**DRM\_D3R 설치 품목들 그리고 방법**

**Gstreamer:** *Pipeline Protocol used by DRM\_D3R*

1.

sudo apt-get install libgstreamer1.0-0 gstreamer1.0-plugins-base gstreamer1.0-plugins-good gstreamer1.0-plugins-bad gstreamer1.0-plugins-ugly gstreamer1.0-libav gstreamer1.0-doc gstreamer1.0-tools

**Gst-omx:** *Gstreamer plugin used for hardware acceleration decoding*

Installed with gstreamer1.0-dev

Check with command gst-inspect 1.0 | grep omx

**Turn on GL Driver and set Mem Split to 256:** *Configuration necessary for hardware acceleration on Raspberry Pi*

1.

sudo rapi-config

2.

advanced options -> GL Driver -> GL (Full KMS) -> Ok

advanced options -> memory split -> set to 256

**Gst-rpicamsrc:** *Gstreamer plugin used to capture footage with Pi Camera*

Install prerequisites:

1.

sudo apt-get install autoconf automake libtool pkg-config libgstreamer1.0-dev \ libgstreamer-plugins-base1.0-dev libraspberrypi-dev

2.

git clone https://github.com/thaytan/gst-rpicamsrc

3.

Cd gst-rpicamsrc

./autogen.sh --prefix=/usr --libdir=/usr/lib/arm-linux-gnueabihf/

make

sudo make install

**Xscreensaver:** *screensaver tool used in Raspberry Pi. Used to turnoff screen saver while streaming.*

1.

sudo apt-get install xscreensaver

2.

start -> preferences -> screensaver -> mode -> disable screen saver

**Download and install bcm2835:** *processor library required by DORCA\_3\_RIM (D3R)*

1.

wget <http://www.airspayce.com/mikem/bcm2835/bcm2835-1.57.tar.gz>

2.

tar zxvf bcm2835-1.57.tar.gz

3.

cd bcm2835

4.

./configure

5.

make

6.

sudo make check

7.

sudo make install

**Install openssl:** *software library required by Dorca\_3\_RIM (D3R)*

1.

sudo apt-get install libssl-dev

**Install required source code and configure:** *Setting correct IP address for TCP communication between server and receiver, and compiling the executable file*

Instruction for sender Pi // Instruction for receiver Pi

1.

git clone <https://github.com/neowinepub/DRM_D3R>

2.

cd DRM\_D3R

3.

Cd gst-sender // gst-receiver

4.

cd function

5. Vim raspi\_streaming.c // vim raspi\_streaming\_player.c

Set “host” to IP address of the sender Pi for both sender and receiver Pi.

raspi\_streaming.c(line340) // raspi\_streaming\_player(line 170, 279)

6.

cd .. // cd ..

7.

make // make

8.

cd ..

9.

./receiver.sh // ./sender.sh