Subject: Re: Porting SystemDraw to Frambuffer
Posted by kohait00 on Fri, 04 Sep 2009 16:47:27 GMT
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hi people

to make me understand:

in embedded systems, you often have no X11 or DirectFb (although there is a small port nxlib for the Blackfin uClinux). all what we have is frambuffer and input drivers.

so the need is only to run *1* single application, without windowmanager, just as a simple control gui for things to do on an embedded system. so frambuffer / input drivers should be enough, so we could spare out all the complex layers, making an embedded system slow and using large memory chunks (in fact thats the biggest concern in ES). using other intermediate layers like DirectFB or SDL, which give you abstract access to fb0 and input drivers is fine and comfortable, but also brings in some costs (regardless of licence, this is another concern as well).

i hope you got the picture..

in any case, we need a layer for the CtrlCore that either can draw on /dev/fb0 and get its input from /dev/input/* or a layer for CtrlCore to interact with SDL or DirectFB..

The graphic stuff is far complex, and the layering especially under linux is of its own, i.e SDL itself can run on DirectFB or bare Framebuffer, DirectFB can run on X or DirectFB or others...but you know all that already.

like you already got the point, SDL is just able to be build and used under Upp, but only for Core (not CtrlCore) base Applications, means not Upp native GUI applications, simple Console applications or so..

so what would be the best / easiest / most flexible solution to drop the X11/Win32 chains ??

Application layer like that is meant to be:

```
Upp GUI application (single window normally, one TopWindow instance)
||
output=================input
||                    ||
framebuffer            inputdrivers
```

or like that

```
Upp GUI App (real CtrlCore)
||
SDL
```

```
||
output======================intput
||                          ||
(frambuffer, X, GL,Dir.FB)   (/dev/input or touchscreen, or X11..)
```

or like that

```
Upp GUI App (real CtrlCore)
||
DirectFB
||
output======================intput
||                          ||
(frambuffer, X, GL..)   (/dev/input or touchscreen, or X11..)
```

or like that

```
Upp GUI App
||(native X11 layer)
nanox (former MicroWindows)
||
output======================intput
||                          ||
(frambuffer)   (/dev/input or touchscreen)
```