

How to use the DNP/5280 Linux TFTP Client Program

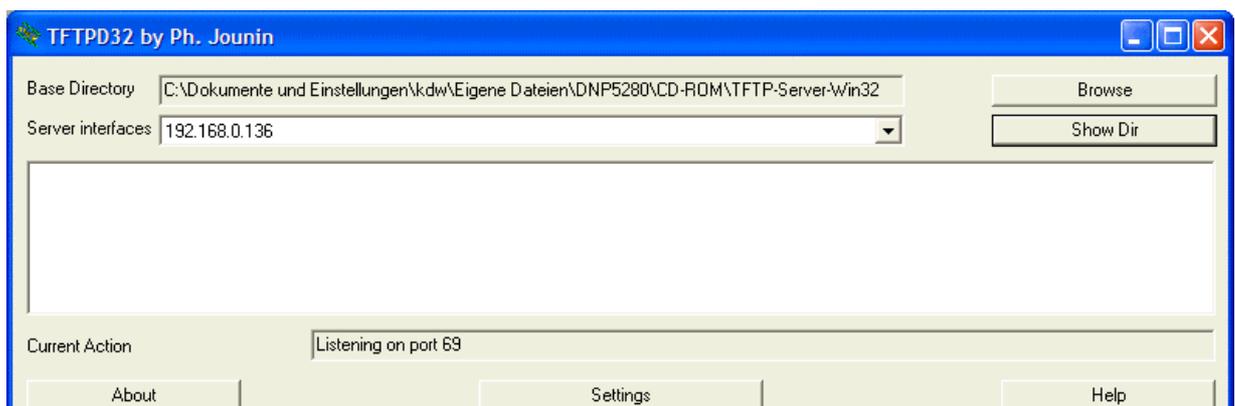
The DIL/NetPC DNP/5280 offers a very simple way for Ethernet-based file transfers between your PC system and the DNP/5280 RAM disk drives or JFFS-based flash disk drives. This file transfer is using the TCP/IP service **TFTP** (Trivial File Transfer Program).

TFTP is server/client-based. The DIL/NetPC DNP/5280 Linux configuration offers a TFTP client program. Your PC needs a TFTP server program.

- **1. Step:** Set-up a Ethernet link between the DNP/5280 10/100 Mbps Ethernet interface and the Ethernet interface of your PC system. Check the IP address of the PC system (Windows: **ipconfig** command; Linux: **ifconfig** command). **The default IP address (factory set-up) of the DNP/5280 is 192.168.0.126.**
- **2. Step:** Run a TFTP server program on your PC system. Most Linux-based PCs comes with a pre-installed TFTP server program. Some of these systems starts this TFTP server program at boot time (the TFTP server is a part of the `inetd` service). In all other cases you have to edit one or more configuration files (SuSE: `/etc/inetd.conf`). See the user documentation of your Linux distribution for details.

Windows-based PCs don't offer TFTP server programs. Only some special server versions of Microsoft Windows comes with a TFTP server program. For all other Windows-based PCs you find a simple TFTP server program – called `TFTPD32` – within the directory `\TFTP-Server-Win32` of your DIL/NetPC DNP/5280 Starter Kit CD-ROM. `TFTPD32` is a free, non-commercial product. Please watch the license.

Copy all files from `\TFTP-Server-Win32` to a new subdirectory on your Windows-based PC hard disk drive and run `TFTPD32`.

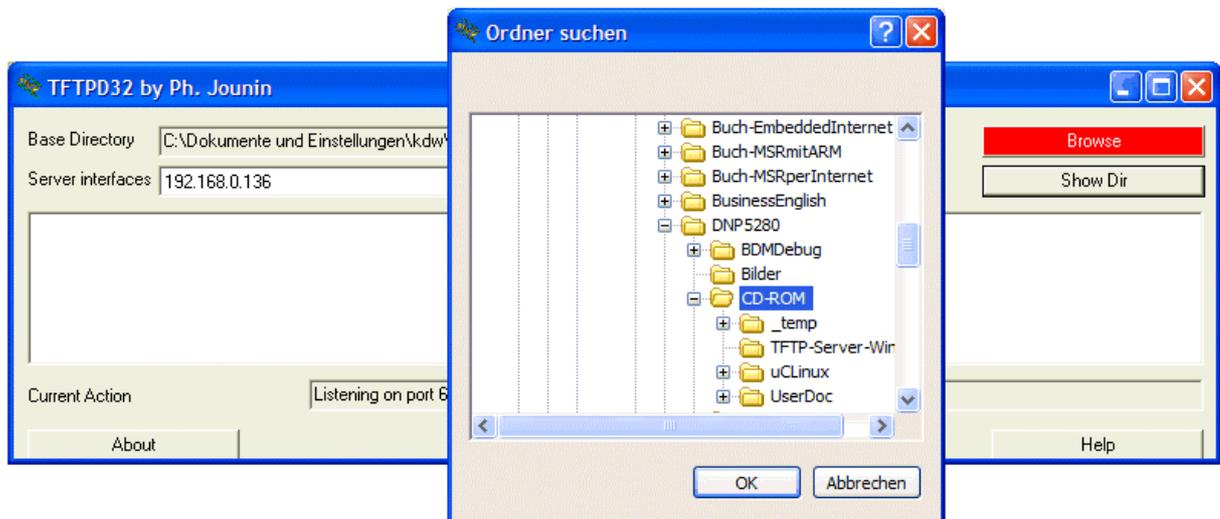


- **3. Step:** Check the TFTP connection between the DIL/NetPC DNP/5280 and your PC system. Open a Telnet session. Use the following commands for downloading and uploading files.

```
tftp -g -l file.name ip-addr
tftp -p -l file.name ip-addr
```

The command `tftp` is the name of the DNP/5280 TFTP client program. The parameter `-g` stands for **get** (get a file from the PC system to the DNP/5280). The parameter `-p` stands for **put** (put a file from the DNP/5280 to the PC system). The parameter `-l file.name` specifies the file for put or get. The parameter `ip-addr` stand for the IP address of your PC system (i.e. 192.168.0.1).

- **4. Step:** Most TFTP server programs works with a default directory for put and get commands. Each TFTP put command writes a file to this directory. Each TFTP get command reads the file from this directory on your PC system. For TFTP32 you can change this directory with the browse button.



- **Example:** The following picture shows the use of the DNP/5280 TFTP client within a Telnet session.

```

Telnet 192.168.0.126
# pwd
/home/httpd
# ls -al
drwxr-xr-x 1 0 0 Nov 30 00:03 .
drwxr-xr-x 1 0 0 Nov 30 00:00 ..
-rw-r--r-- 437 Nov 30 00:07 boa.conf
-rw-r--r-- 4850 Nov 30 00:10 dnp5280-1.gif
-rw-r--r-- 7904 Nov 30 00:10 index.html
-rw-r--r-- 4091 Nov 30 00:11 memmap.html
-rw-r--r-- 11235 Nov 30 00:11 pinout.html
-rw-r--r-- 4766 Nov 30 00:11 pio.html
-rw-r--r-- 1771 Nov 30 00:10 spacer2.gif
-rw-r--r-- 769 Nov 30 00:07 ssvlogo.gif
# tftp -p -l ssvlogo.gif 192.168.0.1
# tftp -p -l spacer2.gif 192.168.0.1
#
  
```

Please note: A file transfer to the DNP/5280 must be started with a Telnet session from RAM disk or JFFS-based flash disk directories. We need R/W access for the TFTP get command.

That is all.