

## How to use a Windows 7-based PC

If your host PC runs Windows 7 you have to solve some special configuration and installation problems. A standard Windows 7 PC installation doesn't allow to *ping* the DIL/NetPC DNP/5280 over the Ethernet connection. Windows 7 also doesn't support *Telnet* sessions.

- **1. Step:** Before your first *ping* (please see also *8. Step: Check the Ethernet-based TCP/IP Communication of the DNP/5280 µClinux Starter Kit: First Steps* user manual) from the PC to the DIL/NetPC DNP/5280 please go to the Windows 7 firewall setup (see setup item *Windows Firewall with Advanced Security*). Then change the **Inbound Rules** and **Outbound Rules** for **ICMP** (Enable inbound and outbound ICMP traffic for IPv4).



```

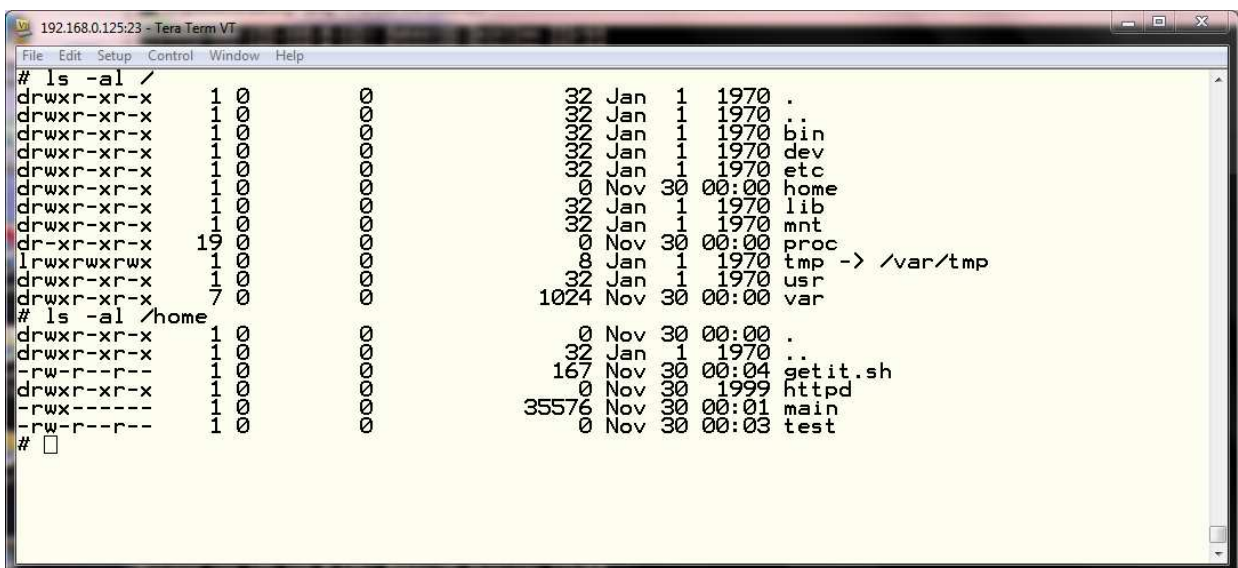
C:\>ping 192.168.0.125

Ping wird ausgeführt für 192.168.0.125 mit 32 Bytes Daten:
Antwort von 192.168.0.125: Bytes=32 Zeit<1ms TTL=64
Antwort von 192.168.0.125: Bytes=32 Zeit<1ms TTL=64
Antwort von 192.168.0.125: Bytes=32 Zeit<1ms TTL=64
Antwort von 192.168.0.125: Bytes=32 Zeit<1ms TTL=64

Ping-Statistik für 192.168.0.125:
    Pakete: Gesendet = 4, Empfangen = 4, Verloren = 0
    (0% Verlust),
    Ca. Zeitangaben in Millisek.:
        Minimum = 0ms, Maximum = 0ms, Mittelwert = 0ms

C:\>
  
```

- **2. Step:** The standard Windows 7 configuration comes without a *Telnet* client program. Please download the free tool *TeraTerm* from <http://ttssh2.sourceforge.jp> or any other download location. Then install *TeraTerm* on your Windows 7 machine. After that please run *TeraTerm* as a *Telnet* client in VT100 mode (see *TeraTerm Terminal setup – Terminal ID*).



