

### 5.3 Establishment of compiler environment

The Linux platform, compile kernel for the development board, Qtopia graphical user interface, bootloader, and other applications require cross-compiler toolchain.

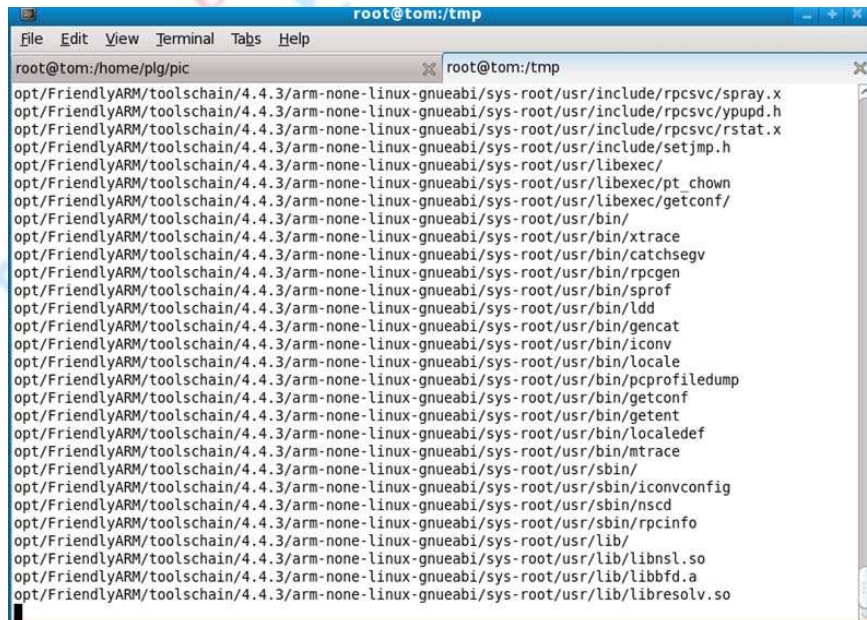
Before, the system use a different compiler version to compile various parts of properly, so to keep switching settings in the development process, which is not convenient to begin, and also reduces performance of development. Since Linux-2.6.29 started (with the development board of the kernel has the latest Linux-2.6.32.2), we have a unified cross-compiler for the arm-linux-gcc-4.4.3, below are steps installation.

Step 1: In the CD-ROM directory “/linux”, copy the arm-linux-gcc-4.4.3.tgz to directory such as “/tmp”, then go to the directory, extract using the execution command:

```
#cd /tmp
#tar xvzf arm-linux-gcc-4.4.3.tgz -C /
```

Note: C with a trailing space, and C is capitalized, it is the English word "Change" the first letter, in the meaning of this is to change the directory.

Execute the command, will install arm-linux-gcc to “/usr/local/arm/4.4.3” directory. Extraction process is shown below:



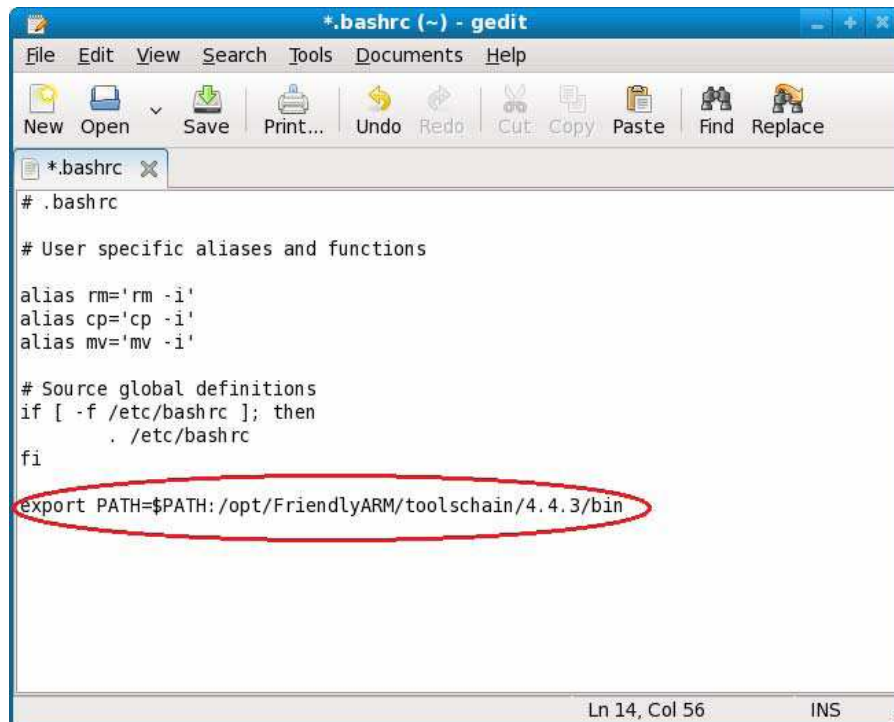
Step 2: Add the path to the compiler environment variables of the system to run commands.

```
#gedit /root/.bashrc
```

Edit "/root/.bashrc" file, add last line:

```
export PATH=$PATH: /opt/FriendlyARM/toolschain/4.4.3/bin
```

By figure, save and exit.



Log in system (do not need to reboot the machine, just "start > logout and then login), the above settings will take effect, at the command line type "arm-linux-gcc -v", the following message will appear, indicating that cross-compile environment has been successfully installed.

