Install Development Environment for LinuxDA

1) Install RedHat 7.0 or RedHat 6.2 in your PC and setup X Windows.
-Check whether there is a directory named '**/opt/src**' in your Linux system. If no, create it with command '*mkdir /opt/src*'.
- X Windows has to config to 16 bit color depth

2) Copy the SDK library file **'LinuxDA-Lib-xxxxxx.tar.gz', 'SDK-Lib-xxxxxx.tar.gz'** to /opt/src directory.
-You can distinguish the latest file by its name – the xxxxxx string indicates the date (yy/mm/dd) when this file was updated (for example, "010224" means this file was updated on 2/24/2001).

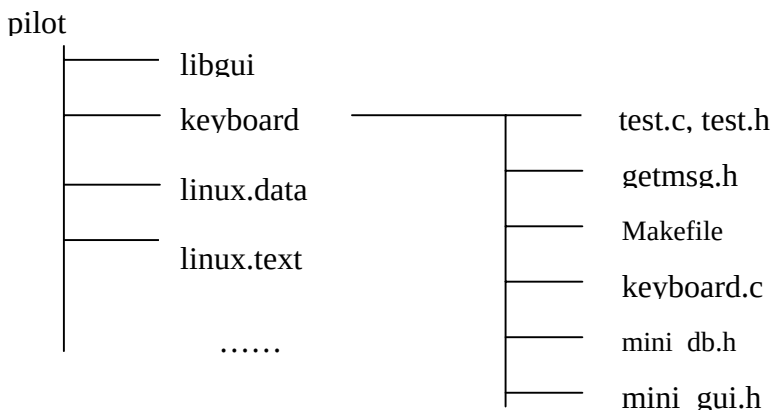
3) Unzip SDK library file with command '***tar –zxf LinuxDA-Lib-xxxxxx.tar.gz***', '***tar –zxf SDK-Lib-xxxxxx.tar.gz***'
-A directory named LinuxDA will be created under the /opt/src/, including the main contents of SDK. It has some files and sub-directories:

a) coff2flt-0.3
It can convert binary file in format '*coff'* to anothre file in formatin '*flt*'. Though files in both fomat can run in Dragonball CPU, '*flt*' file is smaller than a '*coff*' one. This gives 'flt' an advantage in system with small-sized memory, like PDA.

b) genromfs-0.3
This is a tool which can emulate memory as hard disk.

c) Libc, libm
These two directories include GNU Libraries.

(API programmers need not change any contents under directory (a), (b) and (c). They could only care about the directory '**pilot'**)
Directory tree under '**pilot**' looks like this:



(a)'libgui' includes GUI library. They are necessary for writing API.
(b)'linux.data', 'linux.text' are the compiled kernel.

4) Get the compiler tool package '**gnu-xxxxxx.RH70.tar.gz**' for Redhat 7.0 ('gnu-xxxxxx.RH62.tar.gz' is for Redhat 6.2) .
-Create directory '**/usr/local**' if there is no /usr/local directory. Save the file in this directory, unzip it by the command '*tar –zxf gnu-xxxxxx.RH70.tar.gz*'.
You will get a directory '/usr/local/gnu' including 'm68k-coff-gcc' cross compiler.

5) Add '**/usr/local/gnu/bin**' to you environment variable PATH.
-You can use the command '*PATH=$PATH:/usr/local/gnu/bin*'. You also can edit the config file by command 'vi /etc/profile', and reboot the Linux OS.

6)Go to '**/opt/src/LinuxDA/pilot**' directory, and execute '*make*' command to compile your first ROM file.
-If everything is OK, you will not see error message in screen.

7) Edit the 'Makefile' file in order to compile your own API
-Find such sentence in '**Makefile**' file: OBJS= … ../libgui/libgui.a, add '**A.o**' (supposing you write a C file named '**A.c**') to the end of this sentence.
-Then, insert a new line '**A.o: A.c'** under the line $(EXEC): $(SELF_EXE).stamp…$(0) …

8)Try to execute '*make*' in '**pilot**' directory.
-If no error exits in your '**A.c**', a file named '**linux.rom**' will be created. This file can be run in the emulator in your PC.

9) Install latest emulator '**xcopilot-n.n.n.n.tar.gz**'
-Save it in '**/bin**' directory, and release it by command '*tar –zxf xcopilt-n.n.n.n.tar.gz*'.

10) Test your own API in emulator by command '*xcopilot –romfile /opt/src/LinuxDA/pilot/linux.rom* **'** at X windows -You will see a graphic emulation in PC. Operate it with mouse and keyboard. If everything is OK, your own development environment has been set up successfully.

11) Install edit tool **Glimmer**
-Save it anywhere in your PC, then install the two packages in this directory by command '*rpm –ivh glimmer-1.0.1-1rh62.i386.rpm*'. You can run the Glimmer program from '**Program/Development**' in the program bar of X windows.

12) Install the program into PDA.

Notes: You can find the files you need in LinuxDA developer CD or download those files

on line.