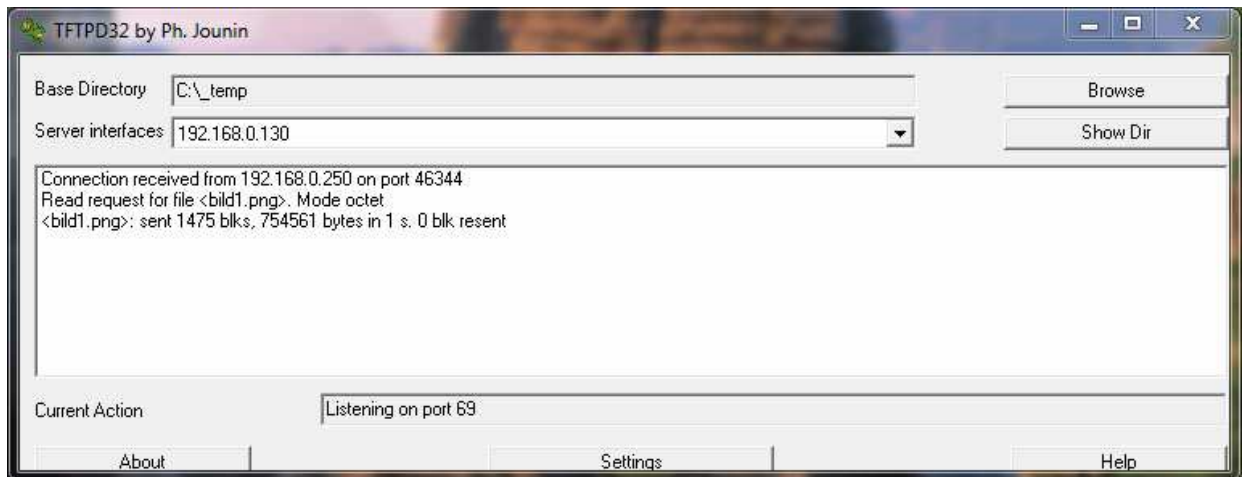
```

192.168.0.125:23 - Tera Term VT
File Edit Setup Control Window Help
# ls -al /
drwxr-xr-x 1 0 0 32 Jan 1 1970 .
drwxr-xr-x 1 0 0 32 Jan 1 1970 ..
drwxr-xr-x 1 0 0 32 Jan 1 1970 bin
drwxr-xr-x 1 0 0 32 Jan 1 1970 dev
drwxr-xr-x 1 0 0 32 Jan 1 1970 etc
drwxr-xr-x 1 0 0 0 Nov 30 00:00 home
drwxr-xr-x 1 0 0 32 Jan 1 1970 lib
drwxr-xr-x 1 0 0 32 Jan 1 1970 mnt
dr-xr-xr-x 19 0 0 0 Nov 30 00:00 proc
lrwxrwxrwx 1 0 0 8 Jan 1 1970 tmp -> /var/tmp
drwxr-xr-x 1 0 0 32 Jan 1 1970 usr
drwxr-xr-x 7 0 0 1024 Nov 30 00:00 var
# ls -al /home
drwxr-xr-x 1 0 0 0 Nov 30 00:00 .
drwxr-xr-x 1 0 0 32 Jan 1 1970 ..
-rw-r--r-- 1 0 0 167 Nov 30 00:04 getit.sh
drwxr-xr-x 1 0 0 0 Nov 30 1999 httpd
-rwx----- 1 0 0 35576 Nov 30 00:01 main
-rw-r--r-- 1 0 0 0 Nov 30 00:03 test
#
  
