IBM Switched and monitored PDUs: Firmware update instructions

Updated: 4/7/2011

Outline

❑ Firmware upgrade via Bootloader (Hyperterminal)

❑ Firmware upgrade via WEB Interface

Firmware upgrade via Bootloader (Hyper-Terminal)

COM1 Properties

Port Settings

Bits per second: 115200

Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Restore Defaults

OK   Cancel   Apply

System Setting

AC input

ENP

SENSOR

RS232   LAN
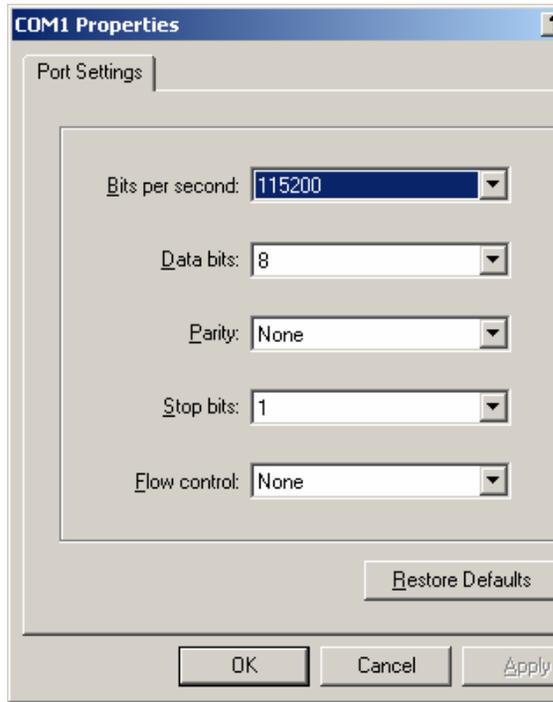
Running Hyper-terminal on you computer

RJ45-to-DB9 cable

Serial port   LAN Port
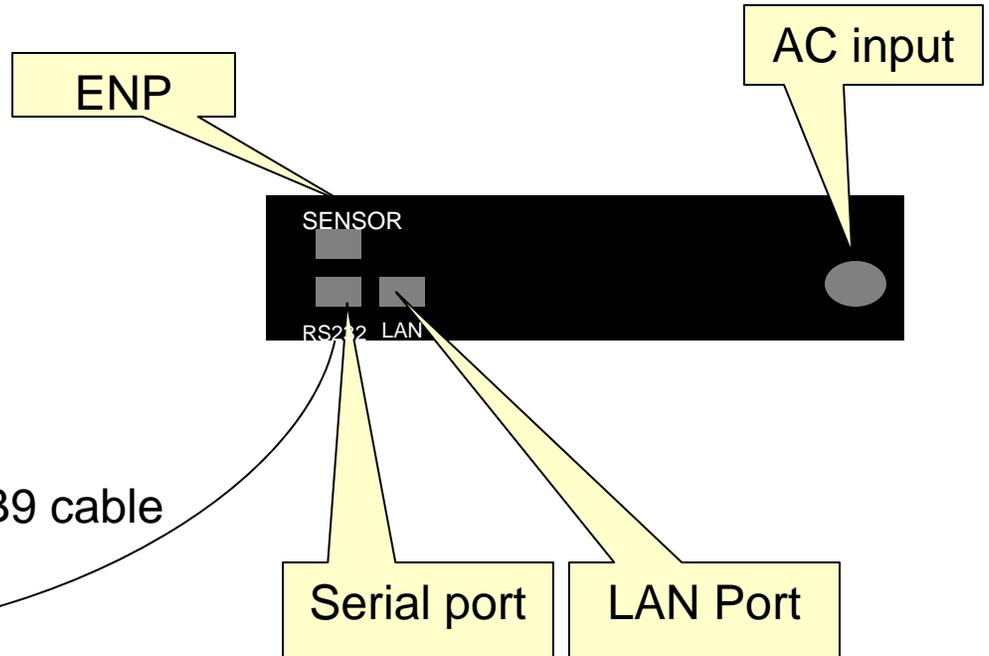
After you have system configured and set up, you reset PDU (OFF, then ON)

