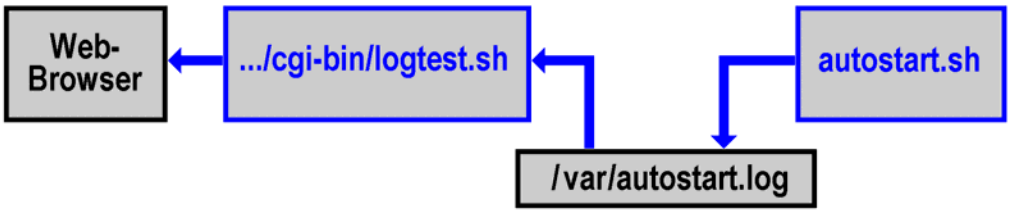
How to transfer live data from a Linux process to a CGI Program

For some applications of your IGW/800 or IGW/900 Linux Device Server 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.

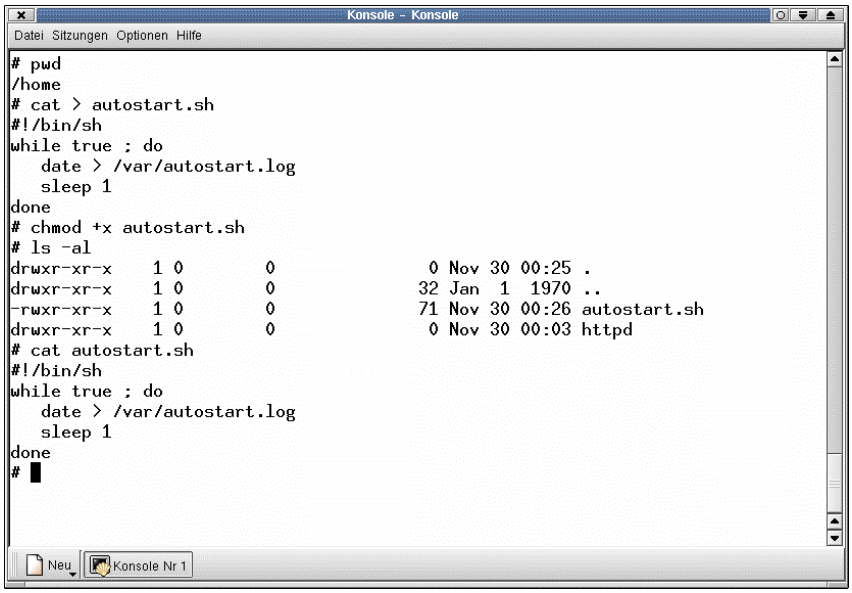


- **2. Step**: Create a Linux shell script file with the name **autostart.sh** on your development system and transfer this file to the DNP/528x directory **/home**. Use a simple text editor program for this job. It is also possible to create the file direct with the help of a Telnet session:

```
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
```

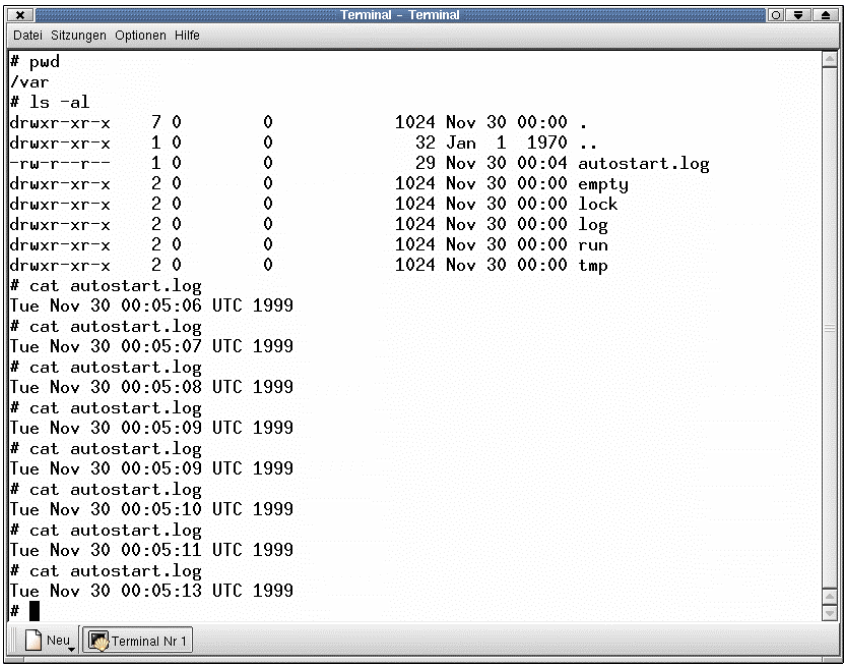


- **3. Step**: Create the CGI program as Linux shell script file. Use the name **logtest.sh** for this file. Create this file on your development system with the help of a simple text editor program and transfer this file to the DNP/528x directory **/home/httpd/cgi-bin**. It is also possible to create 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*)

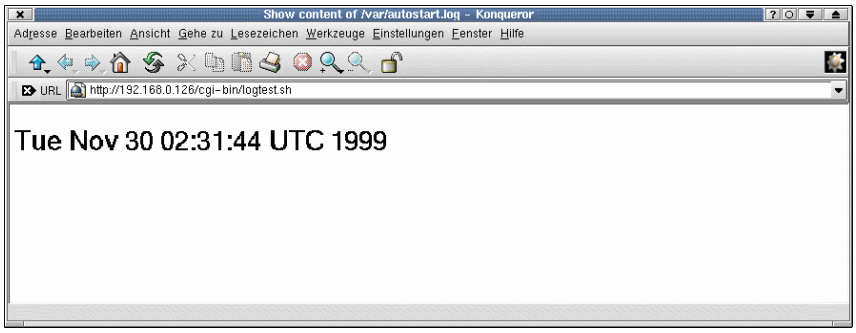
```
chmod +x logtest.sh
```



- **4. Step**: Now reboot the IGW/800 or IGW/900 Linux Device Server. 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/528x inside your IGW/800 or IGW/900 Linux Device Server. 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.