Instructions on burning new firmware into the Mini-Slot Web/SNMP Card

In case of firmware crash or corruption, you can reprogram firmware on the NMC Mini-Slot Card (66102) or ConnectUPS-MS Card (103006826)

How to reprogram

1.1 Preparing the binary file

Click on the FW file then 66102 for the Network Management Card (NMC) Mini-Slot or 103006826 for the ConnectUPS-MS Card. Rename the binary file of the firmware selected as **image.bin**. This is the only name useable on the TFTP server below.

1.2 Installing a TFTP server

Install a TFTP server onto a computer that can talk to the Web Card through the network.

Note: Click through the installation excepting all defaults.

For example, « SolarWinds 2003 TFTP » is free software that could be downloaded from the Web, and is included in this package.
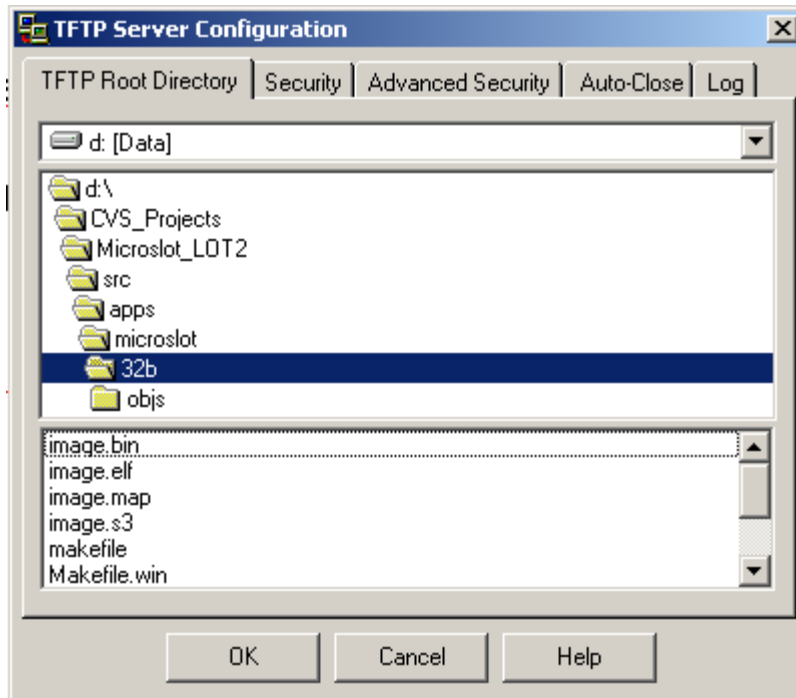
The « SolarWinds 2003 TFTP » program will be the software referenced in each example throughout this document.
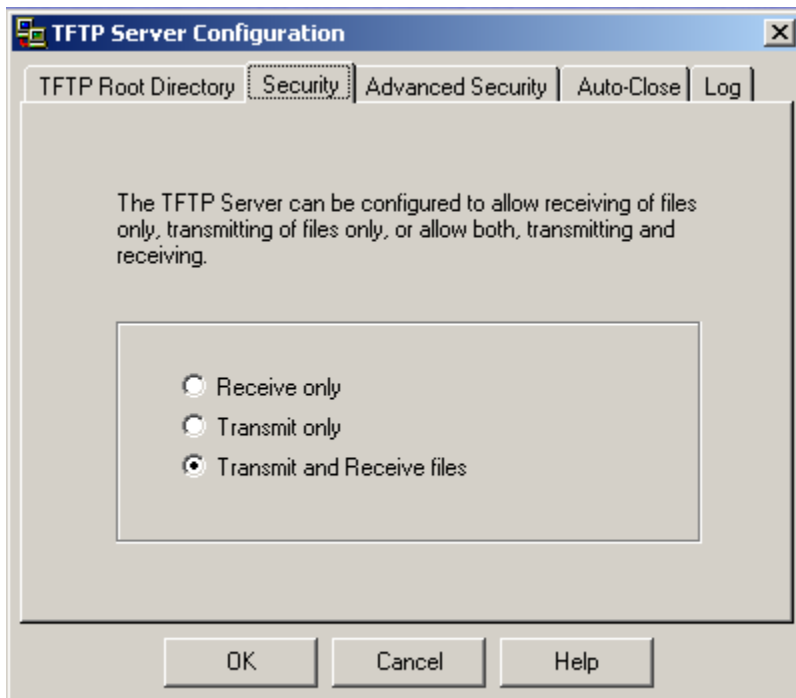
1.3 Settings of the TFTP server