3

Firmware upgrade via Bootloader

After power on, your hyper-terminal will show up as below:

```
IBM Terminal - HyperTerminal
File  Edit  View  Call  Transfer  Help




**************************************************************

      The systerm will enter Application after 10 Seconds

      If you want enter Bootloader,please enter 'B'.

**************************************************************

There are remain 10 Seconds to enter Application
_

Connected 0:00:08    Auto detect   115200 8-N-1   SCROLL   CAPS   NUM   Capture   Print echo
```
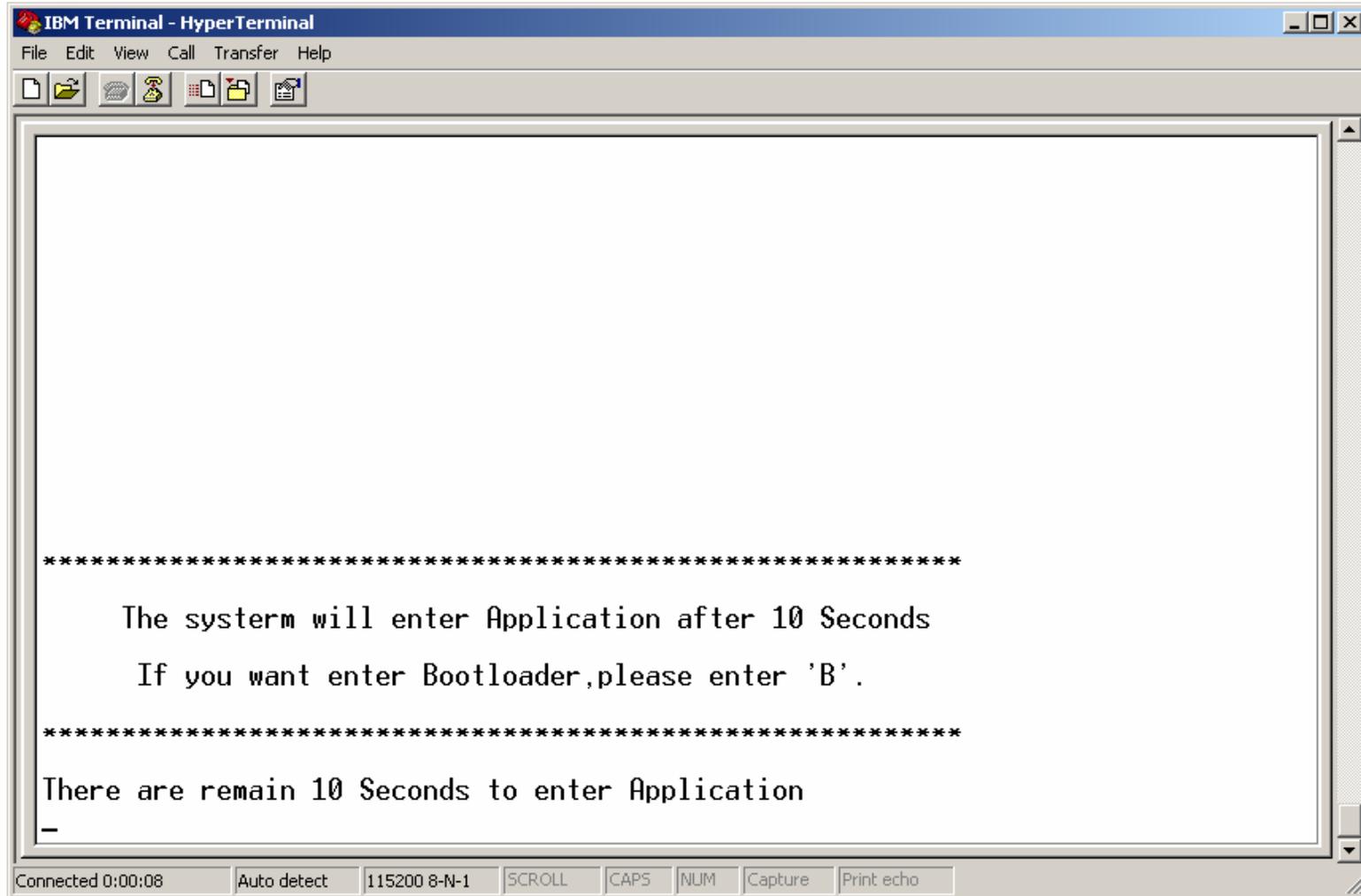
Enter "B" from your keyboard, you will go into bootloader mode.

