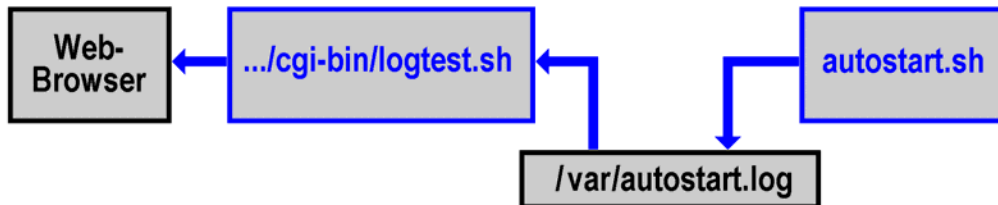


How to transfer live data from a Linux process to a CGI Program

For some applications of your DIL/NetPC DNP/5280 it can be necessary to access live data – generated by a Linux user process – with a CGI program and deliver these data to a Web browser.

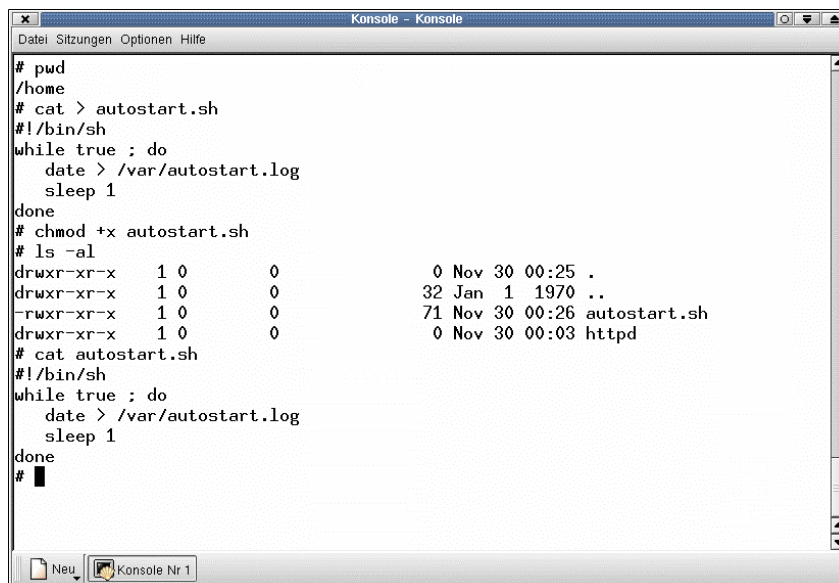
- **1. Step:** We need two Linux shell script files to demonstrate a solution. One shell script writes every second some new data to a RAM disk file with the name `/var/autostart.log`. The other shell script is the CGI program. The following picture shows the details.



- **2. Step:** Create a Linux shell script file with the name `autostart.sh` on your development system and transfer this file to the DNP/5280 directory `/home`. Use a simple text editor program for this job. It is also possible to create the file direct with the help of a Telnet session:

```

cd /home
cat > autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
CTRL-D (CTRL-D stops the Linux cat command)
chmod +x autostart.sh
  
```

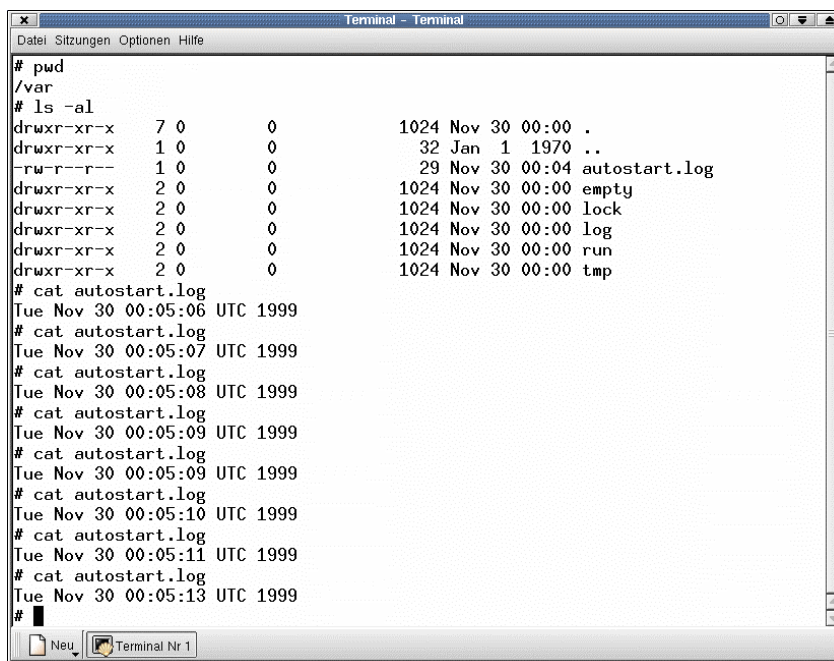


```

# pwd
/home
# cat > autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
# chmod +x autostart.sh
# ls -al
drwxr-xr-x  1 0      0          0 Nov 30 00:25 .
drwxr-xr-x  1 0      0          0  32 Jan  1 1970 ..
-rwxr-xr-x  1 0      0          0  71 Nov 30 00:26 autostart.sh
drwxr-xr-x  1 0      0          0  30 Nov 30 00:03 httpd
# cat autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
# █
  
