

## How to use the eSOM/2586 Autostart Feature

The embedded system-on-module eSOM/2586 MAX-Linux default configuration comes with an *Autostart* feature. This feature allows you to start a program at boot time.

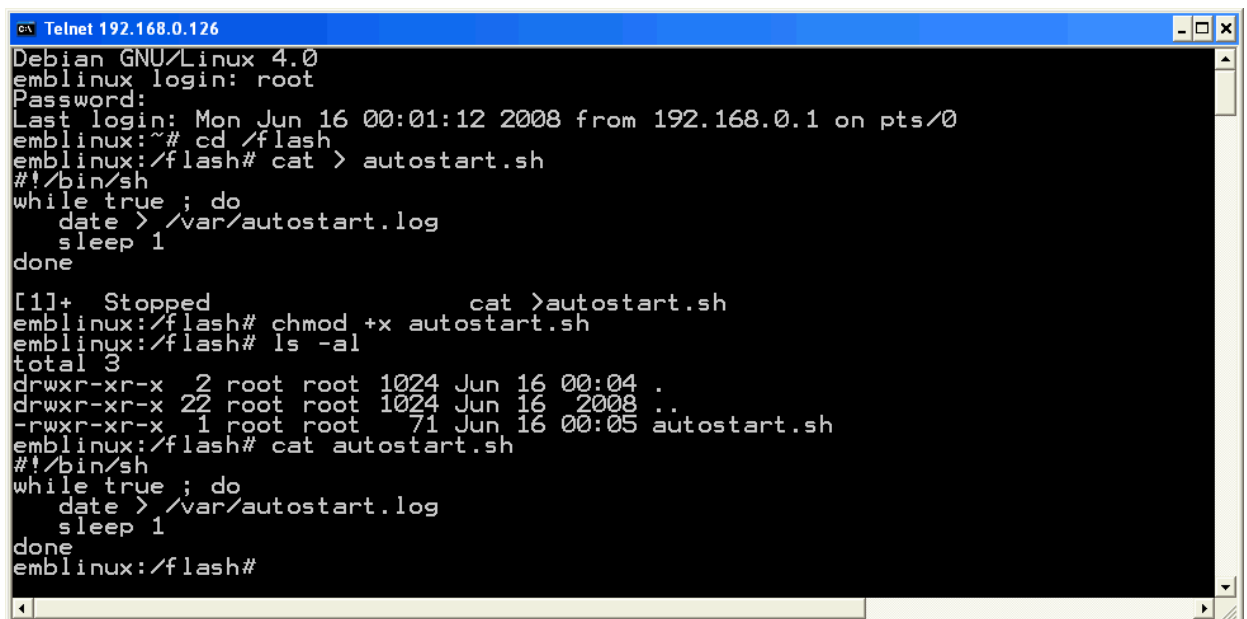
The eSOM/2586 MAX-Linux scans the NAND flash memory-based directory **/flash** direct before the end of the boot phase for a Linux shell script file with the name **autostart.sh**. If this file is present, the shell script will be executed.

- **1. Step:** Create a Linux shell script file with the name **autostart.sh** on your development system and transfer this file to the eSOM/2586 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 or serial console session:

```
cd /flash
cat > autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
```

CTRL-D (*CTRL-D stops the Linux cat command*)

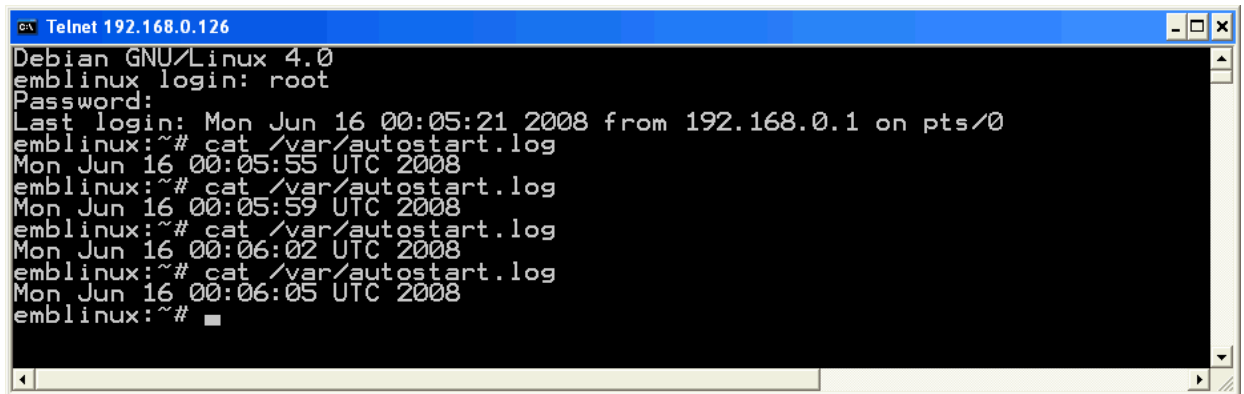
```
chmod +x autostart.sh
```



```

Telnet 192.168.0.126
Debian GNU/Linux 4.0
emblinux login: root
Password:
Last login: Mon Jun 16 00:01:12 2008 from 192.168.0.1 on pts/0
emblinux:~# cd /flash
emblinux:/flash# cat > autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
[1]+  Stopped                  cat >autostart.sh
emblinux:/flash# chmod +x autostart.sh
emblinux:/flash# ls -al
total 3
drwxr-xr-x  2 root root 1024 Jun 16 00:04 .
drwxr-xr-x 22 root root 1024 Jun 16  2008 ..
-rwxr-xr-x  1 root root   71 Jun 16 00:05 autostart.sh
emblinux:/flash# cat autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
emblinux:/flash#
```

- **2. Step:** Reboot the eSOM/2586. Then watch the content of the file **/var/autostart.log**. The Linux shell script sample file from the 1. Step writes every second a new date string into this file.



```
gn Telnet 192.168.0.126
Debian GNU/Linux 4.0
emblinux login: root
Password:
Last login: Mon Jun 16 00:05:21 2008 from 192.168.0.1 on pts/0
emblinux:~# cat /var/autostart.log
Mon Jun 16 00:05:55 UTC 2008
emblinux:~# cat /var/autostart.log
Mon Jun 16 00:05:59 UTC 2008
emblinux:~# cat /var/autostart.log
Mon Jun 16 00:06:02 UTC 2008
emblinux:~# cat /var/autostart.log
Mon Jun 16 00:06:05 UTC 2008
emblinux:~# █
```

**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 embedded system-on-module eSOM/2586. 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 and XP – use a carriage return/linefeed pair (CR/LF), whilst UNIX only uses the LF character.

That's all.