

# RDK-C : 2022 Global Techsummit Changes

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## HLS Streaming Changes

### Change 1:

```
cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/rms/git-r0/git/builders/make2/CCdist/rms/config/
```

```
vi config.lua
```

Line Number : 41

```
-           pushPullPersistenceFile="/usr/local/rms/config/pushPullSetup.xml",  
+--[[           pushPullPersistenceFile="/usr/local/rms/config/pushPullSetup.xml", ]]
```

Disable this "pushPullPersistenceFile="/usr/local/rms/config/pushPullSetup.xml"," line in config.lua

### Change 2:

```
cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/rms/git-r0/git/sources/thelib/src/streaming/hls
```

```
vi hlsplaylist.cpp
```

Function Name : OpenSegment

Line Number : 562

```
-           _appending ? ((uint32_t) _segmentSequence) : SEGMENT_SEQUENCE(_segmentSequence));  
+           _appending ? ((uint32_t) _segmentSequence) : (uint32_t)SEGMENT_SEQUENCE(_segmentSequence));
```

Added (uint32\_t) type casting in this "\_appending ? ((uint32\_t) \_segmentSequence) : SEGMENT\_SEQUENCE(\_segmentSequence);" line

### Change 3:

```
cd meta-cmf-raspberrypi/meta-rdk-camera/recipes-extended/rms/files
```

Copy this file in this directory [startRMS.sh](#)

## Thumbnail Changes

### Change 1:

```
cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/pipewire/0.3.52-r0/git/src/examples
```

```
pw-capture.cpp
```

Copy this pw-capture.cpp file into this directory

### Change 2:

```
cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/pipewire/0.3.52-r0/git/src/examples
```

```
vi meson.build
```

Add below lines in end of the file

```

opencv = dependency( 'opencv4' )

executable('pw-capture',
'pw-capture.cpp',
c_args : [ '-D_GNU_SOURCE' ],
install : true,
dependencies : [pipewire_dep, mathlib, opencv],
)

```

### Change 3:

cd meta-cmf-camera/recipes-multimedia/pipewire

vi pipewire\_git.bbappend

Add below line in this pipewire bbappend file

```
TARGET_CXXFLAGS += "-fpermissive"
```

### Change 4:

cd build-raspberrypi3-rdk-camera/tmp/work/cortexa7t2hf-neon-vfpv4-rdk-linux-gnueabi/pipewire/0.3.52-r0/recipe-sysroot/usr/include/opencv4/opencv2/flann

vi logger.h

Line number : 81

```

int ret;

//int ret = vfprintf(stream, fmt, arglist);

```

Did above two line changes in this logger.h file

### Change 5:

cd meta-openembedded/meta-oe/recipes-multimedia/pipewire

vi pipewire\_git.bb

```
-DEPENDS = "alsa-lib dbus udev"
```

```
+DEPENDS = "alsa-lib dbus udev opencv"
```

Added opencv dependency component for PipeWire

## Lighttpd Changes

[lighttpd.conf](#)

[light.tar.gz](#)

Need to copy this lighttpd.conf and light.tar.gz files in RPI camera target

### lighttpd.conf:

Need to copy this lighttpd.conf file into /etc/lighttpd

### light.tar.gz:

copy this into camera target

Local system : scp light.tar.gz root@camera\_ip:/

### camera target:

```
cd /  
tar -xvzf light.tar.gz
```

While untar this light.tar.gz file the respective files will automatically copy to usr/bin , usr/lib , usr/share directory.

Once did above steps then reboot the target.

## Validation

### HLS live streaming

Can play this URL in VLC Player

[http://camera\\_ip:50050/hls/playlist.m3u8](http://camera_ip:50050/hls/playlist.m3u8)

### Thumbnail

Can view thumbnail image in browser page

[http://camera\\_ip:50050/thumbnail.jpeg](http://camera_ip:50050/thumbnail.jpeg)