

LSE-2015 Project

Framebuffer Copy

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

5th of May, 2015



Date	Version	Issue	Author
2015-04-19	1.0	Initial release.	PCA
2015-04-20	1.1	Updated section Test .	PCA
2015-05-05	1.2	Updated section Application .	PCA

Contents

1	Description	1
2	Application	1
3	Setup	1
4	Service	1
5	Testing	1

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.

The application does not write to `STDOUT` or `STDERR`. It instead writes to `Syslog` (`/var/log/syslog`).

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.