Firmware Upgrade - Multi boot support User Manual - 2019

Introduction-Mulitboot

This page is dedicated for switching the images (broadband to video) specifically for techsummit-2019

RDK- Broadband Image Flashing in SDcard Steps

1. Flash the Broadband image in SD card

Image Flashing Command

```
sudo dd if=<RPIimage-sdimg> of=</dev/sdc> bs=4M

Example: sudo dd if=rdk-generic-hybrid-refapp-thunder-image_default_20190829072513.rootfs.rpi-sdimg of=/dev/sdc
bs=4M
```

2. Resizing and partition creation

- Use Gparted tool for resizing and partition creation by using the following link
  - Partioning and Resizing using GParted GUI

RDK- Video Image Copying in SDcard Steps

3. Keep RDK-Video image in the host machine
4. Extracting the RDK-Video image into the **extblock** directory

video data extract

```
sudo sh extract.sh <video-image file>
For ex. sudo sh extract.sh rdk-generic-hybrid-refapp-thunder-image_default_20190924125426.rootfs.rpi-sdimg
```

After executing the above script, **Linux kernel** and **RootFS** of RDK-Video image would be present in the **extblock** directory

5. To Copy the RDK-Video image in **Partition-P4**

- Create mount directory and execute mount for the partition 4

video data extract

```
For ex.
mkdir videomnt
sudo mount /dev/sdb4 videomnt

In above command, storage partition 4 will get mounted to videomnt directory
```

- Copy the RDK-Video image which is present in the extblock

video data extract

```
sudo cp -r extblock/v* videomnt/
```

6. Copy the vrootfs backup data into partition 4 storage bank, to ensure it will acts as video bank as well

video data extract

```
sudo cp -r extblock/vrootfs_backup_data/* videomnt/
```

7. Unmount videomnt directory as below

video data extract

```
sudo umount videomnt
```

Switching to RDK-Video Image from RDK-Broadband

8. Now Boot up the SD card in RPI-> it should come up with BB **image in partition (P2)**

9. Log into the R-Pi from Host PC execute the below command

ssh root@<RPI-Board IP>

10. To load the video image which is present in the storage execute the script bank_video_switch.sh

Switching to Video Image

```
root@RaspberryPi-Gateway:/lib/rdk# sh bank_video_switch.sh
```

11. R-Pi should boot up with video image. Ensure that the ethernet connection is available for R-Pi.

NOTE:

Ensure that while mounting the SD card in host machine it may have different device names like /dev/sdc * and /dev/sdd * . Please check host machine accordingly while using device name.