

Network Management Card Firmware Upgrade SOP

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Modification History

Date	Firmware	Release Notes
2019/03/07	V2.6.0.5	Request login password for web access as default. Resolve email crash and abnormal reboot issue. Fix minor bugs.
2019/10/21	V2.8.0.2	Remove telnet function for security Change SNMP v3 as default SNMP setting for security Update SSL file HTTP is disable as default for security, HTTPS is always enable. Modify NMC password when the first login If the password is input error over 5 times, NMC will be locked for 10 minutes Log the login information in system log

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1. Prepare UPS, NMC card, a computer

Please Note : If there is NMC running and user has known the IP address of NMC, user can skip first part and second part to go third part

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- 1.1. Insert NMC card into the UPS slot correctly, and make sure the card is connected to the slot tightly.
- 1.2. There is a communication cable provided from package, please link the card and computer via the cable. Insert the RJ45 port into the “SETTING” port of the card and connect DB9 port to the RS232 port of computer.
Please refer to the following picture.
- 1.3. Connect NMC to network via “NETWORK” port

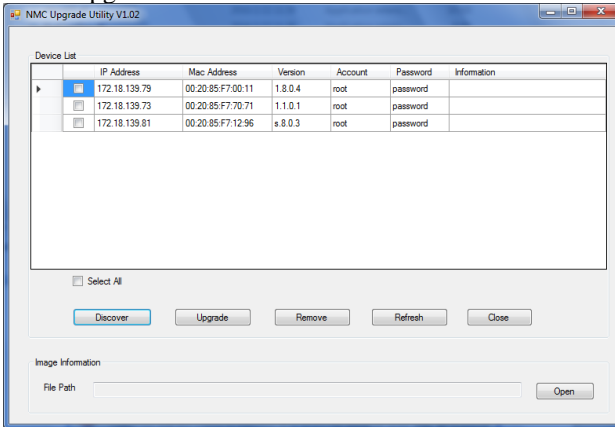


2. View or Configure NMC via serial port

There are two methods to view NMC IP address using NMC Upgrade Tool or Putty Tool.

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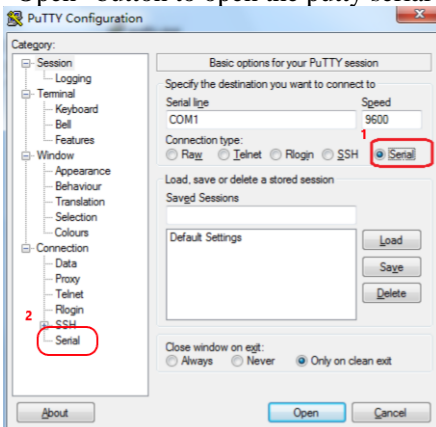
2.1. NMC Upgrade Tool



NMC Upgrade Tool can find the IP address automatically. Click the **Discover** button will pop up the search dialog. Enter IP range and click **Search**

2.2. Putty Tool

2.2.1. Check the Serial line number in the Device Manager (ex. COM1). Select “Serial” (1) node on the left tree and configure the parameter (2) of the serial port to **9600** bps, **8** bits, **None** parity, **1** stop bit and **None** flow control. Click “Open” button to open the putty serial communication window.



- 2.2.2. Press the “Enter” key from keyboard, and wait for the card information shown, when you see the information shown as the following picture 2.2.2-1, please input the default password “password” and the Network Management Card configuration menu will be shown on the screen as the following picture 2.2.3-1.

```

=====+
|           Network Management Card Configure Menu           |
=====+
Password:*****

```

2.2.2-1

- 2.2.3. Input “1” to enter the IP configuration menu to view or configure the IP address. For example, you can see the IP Address as the following picture 2.2.3-2.

```

=====+
|           Network Management Card Configure Menu           |
=====+
1. IP Configurations
2. Pass Through
3. Reset Configuration to default
4. Restart
5. Password
0. Exit

Please Enter Your Choice ->

```

2.2.3-1

```

=====+
|                               IP Configure Menu            |
=====+
MAC Address      : 00:20:85:F7:10:18
1. IP address    : 172.18.127.122
2. Subnet mask   : 255.255.255.0
3. Gateway       : 172.18.127.1
4. DHCP          : Enabled
5. Primary DNS address : ::FFFF:172.18.121.17
6. Secondary DNS address: ::FFFF:151.110.232.21
7. IPv6 Configure
0. Return to previous menu

```

Please Enter Your Choice :

2.2.3-2

3. Upload firmware via web browser

The upgrade process will take you several minutes, please waiting with your patience.

There are two files to be updated, **rom.bin** and **image.bin**.