Firmware upgrade via Bootloader

Bootloader mode

After select "1", you can start to down load the new firmware.

Firmware upgrade via Bootloader

IBM Terminal - HyperTerminal

File Edit View Call Transfer Help

Transfer>Send File

Send File

Folder: C:\IBM Potencia\IBM firmware release\20090605

Filename:

C:\IBM Potencia\IBM firmware release\20090605\   [Browse...]

Protocol:

Ymodem

[Send]   [Close]   [Cancel]

> It must be Ymodem.

> Your image file location
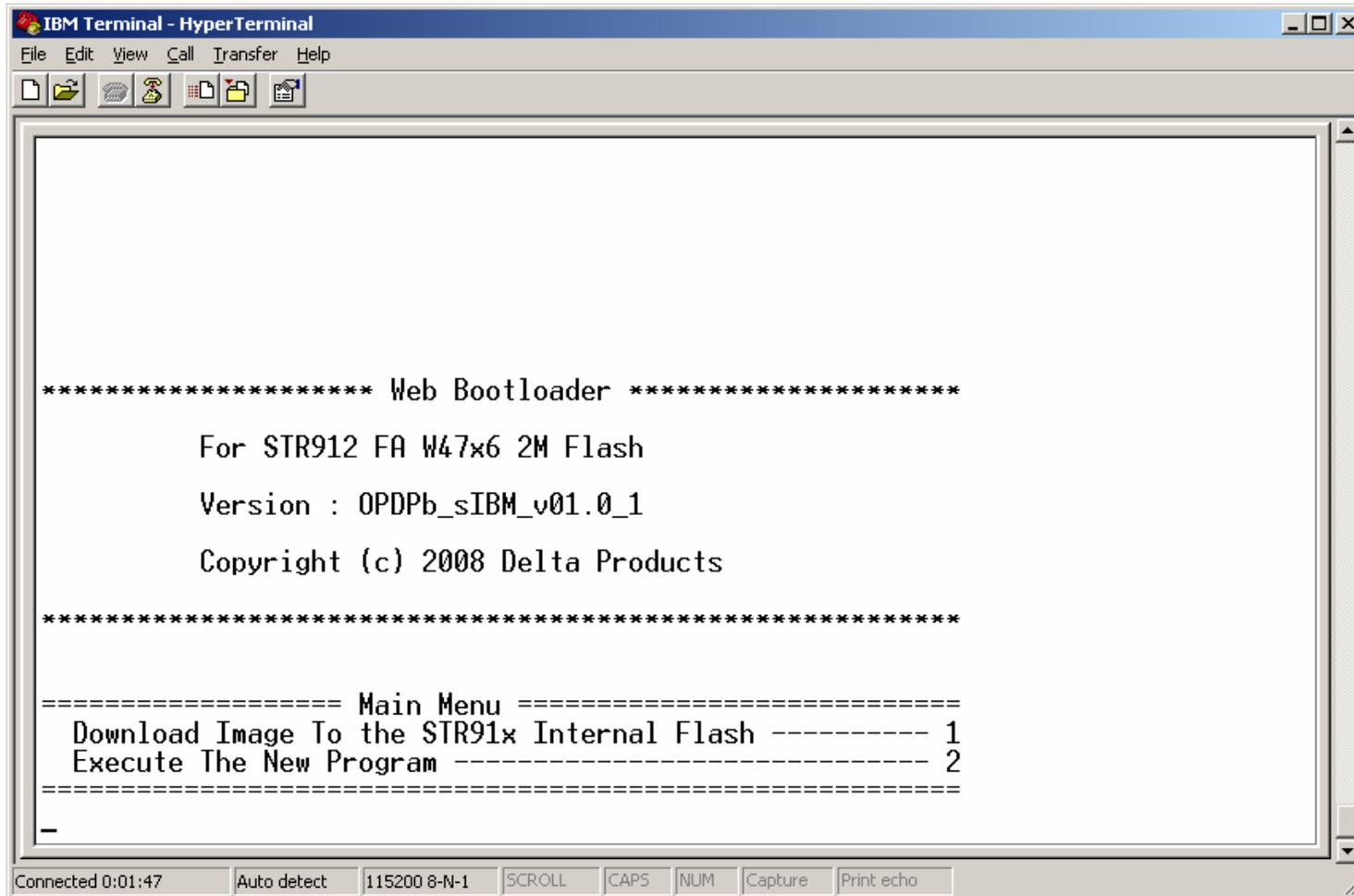
```
******************** Web Bootloader ********************

        For STR912 FA W47x6 2M Flash

        Version : OPDPb_sIBM_v01.0_1

        Copyright (c) 2008 Delta Products

        ***********************************************************




================== Main Menu ============================
  Download Image To the STR91x Internal Flash ---------- 1
  Execute The New Program ---------------------------- 2
========================================================
Waiting for the file to be sent ... (press 'a' to abort)
CCCCCC
```