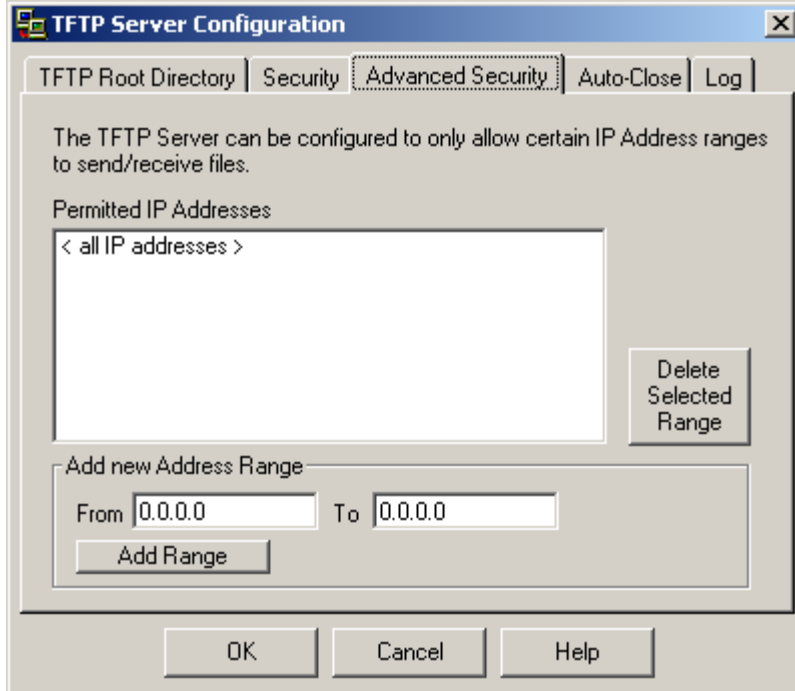To access TFTP server settings, open the menu File >> Configure.
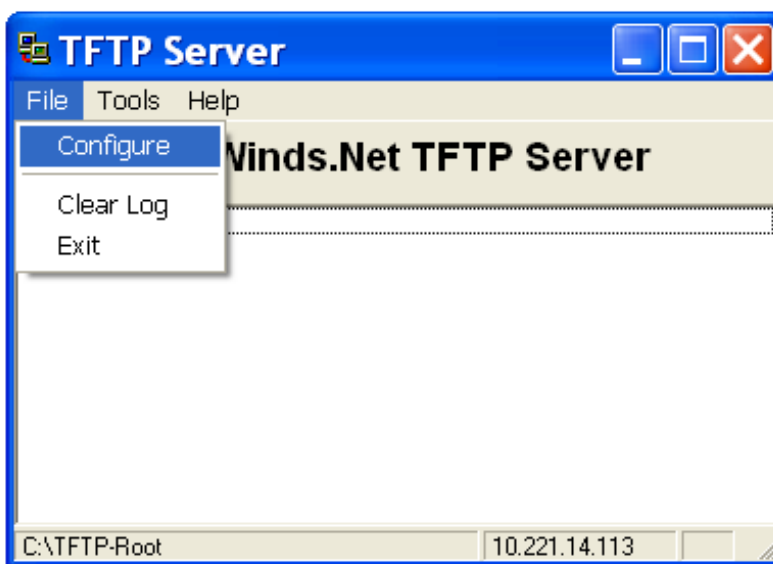
Locate the image.bin file on the TFTP Root Directory tab.

Define access as "Transmit" or "Transmit and receive" on the Security tab.

Define the allowed IP range on the Advanced Security tab.

Note: This is a range of IP addresses that includes the Web card's IP address.