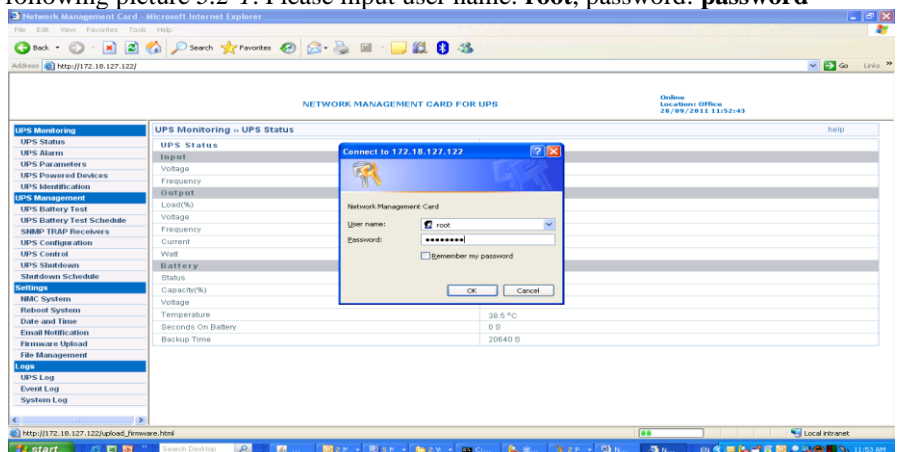
Please upload rom.bin first, after upload it successfully, and then upload image.bin.

- 3.1. Open the web browser, and input the IP address, such as 172.18.127.122, in the Address text box, Web page will be shown as the following picture 3.1-1.



3.1-1

- 3.2. Click Settings→Firmware Upload menu on the left window, and there will be a dialog pop-up to require you input user name and password. Please refer to the following picture 3.2-1. Please input user name: **root**, password: **password**

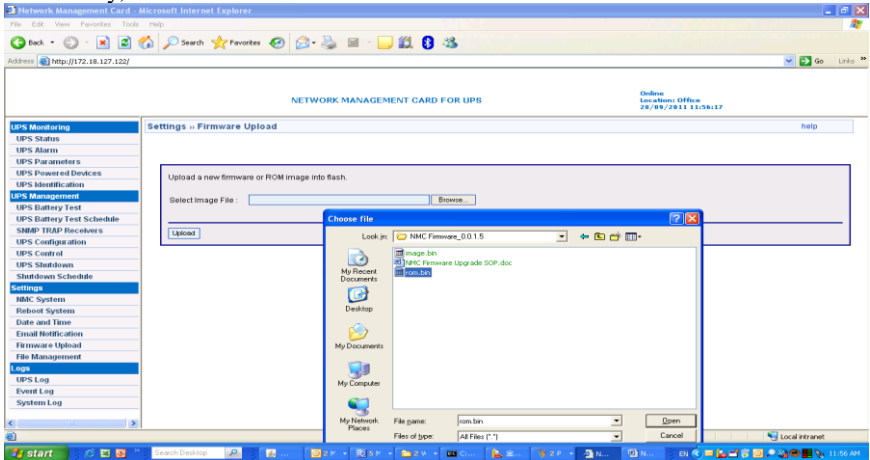


3.2-1

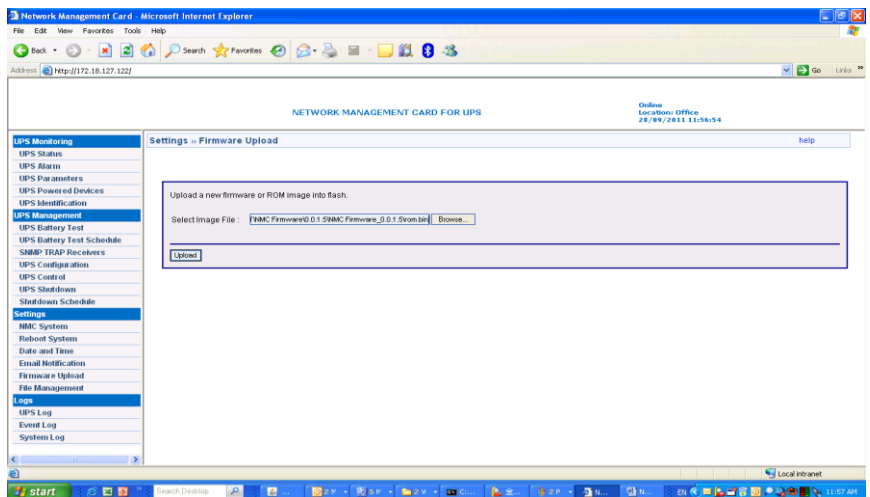
- 3.3. Select the **rom.bin** file that ready for upgrade by clicking the 'Browse' button. Please refer to the following picture 3.3-1, and press 'Upload' button to start the firmware upgrade. Please refer to the following picture 3.3-2.

In the process for updating the rom.bin, you can view the information shown on Putty to make sure the rom.bin upload OK and the card reset OK. If upload successfully, the information will be shown as 3.3-3.

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3.3-1



3.3-2

```

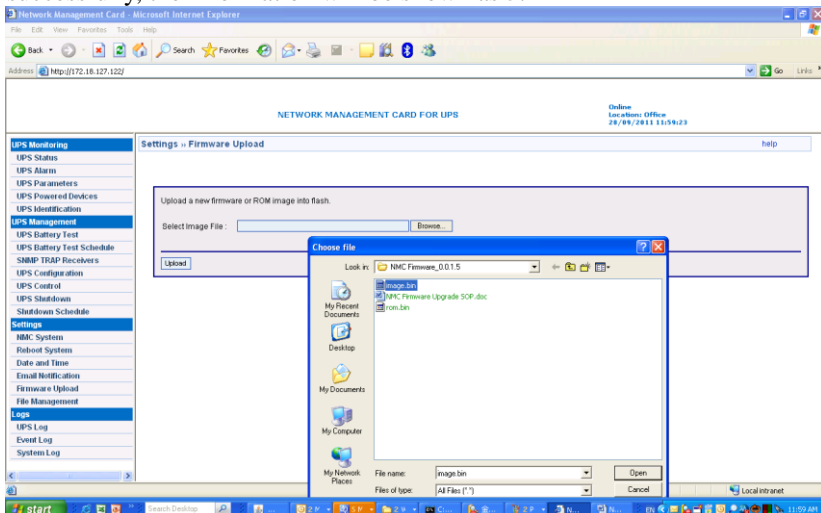
NMC Version 0.0.1.0
=====
|           Network Management Card Configure Menu           |
=====
Password:Download complete, writing to flash...
Firmware updated, quit the session to restart.
Resetting the system in 2 seconds...
bootloader version is 0.0.0.1
Got AUTO-CONFIGURED IPv6 address FE80::220:85FF:FEF7:1018 on interface eth0:3
Got DHCP IPv4 address 172.18.127.122 on interface eth0
Network IP configured.
FTP server started.
Using existing X.509 certificate.
HTTPS/HTTP server started.
SNMP start success
NMC Version 0.0.1.0
=====
|           Network Management Card Configure Menu           |
=====
Password:_
  
```

连接 0:01:56 自动检测 9600 8-N-1 SCROLL CAPS NUM 辅助 打印

3.3-3

- 3.4. After the rom.bin file is upgraded successfully. Refresh the web browser to make sure the card communication OK. Repeat the 3.2 of the third part and select the **image.bin** file that ready for upgrade by clicking the 'Browse' button. Please refer to the following picture 3.4-1, and press 'Upload' button to start the firmware upgrade.

In the process for updating the image.bin, you can view the information shown on Putty to make sure the image.bin upload OK and the card reset OK. If upload successfully, the information will be shown as 3.4-2



3.4-1


```

FTP server started.
Using existing X.509 certificate.
HTTPS/HTTP server started.
SNMP start success
NMC Version 0.0.1.0
+-----+
|               Network Management Card Configure Menu               |
+-----+

Password:Checksum passed, writing to flash...
Resetting the system in 2 seconds...
Firmware updated, quit the session to restart.
bootloader version is 0.0.0.1
Got AUTO-CONFIGURED IPv6 address FE80::220:85FF:FEF7:1018 on interface eth0:3
Got DHCP IPv4 address 172.18.127.122 on interface eth0
Network IP configured.
FTP server started.
Using existing X.509 certificate.
HTTPS/HTTP server started.
SNMP start success
NMC Version 0.0.1.5
+-----+
|               Network Management Card Configure Menu               |
+-----+

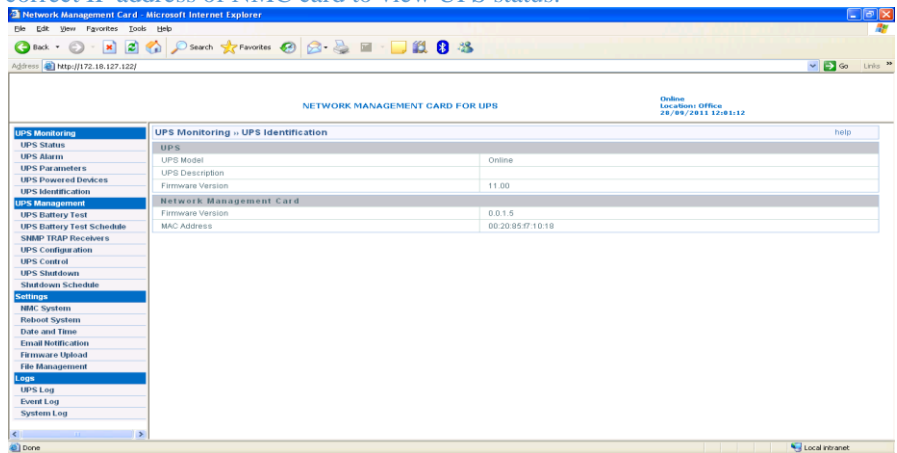
Password:

```

3.4-2

3.5. After rom.bin and image.bin update successfully, you can confirm the firmware version in “UPS Identification” page. Please refer to the following picture 3.5-1.

Note: if you can't refresh the IE successfully, please close IE and reopen, input the correct IP address of NMC card to view UPS status.



3.5-1