

How to use the IGW/922 Autostart Feature

The IGW/922 Linux operating system comes with an *Autostart* feature. This feature allows you to start a program or a Linux build-in command at boot time.

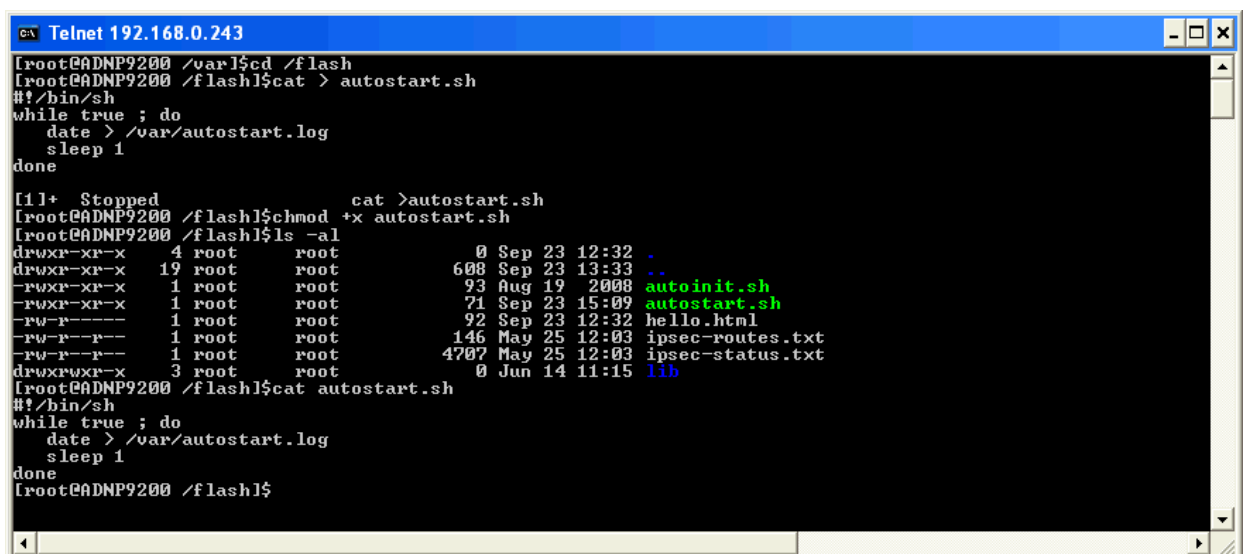
The IGW/922 Linux O/S scans the internal flash memory-based directory */flash* direct before the end of the boot phase for a Linux shell script file with the name *autostart.sh*. If this file is present, the shell script will be executed.

- **1. Step:** Create a Linux shell script file with the name *autostart.sh* on your development system and transfer this file to the IGW/922 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 saves the file)
CTRL-Z (CTRL-Z stops the Linux cat command)
```

- **2. Step:** Make sure that the file */flash/autostart.sh* is executable. Use the following command line to assign executable rights to *autostart.sh*:

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



```

Telnet 192.168.0.243
[1] root@ADNP9200 /var/ # cd /flash
[1] root@ADNP9200 /flash # cat > autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
[1] + Stopped cat >autostart.sh
[1] root@ADNP9200 /flash # chmod +x autostart.sh
[1] root@ADNP9200 /flash # ls -al
drwxr-xr-x  4 root  root          0 Sep 23 12:32 .
drwxr-xr-x 19 root  root        608 Sep 23 13:33 ..
-rwxr-xr-x  1 root  root         93 Aug 19  2008 autoinit.sh
-rwxr-xr-x  1 root  root         71 Sep 23 15:09 autostart.sh
-rw-r----- 1 root  root         92 Sep 23 12:32 hello.html
-rw-r--r--  1 root  root        146 May 25 12:03 ipsec-routes.txt
-rw-r--r--  1 root  root       4707 May 25 12:03 ipsec-status.txt
drwxrwxr-x  3 root  root          0 Jun 14 11:15 lib
[1] root@ADNP9200 /flash # cat autostart.sh
#!/bin/sh
while true ; do
    date > /var/autostart.log
    sleep 1
done
[1] root@ADNP9200 /flash #

```

- **3. Step:** Reboot the IGW/922. Then watch the content of the file */var/autostart.log*. The Linux shell script sample file *autostart.sh* writes every second a new date string into *autostart.log*.

```

Telnet 192.168.0.243
- SSV Embedded Linux - Version 0.62.26-ssv4

ADNP9200 login: root
Password:
[root@ADNP9200 /root]#cd /var
[root@ADNP9200 /var]#ls -al
drwxr-xr-x   9 root   root   384 Sep 23 15:15 .
drwxr-xr-x  19 root   root   608 Sep 23 15:14 ..
lrwxrwxrwx   1 root   root    3 Apr  7 14:25 adm -> log
-rw-r--r--   1 root   root   30 Sep 23 15:16 autostart.log
drwxr-xr-x   2 root   root   64 Sep 23 15:14 empty
drwxr-xr-x   2 root   root   64 Apr  3 2000 lib
drwxrwxrwt   3 root   root   96 Apr  4 2000 lock
drwxr-xr-x   2 root   root  192 Apr  3 2000 log
drwxr-xr-x   3 root   root  512 Sep 23 15:15 run
drwxr-xr-x   3 root   root   96 Jun  3 1998 spool
drwxr-xr-x   3 root   root   96 Nov  4 2003 state
lrwxrwxrwx   1 root   root    4 Apr  7 14:25 tmp -> /tmp
[root@ADNP9200 /var]#cat autostart.log
Thu Sep 23 15:16:08 CEST 2010
[root@ADNP9200 /var]#cat autostart.log
Thu Sep 23 15:16:16 CEST 2010
[root@ADNP9200 /var]#cat autostart.log
Thu Sep 23 15:16:23 CEST 2010
[root@ADNP9200 /var]#cat autostart.log
Thu Sep 23 15:16:25 CEST 2010
[root@ADNP9200 /var]#cat autostart.log
Thu Sep 23 15:16:26 CEST 2010
[root@ADNP9200 /var]#cat autostart.log
Thu Sep 23 15:16:27 CEST 2010
[root@ADNP9200 /var]#_

```

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 IGW/922. 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, Windows Vista and Windows 7 – use a carriage return/linefeed pair (CR/LF), whilst UNIX only uses the LF character.

That's all.