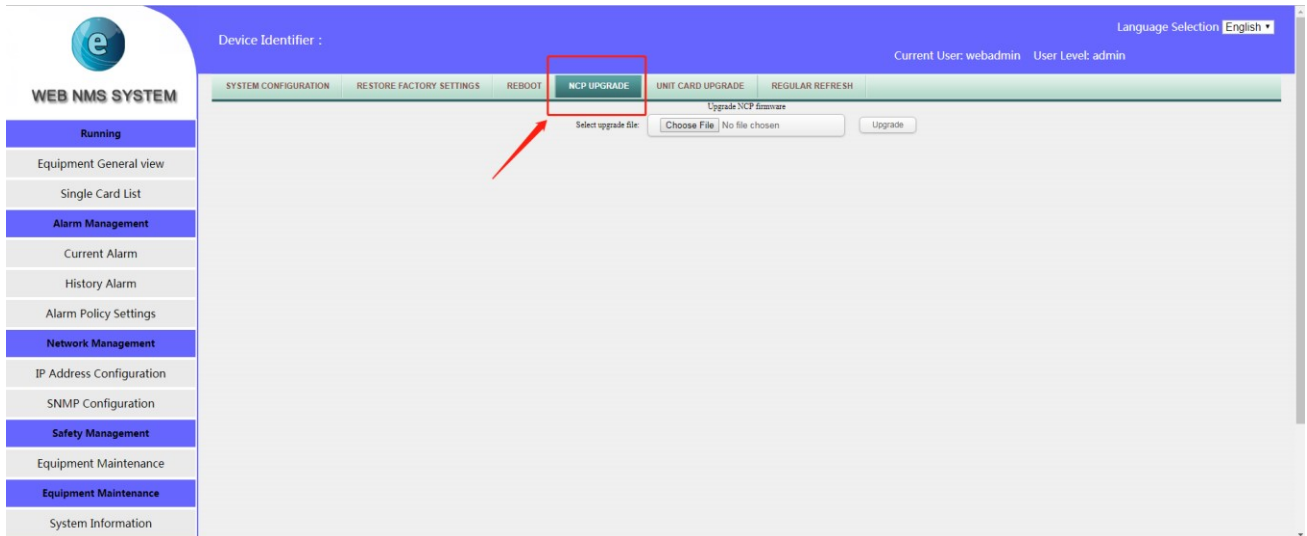


12. Network Management System Upgrade

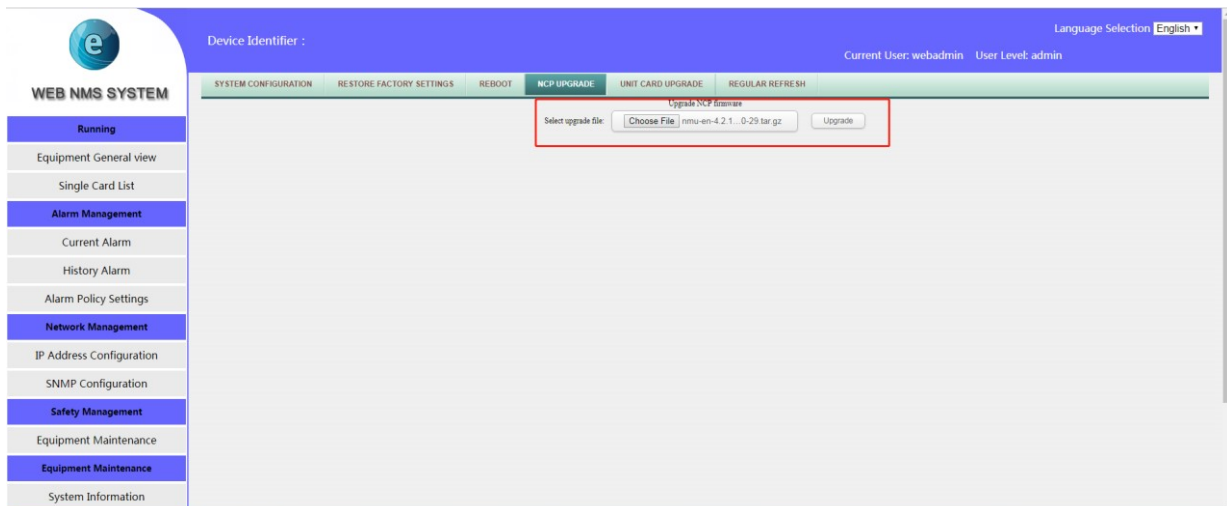
- 1) Click the <Remote Upgrade> button in the left navigation bar on the NMS page. The system configuration page will be displayed in the configuration area on the right side of the page, as shown in the following figure:



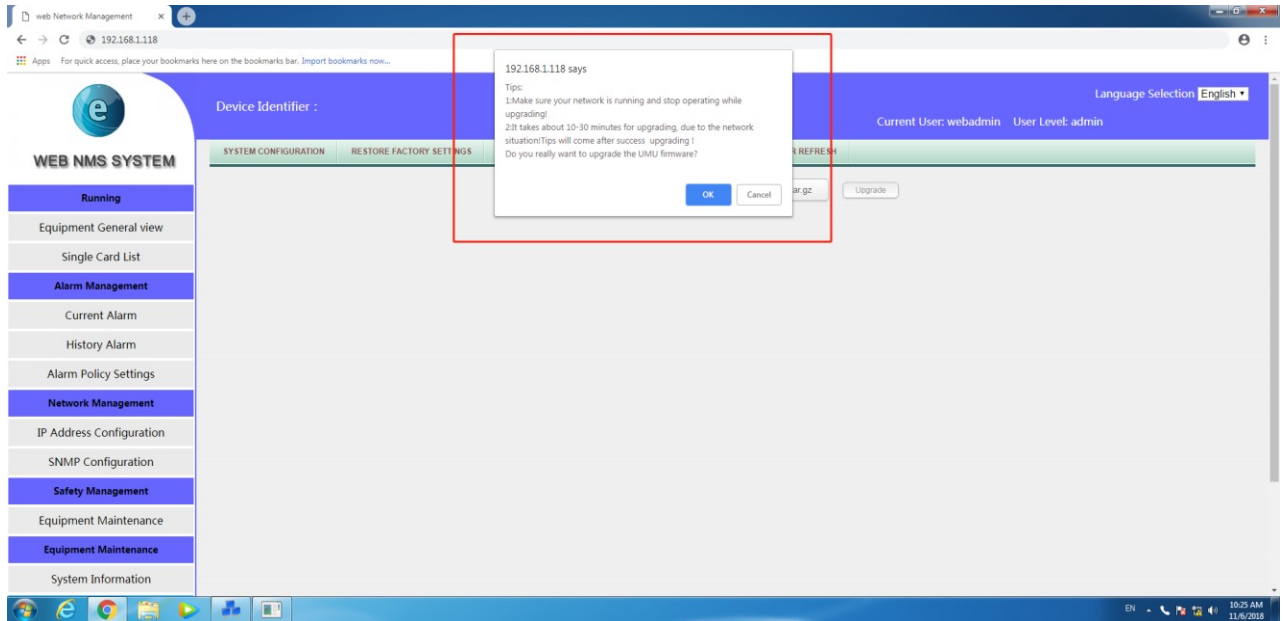
- 2) Click the <NCP Upgrade> button on the system configuration page to switch to the network management system upgrade interface, as shown in the following figure:



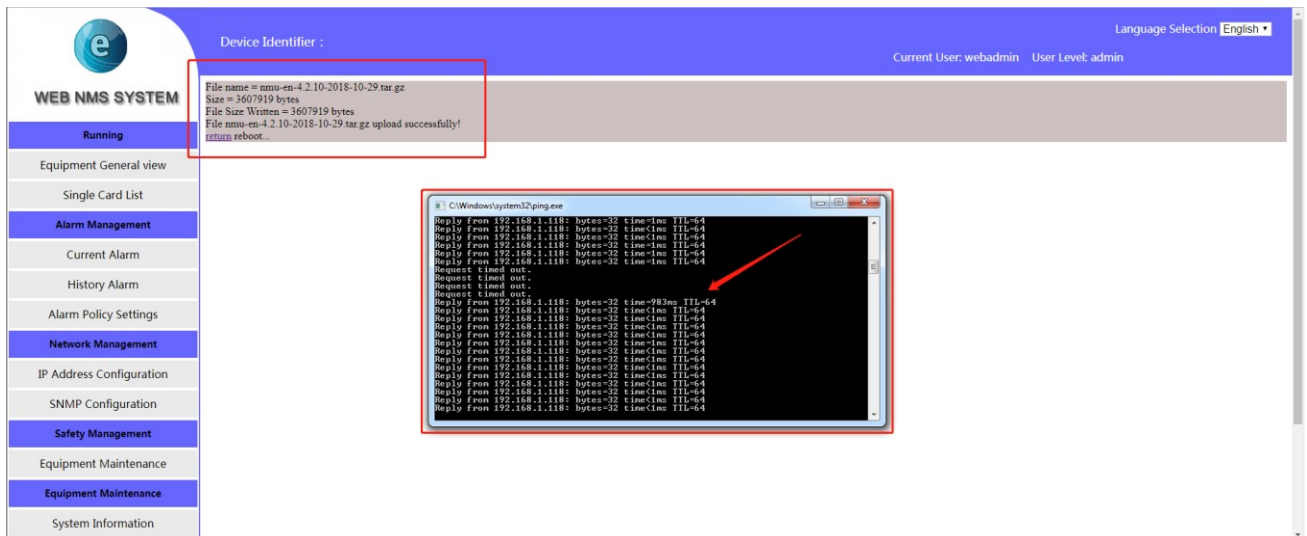
- 3) Click <Select Upgrade File> in the network management system upgrade interface, select the updated network management system upgrade file in the file manager that pops up, and click the <Upgrade> button on the right, as shown in the figure below:



The web interface will pop up the network management system upgrade confirmation or cancel prompt box. After clicking the “confirm” button, the network management system will start to upgrade, as shown in the figure below:

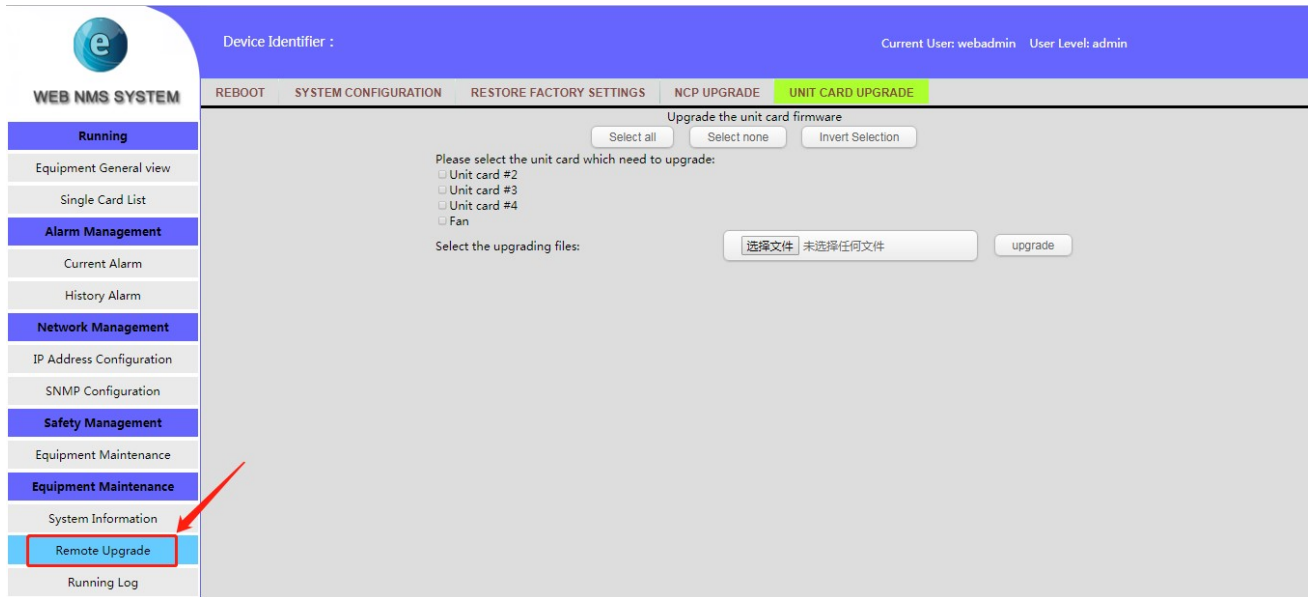


- 4) The network management system has a long upgrade time. During the upgrade process, do not perform other operations or refresh the page. Wait for the upgrade process to complete automatically and finally prompt “System is restarting...” and the upgrade is successful. At this time, the network management system is restarting. After a minute, users can refresh the network management interface and revisit it, as shown in the following figure:

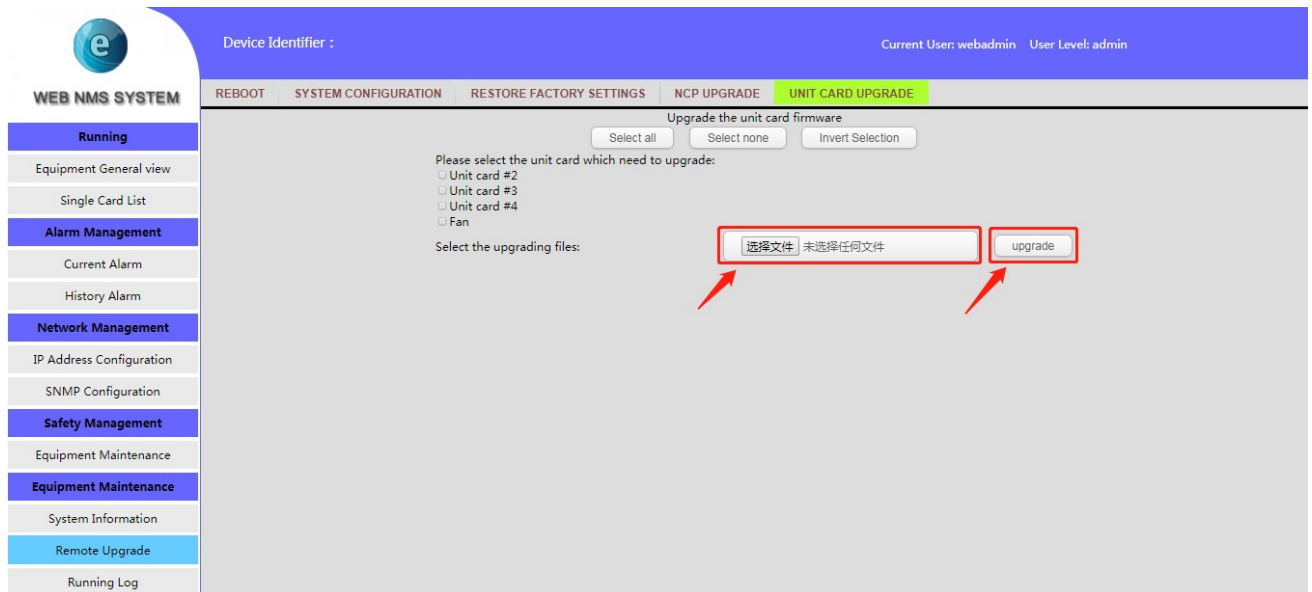


13. Unit Card Upgrade

- 1) On the Web management page, click the <Remote Upgrade> button in the left navigation bar. The configuration area on the right side of the page will display the unit upgrade interface, as shown in the following figure.:



- 2) In the unit card upgrade interface, select the unit card to be upgraded, and then click the <Select Upgrade File> button, select the updated unit card upgrade file in the file manager that pops up, and click the <Upgrade> button on the right side, as shown in the following figure:



- 3) The web interface will pop up the unit card upgrade confirmation or cancel the prompt box. After clicking the “confirm” button, the unit card will start to upgrade, as shown in the figure below:



- 4) The unit card upgrade time is fast. During the upgrade process, do not perform other operations or refresh the page. Wait for the upgrade process to complete automatically and finally prompt “the unit disk upgrade is completed”, indicating that the upgrade is successful. At this time, the network management interface can be refreshed to visit. As shown below:

