

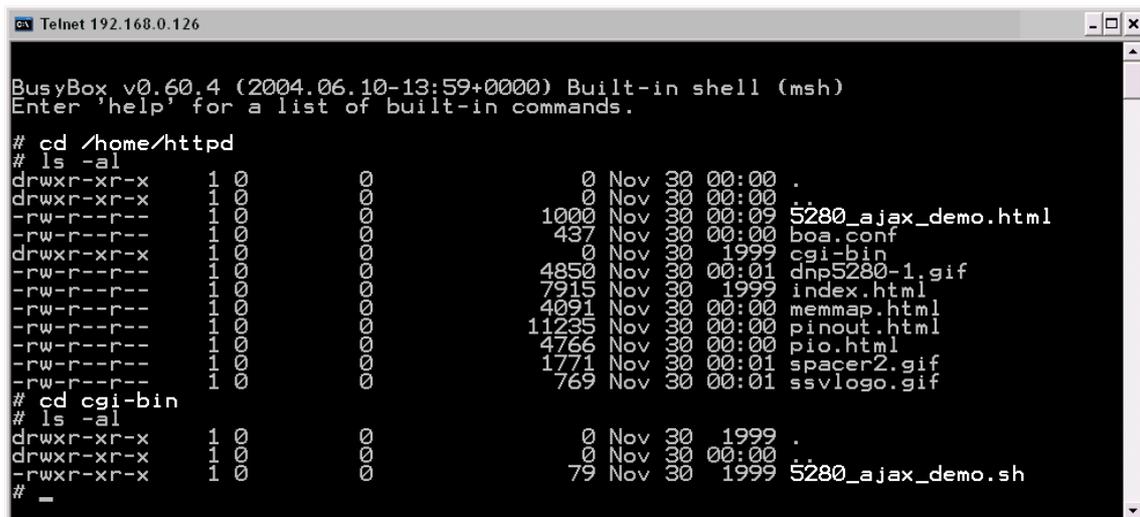
## How to use AJAX technology with the DNP/5280 embedded web server

The elements of web-based user interfaces are static. The update of a value needs a complete page reload. The alternative is the use of AJAX (Asynchronous JavaScript and XML) technology. This document describes a sample for the DIL/NetPC DNP/5280.

The following steps need two sample files *5280\_ajax\_demo.html* and *5280\_ajax\_demo.sh*. These files are available over the download section of [www.dilnetpc.com](http://www.dilnetpc.com).

- **1. Step:** Create the new directory */home/httpd/cgi-bin* within the flash file system of your DNP/5280.
- **2. Step:** Copy the file *5280\_ajax\_demo.html* to the directory */home/httpd*.
- **3. Step:** Copy the file *5280\_ajax\_demo.sh* to the directory */home/httpd/cgi-bin*. Then set the executable attribute for this file:

```
chmod +x 5280_ajax_demo.sh
```



```

Telnet 192.168.0.126
BusyBox v0.60.4 (2004.06.10-13:59+0000) Built-in shell (msh)
Enter 'help' for a list of built-in commands.

# cd /home/httpd
# ls -al
drwxr-xr-x 1 0 0 0 Nov 30 00:00 .
drwxr-xr-x 1 0 0 0 Nov 30 00:00 ..
-rw-r--r-- 1 0 0 1000 Nov 30 00:09 5280_ajax_demo.html
-rw-r--r-- 1 0 0 437 Nov 30 00:00 boa.conf
drwxr-xr-x 1 0 0 0 Nov 30 1999 cgi-bin
-rw-r--r-- 1 0 0 4850 Nov 30 00:01 dnp5280-1.gif
-rw-r--r-- 1 0 0 7915 Nov 30 1999 index.html
-rw-r--r-- 1 0 0 4091 Nov 30 00:00 memmap.html
-rw-r--r-- 1 0 0 11235 Nov 30 00:00 pinout.html
-rw-r--r-- 1 0 0 4766 Nov 30 00:00 pio.html
-rw-r--r-- 1 0 0 1771 Nov 30 00:01 spacer2.gif
-rw-r--r-- 1 0 0 769 Nov 30 00:01 ssvlogo.gif
# cd cgi-bin
# ls -al
drwxr-xr-x 1 0 0 0 Nov 30 1999 .
drwxr-xr-x 1 0 0 0 Nov 30 00:00 ..
-rwxr-xr-x 1 0 0 79 Nov 30 1999 5280_ajax_demo.sh
#

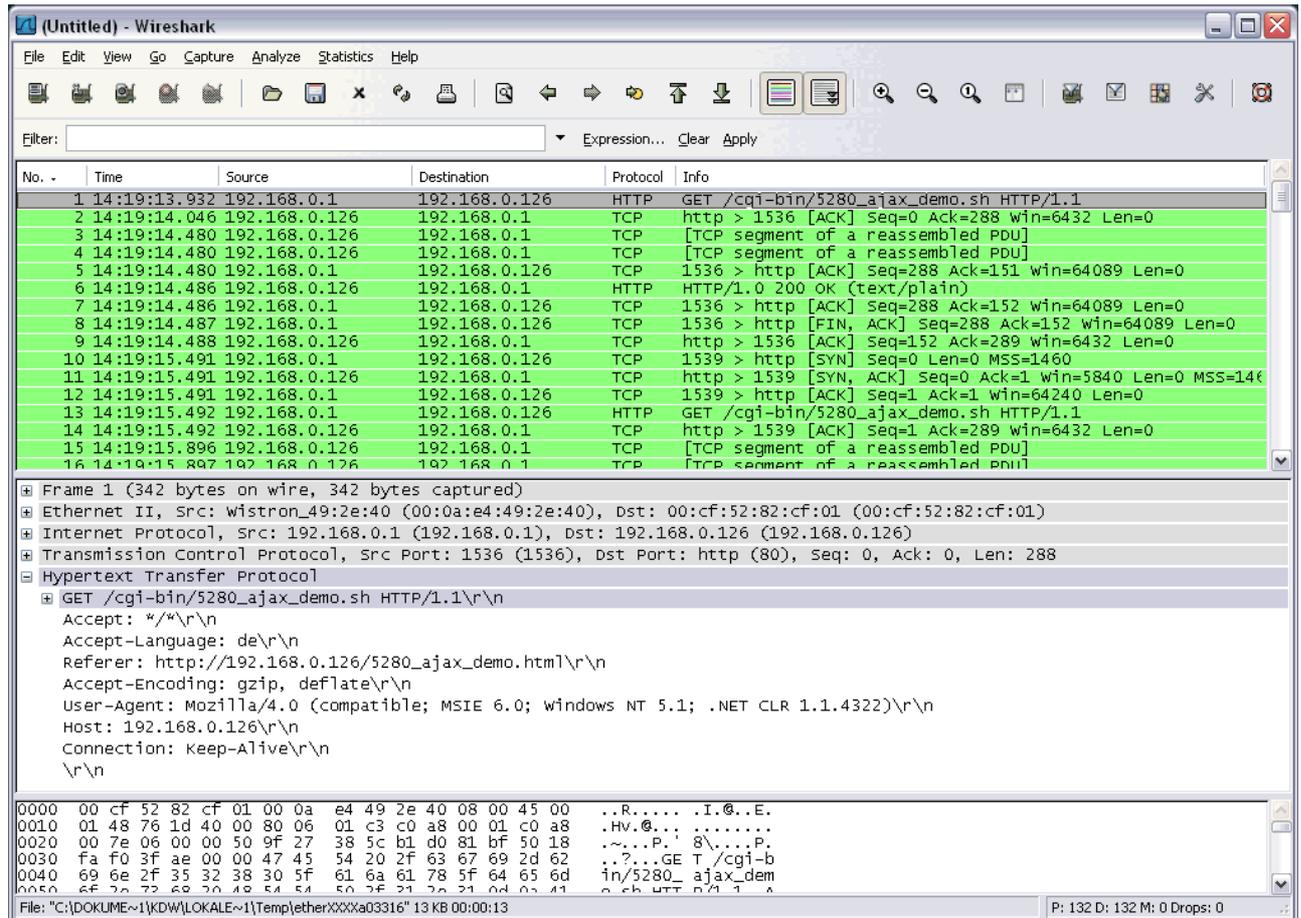
```

- **4. Step:** Run your PC web browser and access the HTML file *5280\_ajax\_demo.html*. Just enter: `http://192.168.0.126/5280_ajax_demo.html` within the URL field of your web browser.



**Please note:** AJAX technology works with each newer PC web browser. AJAX uses JavaScript and the XMLHttpRequest API within your browser. Please make sure that the JavaScript engine of your browser is enabled.

The file *5280\_ajax\_demo.html* generates each second a new HTTP GET request to the DNP/5280 web server. The web server response data – generated by the CGI program *5280\_ajax\_demo.sh* – updates the time within the browser windows. Thanks to the AJAX technology and the XMLHttpRequest object, the browser updates only the time string and not the complete browser window.



The picture shows the HTTP traffic between the web browser and the DNP/5280 embedded web server. The selected frame is the HTTP GET request issued by the XMLHttpRequest object.

That's all.