Connected 0:03:31   Auto detect   115200 8-N-1   SCROLL   CAPS   NUM   Capture   Print echo

Start to send file (update firmware) for PDU by "Send".

Firmware upgrade via Bootloader

Updating firmware!!!!

Firmware upgrade via Bootloader

Finished the update!!!

```
IBM Terminal - HyperTerminal                                    _ □ ×
File  Edit  View  Call  Transfer  Help

        For STR912 FA W47x6 2M Flash

        Version : OPDPb_sIBM_v01.0_1


        Copyright (c) 2008 Delta Products

        ************************************************************


        =================== Main Menu ============================
          Download Image To the STR91x Internal Flash ---------- 1
          Execute The New Program ------------------------------ 2
        ==========================================================
        Waiting for the file to be sent ... (press 'a' to abort)
        CCCCC

          Programming Completed Successfully!
        ---------------------------------------
          Name: OPDP_sIBM_v01.1_1.bin
          Size: 1532380   Bytes
        ---------------------

        =================== Main Menu ============================
          Download Image To the STR91x Internal Flash ---------- 1
          Execute The New Program ------------------------------ 2
        ==========================================================


Connected 00:05:13    ANSIW    115200 8-N-1    SCROLL   CAPS   NUM   Capture   Print echo
```

> New updated firmware version.

8

Select "2" to execute the new program.

Firmware upgrade via Bootloader

Login ID: ADMIN

Login Passwd: **   ➔ it is 1001**

9

Firmware upgrade via Bootloader

Select "1" for PDU information


```
 3. Restart System
 4. Restore to Default Network Setting
 5. Restore to Default Setting

 6. Set All Relay ON or OFF
 7. Change ADMIN Login ID and Password
 0. Exit

-----------------------------------------------------------------

 Please Enter Your Selection => 1

+=================================================================
|                       [ PDU Information ]
+=================================================================

    DHCP: Enable
    IP Address : 172.18.17.209
    Gateway IP Address : 172.18.16.254
    Subnet Mask : 255.255.240.0
    MAC Address : 00:18:23:02:ea:01
    Part Number : 43V6145
    Serial Number : facture
    Software Version : OPDP_sIBM_v01.1_1
    System Date(YYYY/MM/DD) : 2011/03/07
    System Time(HH:MM:SS) : 10:29:22

-----------------------------------------------------------------

 Press Any Key to Continue ...
```

You can disable the DHCP mode and then go to Static IP mode. (Please select "2" at main manual to change the IP mode.

10

Firmware upgrade via Bootloader

Select "2" to modify network information.

