

How to use the MB/1520-100 Autostart Feature

The DIL/NetPC ADNP/1520 default embedded Linux configuration – called "Embedded Gateway Linux" – of your Application Board MB/1520-100 comes with an Autostart feature. This feature allows you to start a program at boot time.

The ADNP/1520 embedded Linux scans the Flash memory-based directory **/home** during the boot process for a Linux shell script file with the name **autostart.sh**. If this file is present, the shell script will be executed.

• **1. Step**: Create a Linux shell script file with the name **autostart.sh** on your development system and transfer this file to the ADNP/1520 directory /**flash**. 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 /flash
cat > autostart.sh
#!/bin/sh
while true ; do
    date > /home/autostart.log
    sleep 1
done
```

```
CTRL-D (CTRL-D stops the Linux cat command)
chmod +x autostart.sh
```

#!/bin/sh while true ; date > /h sleep 1	start.sh	nrt.log			- • ×
	1 root 15 root 1 root 1 root utostart.sh	root root root root	0 Jan 480 Apr 72 Jan 0 Jan	1 03:24 . 1 2004 1 03:25 autostart.sh 1 02:48 www	
	1 root 15 root 1 root art.sh do ome/autosta	root root root root	0 Jan 480 Apr 72 Jan 0 Jan	1 03:24 . 1 2004 . 1 03:25 autostart.sh 1 02:48 www	*1

• 2. Step: Reboot the Application Board MB/1520-100. Then watch the content of the file /home/autostart.log. The Linux shell script sample file from the 1. step writes every second a new date string into this file.



M Telnet 192.168.0.126		– – ×					
- SSV Embedded Linux Gateway - Version 0.01-2.4.20-1-MB100-ADNP1520-1-20040401 🔺							
emblinux login: root							
BusyBox v0.60.1 (2001.09.28-09:44+0000) Built-in shell (ash) Enter 'help' for a list of built-in commands.							
# cd /home							
# ls -al drwxr-xr-x 4 root	root	160 Jan 1 03:30 .					
drwxr-xr-x 15 root	root	480 Apr 1 2004					
-rw-rr 1 root drwxr-xr-x 2 gast drwxr-xr-x 2 guest	root users	29 Jan 1 03:31 autostart.log 64 Jun 7 2000 gast					
drwxr-xr-x 2 guest	users	64 Jun 7 2000 gast 64 Jul 24 2002 guest					
# cat autostart.log Tue Jan 1 03:31:22 UTC	1980						
∦ cat autostart,log	1000						
Tue Jan 1 03:31:26 UTC # cat autostart.log	1980						
# cat autostart.log Tue Jan 1 03:31: 28 UTC	1980						
# cat autostart.log Tue Jan 1 03:31:31 UTC	1980						
# cat autostart.log Tue Jan 1 03:31:32 UTC	1980						
# cat autostart.log Tue Jan 1 03:31:33 UTC	1980						
# cat autostart.log							
Tue Jan 1 03:31:34 UTC # cat autostart.log	1980						
# cat autostart.log Tue Jan 1 03:31:35 UTC	1980						
	1980						
# cat autostart.log Tue Jan 1 03:31:37 UTC	1980						
# cat autostart.log Tue Jan 1 03:31:38 UTC	1980						
# cat autostart.log							
Tue Jan 1 03:31:39 UTC # _	1980						
		▼					

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 ADNP/1520 of your Application Board MB/1520-100. 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.