```

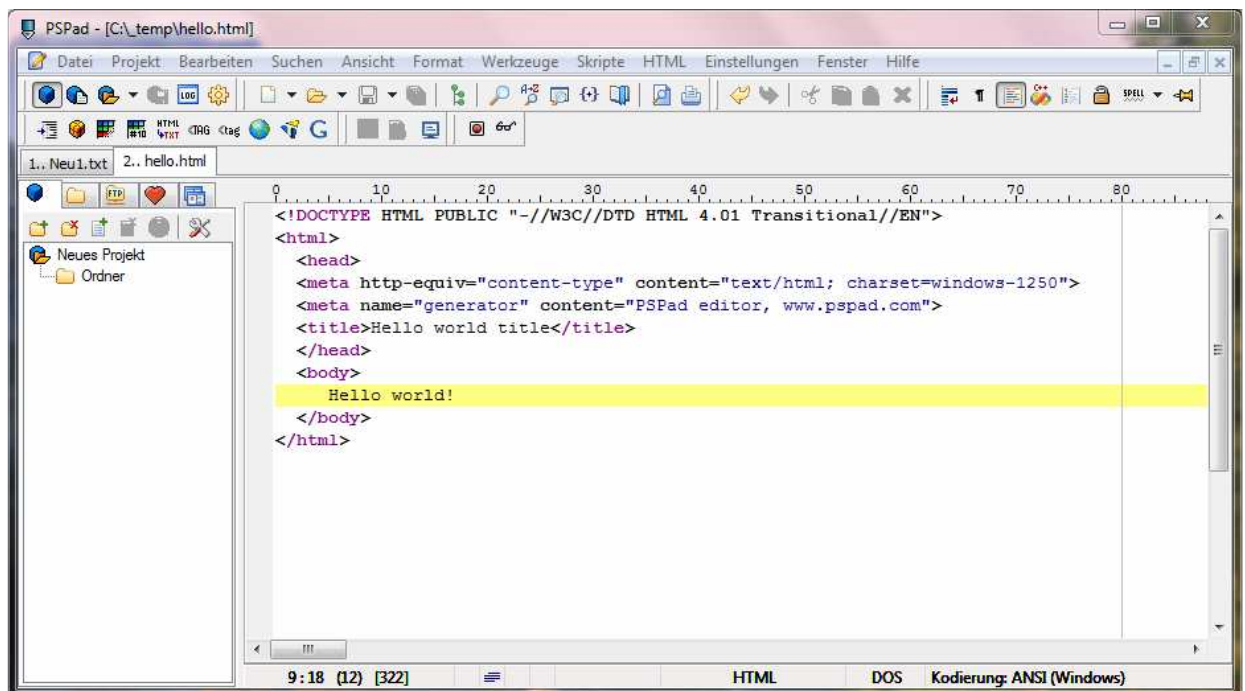
The standard Windows 7 configuration doesn't allow any *Telnet* traffic. Please go again to the

Windows 7 firewall setup (see setup item *Windows Firewall with Advanced Security*). Then create a new outbound rule for the TCP protocol and port 23 (Enable the usage of TCP port 23).

- **3. Step:** For file downloads and uploads between the PC to the DIL/NetPC DNP/5280 please use TFTP. The DNP/5280 starter kit CD-ROM offers the TFTP32 server for Windows PC (please see CD-ROM directory *TFTP-Server-Win32*). This server works also with Windows 7.

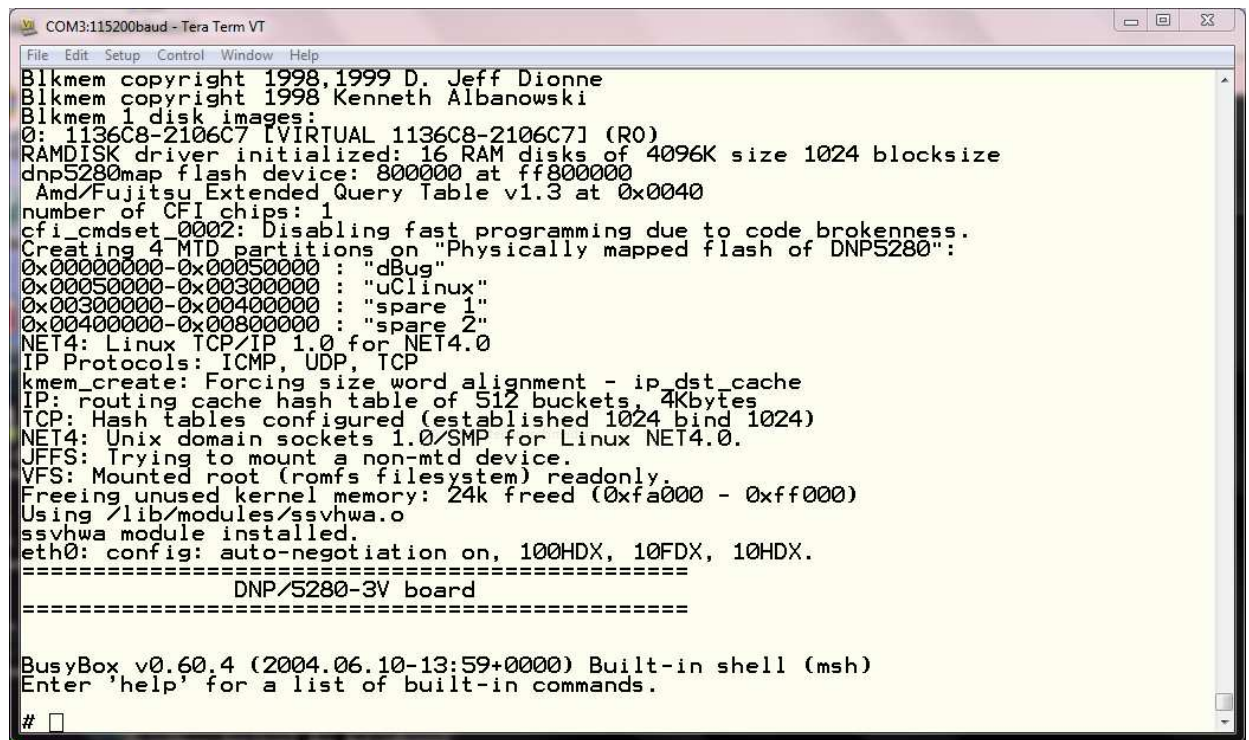


- **4. Step:** For editing HTML files (see also *9. Step: Check the DNP/5280 Embedded Web server of the DNP/5280 µClinux Starter Kit: First Steps user manual*) on your Windows 7-based PC please use the free *PSPad* editor.



- **5. Step:** Windows 7 comes without the *HyperTerminal* terminal emulation program. This well-known program was a part of older Windows version. It is possible to use *TeraTerm* also as a

terminal emulation program over RS232-based links. Please run *TeraTerm* in the serial port mode. Then choose the RS232 COM port instead of *Telnet* and set this port to 115.200/N/8/1.



```
COM3:115200baud - Tera Term VT
File Edit Setup Control Window Help
Blkmem copyright 1998,1999 D. Jeff Dionne
Blkmem copyright 1998 Kenneth Albanowski
Blkmem 1 disk images:
0: 1136C8-2106C7 [VIRTUAL 1136C8-2106C7] (R0)
RAMDISK driver initialized: 16 RAM disks of 4096K size 1024 blocksize
dnp5280map flash device: 800000 at ff800000
  Amd/Fujitsu Extended Query Table v1.3 at 0x0040
number of CFI chips: 1
cfi_cmdset 0002: Disabling fast programming due to code brokenness.
Creating 4 MTD partitions on "Physically mapped flash of DNP5280":
0x00000000-0x00050000 : "dBug"
0x00050000-0x00300000 : "uClinux"
0x00300000-0x00400000 : "spare 1"
0x00400000-0x00800000 : "spare 2"
NET4: Linux TCP/IP 1.0 for NET4.0
IP Protocols: ICMP, UDP, TCP
kmem_create: Forcing size word alignment - ip_dst_cache
IP: routing cache hash table of 512 buckets, 4Kbytes
TCP: Hash tables configured (established 1024 bind 1024)
NET4: Unix domain sockets 1.0/SMP for Linux NET4.0.
JFFS: Trying to mount a non-mtd device.
VFS: Mounted root (romfs filesystem) readonly.
Freeing unused kernel memory: 24k freed (0xfa000 - 0xff000)
Using /lib/modules/ssvhwa.o
ssvhwa module installed.
eth0: config: auto-negotiation on, 100HDX, 10FDX, 10HDX.
=====
                DNP/5280-3V board
=====

BusyBox v0.60.4 (2004.06.10-13:59+0000) Built-in shell (msh)
Enter 'help' for a list of built-in commands.
#
```

**Please note:** *HyperTerminal* for the Microsoft Windows 7 O/S is available. Please visit the web site <http://www.hilgraeve.com/hyperterminal/> for more information.

That's all.