IBM Terminal - HyperTerminal

File Edit View Call Transfer Help

```
1. PDU Information
2. Setup Network Parameter
3. Restart System
4. Restore to Default Network Setting
5. Restore to Default Setting
6. Set All Relay ON or OFF
7. Change ADMIN Login ID and Password
0. Exit
--------------------------------------------------------------------
Please Enter Your Selection => 2
```

Select "2" at main manual to modify IP configuration

```
+==================================================================+
|                    [ Setup Network Information ]                 |
+==================================================================+

DHCP(Enable):
1. Enable
2. Disable
--------------------------------------------------------------------
Please Enter Your Selection => 2
```

Select "2" at Network Information to disable DHCP mode (go into Static mode to modify IP address)

```
DHCP Function Disable!

--------------------------------------------------------------------
Please Enter IP Address ( 172.18.17.209 ) =>
--------------------------------------------------------------------
Please Enter Gateway IP Address ( 172.18.16.254 ) =>
--------------------------------------------------------------------
Please Enter Subnet Mask  ( 255.255.240.0 ) =>
+==================================================================+
|                 [ IBM PDU Configuration Utility ]    ADMIN Level |
+==================================================================+


1. PDU Information
2. Setup Network Parameter
```

Modify this IP , Gateway, and Subnet mask t your network.

Connected 00:16:19   ANSIW   115200 8-N-1   SCROLL   CAPS   NUM   Capture   Print echo   EN English (United States)

Outline

❑ Firmware upgrade via Bootloader (Hyperterminal)

❑ Firmware upgrade via WEB Interface

Firmware upgrade via WEB

System Setting Up

e.g. OPDP_sIBM_v01.1_1.bin

Binary file Location

TFTP server

PDU
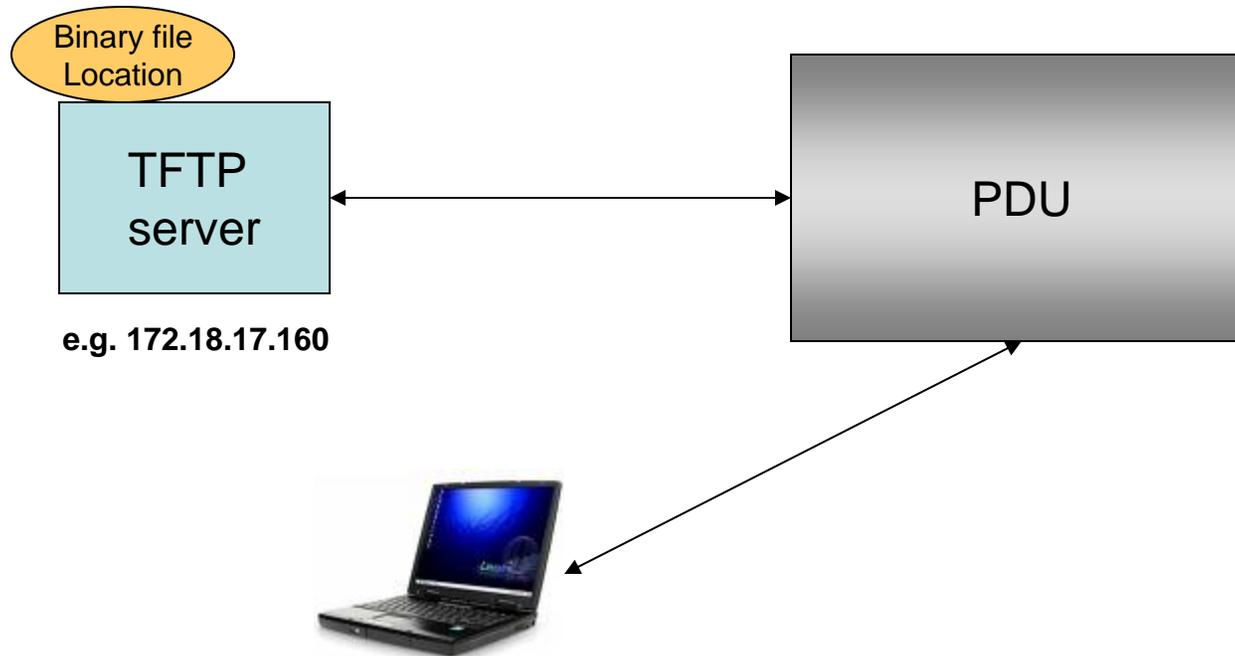
e.g. 172.18.17.160

Set up TFTP server IP address and file name for transferring the binary (image) file to PDU (Firmware upgrade) via WEB page.