```

- **3. Step:** Create the CGI program as Linux shell script file. Use the name **logtest.sh** for this file. Create this file on your development system with the help of a simple text editor program and transfer this file to the DNP/5280 directory **/home/httpd/cgi-bin**. It is also possible to create the file direct within the directory **/home/httpd/cgi-bin** with the help of a Telnet session:

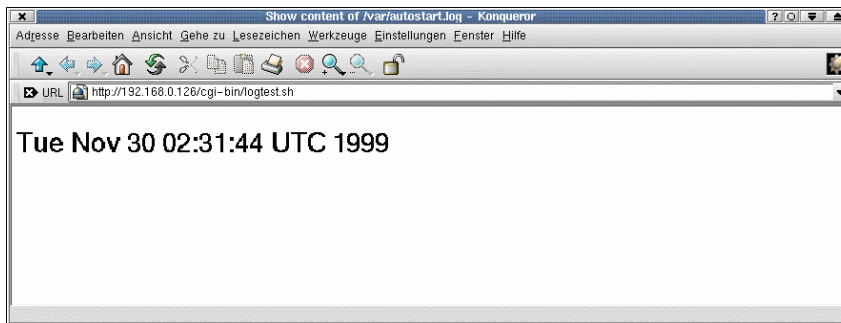
```
cd /home/httpd/cgi-bin
cat > logtest.sh
#!/bin/sh
# logtest.sh
# Show content of /var/autostart.log
echo "Content-type: text/html"
echo
echo "<html>"
echo "<head>"
echo "<title>"
echo "Show content of /var/autostart.log"
echo "</title>"
echo "</head>"
echo "<body>"
echo "<h1>"
cat /var/autostart.log
echo "</h1>"
echo "</body>"
echo "</html>"
exit 0
CTRL-D (CTRL-D stops the Linux cat command)
chmod +x logtest.sh
```



```
Terminal - Terminal
Datei Sitzungen Optionen Hilfe
# pwd
/var
# ls -al
drwxr-xr-x  7 0      0      1024 Nov 30 00:00 .
drwxr-xr-x  1 0      0      32 Jan  1 1970 ..
-rw-r--r--  1 0      0      29 Nov 30 00:04 autostart.log
drwxr-xr-x  2 0      0      1024 Nov 30 00:00 empty
drwxr-xr-x  2 0      0      1024 Nov 30 00:00 lock
drwxr-xr-x  2 0      0      1024 Nov 30 00:00 log
drwxr-xr-x  2 0      0      1024 Nov 30 00:00 run
drwxr-xr-x  2 0      0      1024 Nov 30 00:00 tmp
# cat autostart.log
Tue Nov 30 00:05:06 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:07 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:08 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:09 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:09 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:10 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:11 UTC 1999
# cat autostart.log
Tue Nov 30 00:05:13 UTC 1999
#
```

- **4. Step:** Now reboot the DIL/NetPC DNP/5280. The Linux shell script sample file **autostart.sh** from the 2. step writes every second a new date string into the file **/var/autostart.log**.

- **5. Step:** Run the CGI shell script file. Start the Web browser of your development system and enter the URL `http://192.168.0.126/cgi-bin/logtest.sh`. This URL runs the CGI shell script and generates a Browser window with the current content of the file `/var/autostart.log`.



Please note: If you edit shell script files for Linux systems on a Windows-based PC, it is necessary to convert these files with a DOS2UNIX tool before you transfer them to the DIL/NetPC DNP/5280. Linux shell script files are simple text files. Windows is using the good old MS-DOS format for text files. MS-DOS and Unix systems use different methods to identify end-of-line information in text files. MS-DOS, including Windows 9x/ME/NT/2000/XP, use a carriage return/linefeed pair (CR/LF), whilst Unix only uses the LF character.

That's all.