1.4 How to burn the NMC firmware

Plug the NMC into the network with a standard Ethernet cable (Network Port). Connect the cable that came with the Web Card (RJ-45 to DB-9) to the Settings/Sensor Port and to the RS232 port of the computer.
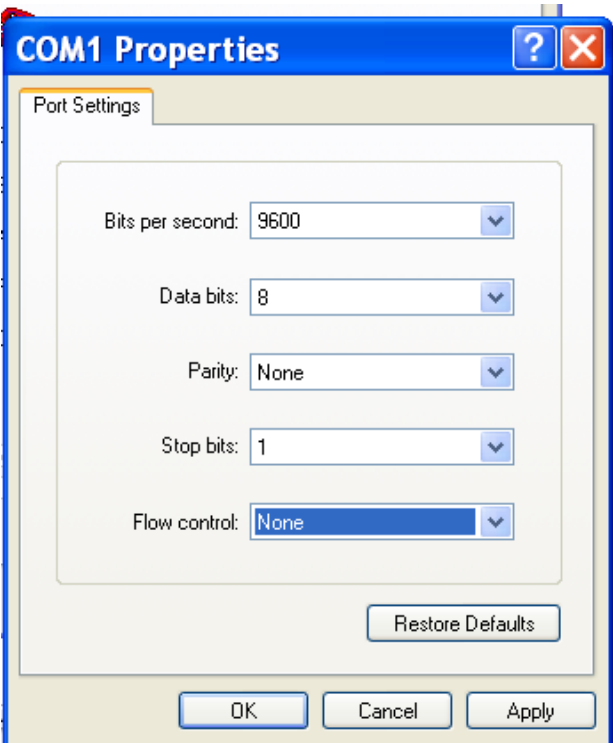Open HyperTerminal application with the following settings:

9600 bits/s,

Data Bits, 8

parity, None

stop bits, 1

Flow Control, None

COM1 Properties

Port Settings

Bits per second: 9600

Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Restore Defaults

OK   Cancel   Apply

Reset the NMC by removing and reinserting the Web Card in the UPS slot. Within a few seconds, the following messages will then be displayed on the HyperTerminal page:

```
----------------------------------------------------------------------------
EATON
NETWORK MANAGEMENT CARD
BOOTLOADER VERSION: DD
----------------------------------------------------------------------------
RAM auto test in progress.
RAM auto test SUCCESS.

Commercial reference: 103006826
Kitting technical level: 09
Kitting revision: GA
Ethernet MAC Address: 00:20:85: FD: 42:16
Serial number: BJ3K1100H

PHY auto test SUCCESS

The application in FLASH is corrupted!!!
Run the TFTP server to download the image. bin file
```

Wait three minutes ... you will not see the questions below for at least three minutes.

Set the IP address: 166.99.226.64   Card IP address

Set the subnet mask address: 255.255.255.0

Set the gateway address: 166.99.226.1

Set the TFTP server IP address: 166.99.226.33 Computer's IP address

In the HyperTerminal application, enter the card IP (to be fixed), subnet mask, Gateway and IP address of the TFTP server. Then type <Enter>

You will then see the following message reporting the data transfer in progress in the TFTP server window.
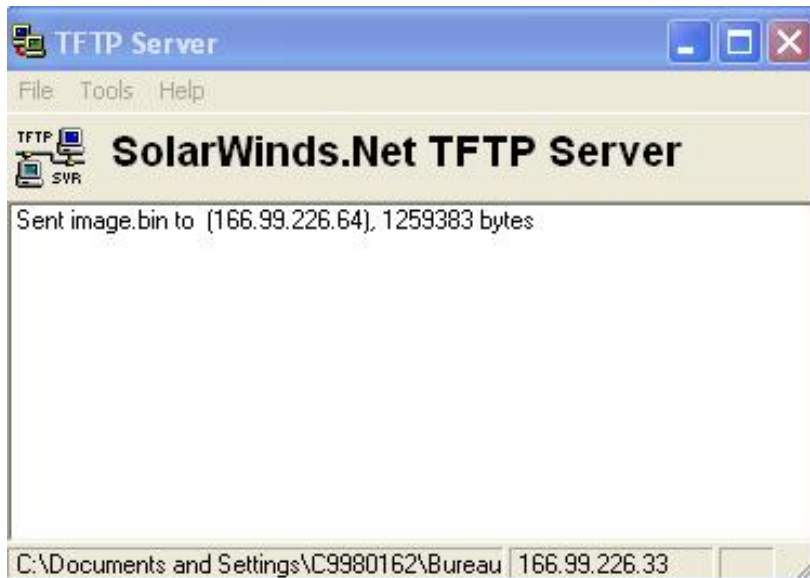
Wait for the display of the following message:

> -> The application is completely downloaded
> Wait while the application is Flashed ...

That means that file transfer completed.

Then wait for the following message:

> **Flashing done.**

The NMC or ConnectUPS-MS Web Card will restart automatically.

Wait two minutes for the card to finish restarting.

Connect to the Web Card through the Web interface and verify the flash was successful and the card is working properly.

Complete.

For more information
To learn more about these Web/SNMP cards, please visit Eaton's Power Quality Web site at www.eaton.com/powerquality. You may also contact application engineer Thomas Hilliker at ThomasHilliker@eaton.com or 619.692.6287.