Start TFTP server

(My TFTP server is at 172.18.17.160,

And my the TFTP root is c:\TFTP-Root\ , we will download/put the binary file under TFTP root)
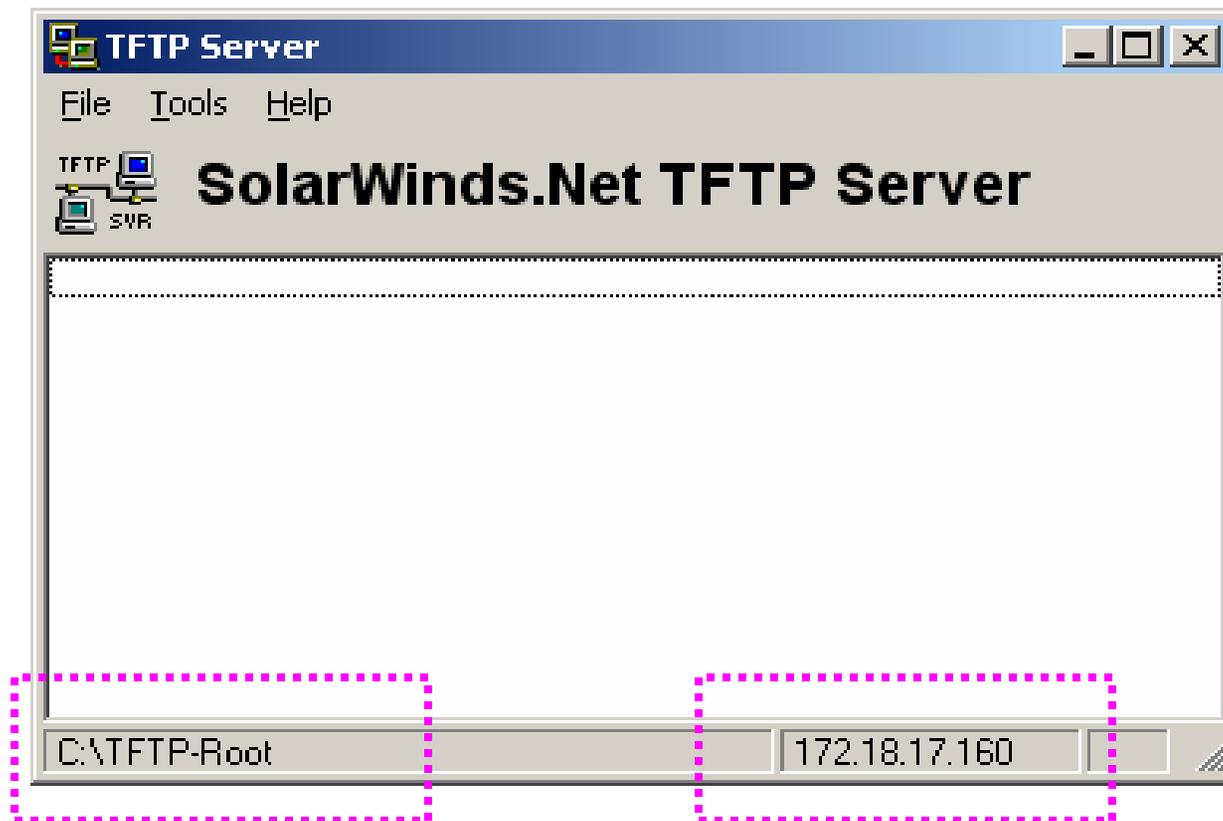
TFTP server configuration: (From main manual)

(File→ Configure)

