LSE-2015 Project

`Framebuffer Copy`

Cholbi Alenda, Pablo (*Doc, Test*)
p.cholbi@alumnos.upm.es

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Date	Version	Issue	Author
2015-04-19	1.0	Initial release.	*PCA*
2015-04-20	1.1	Updated section **Test**.	*PCA*

Contents

1 Description

The **fbcp** application replicated the HDMI output of the Raspberry Pi on the TFT LCD touchscreen.

2 Application

The application is developed and maintained by Git user tasanakorn. The source code of the application can be found at:

```
https://github.com/tasanakorn/rpi-fbcp.git
```

The **fbcp** application copies the content of `/dev/fb0` (HDMI) to `/dev/fb1` (TFT LCD touchscreen). The application is started without arguments or parameters.

3 Setup

A set up script is provided at `../../scripts/setup/fbcp_setup.sh` to ease the building and installation.

If the setup script finished successfully; the binary should be at `/usr/local/bin/fbcp` and a UNIX System V init script should be at `/etc/init.d/fbcp`.

4 Service

To start **fbcp** as a daemon; execute `/etc/init.d/fbcp` as root. This daemon can take as argument `start`, `stop`, `restart` or `force-reload`.

5 Testing

A test script is provided at `../../scripts/test/camera-fbcp-tft_test.sh` to test the application. The test script execute a series of test cases and then asks for user input to determine if the test executed correctly.

If the test was successful, the scripts returns 0, if the test failed a value different from 0 is returned.

The test sequence currently implemented starts and stops the service while an instance of `raspivid` is running.

Please note that for `raspivid` to run the camera must be present and some system configuration must have taken place at some time prior to the test. Please refer to the kernel configuration documentation (`../kernel/report.pdf`) for more information on this point.