TFTP Root

Copy your binary to TFTP Root, Through the "Configure", you can double check whether your binary file exits at TFTP root.
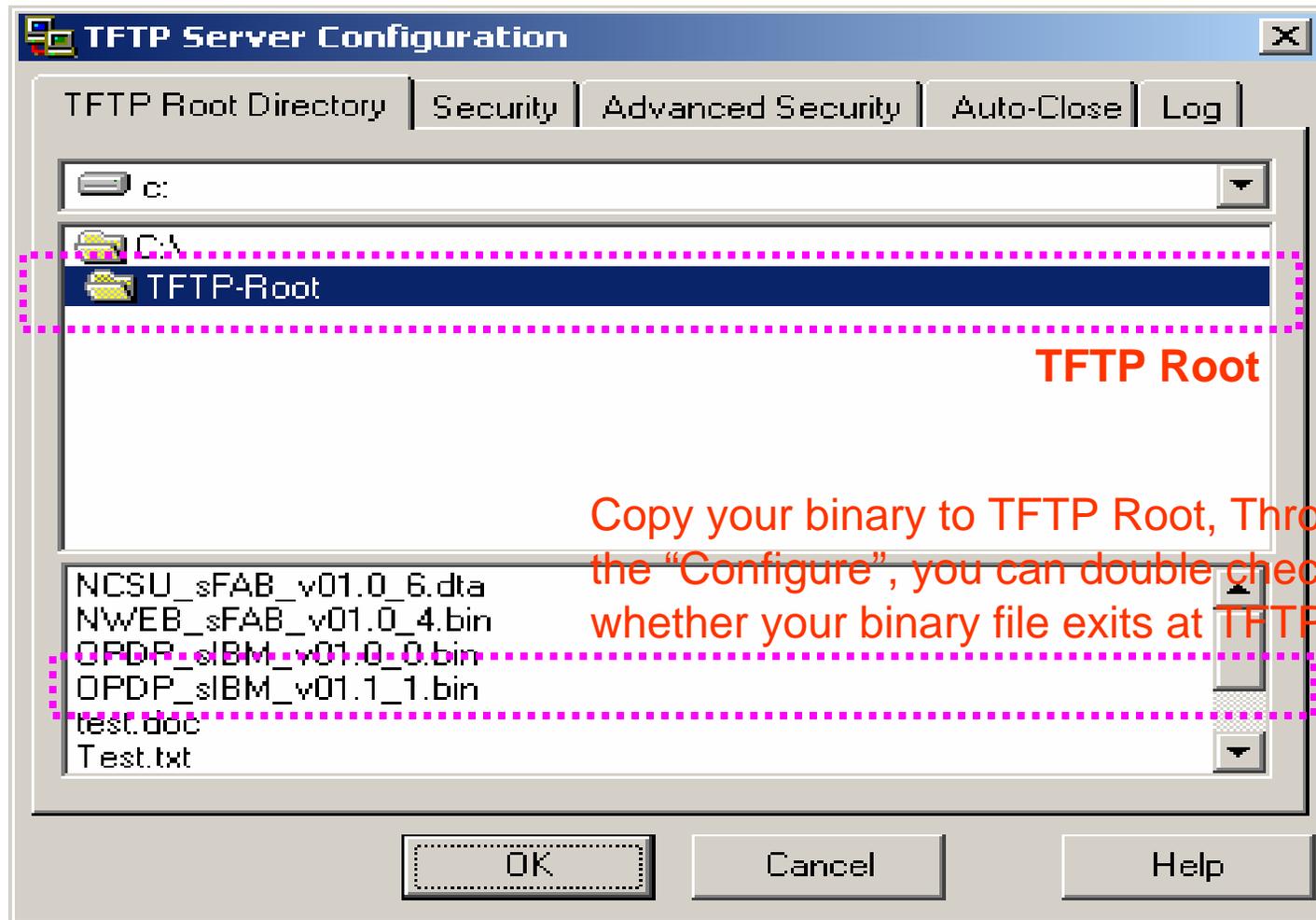
Login to your PDU via WEB Interface

On your browser (e.g. Internet Explore) put you PDU's IP address (e.g. 172.18.17.209)

User Name→ ADMIN (Case-sensitive)
Password → 1001

Firmware upgrade via WEB

At Manual tree, select "System→ Upgrade firmware

Make sure to have the correct TFTP server IP address, and the correct file name under your TFTP Root. (Make sure to have the binary file under your TFTP root.)

Firmware upgrade via WEB

Downloading/transferring the file from TFTP server to PDU…

Firmware upgrade via WEB

Finished the download process. Click on "Verify the Image" to continue.

Firmware upgrade via WEB

After "Verify Image, PDU will automatically upgrade firmware.
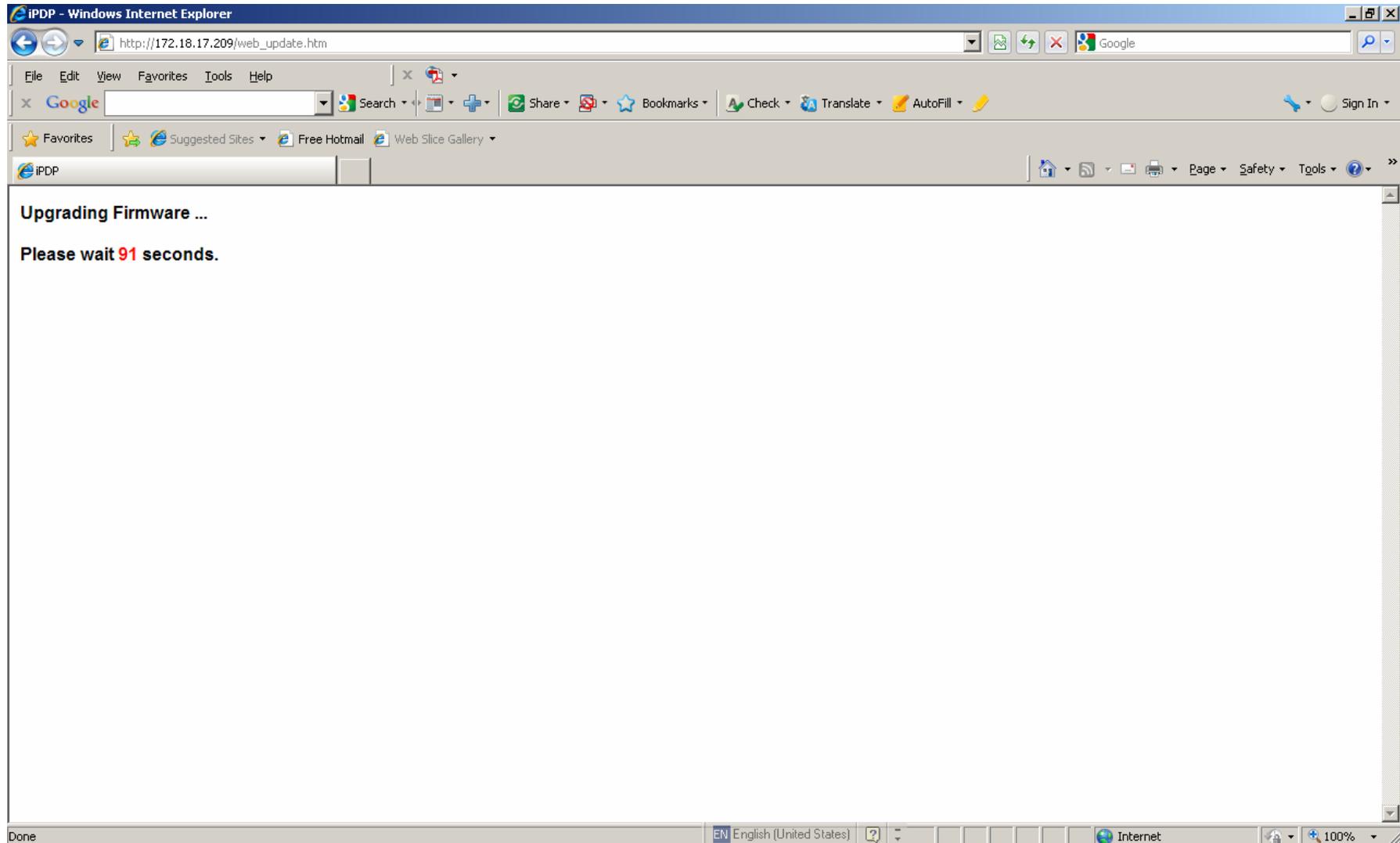
Firmware upgrade via WEB

After finished the firmware upgrade, PDU will do "software" reboot automatically without affecting any outlets' power output!

New upgraded firmware via WEB page