RDK Image Flash App(On SD card)

Prerequisite

Image Flash app has been developed and tested on below environment

- **VS Code: Version-1.63.0**

Visual Studio Code is a source-code editor made by Microsoft for Windows, Linux and macOS.

- **Electron: 13.5.2**

Electron (formerly known as Atom Shell) is a free and open-source software framework developed and maintained by GitHub. It allows for the development of desktop GUI applications using web technologies: it combines the Chromium rendering engine and the Node. js runtime.

- **Google Chrome: Version 96.0.4664.93 (Official Build) (64-bit)**

Google Chrome is a cross-platform web browser developed by Google.

- **Node.js: 14.16.0**

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.

- **V8: 9.1.269.39-electron.0**

V8 is Google's open source high-performance JavaScript and WebAssembly engine, written in C++. It is used in Chrome and in Node.js, among others.

RDKV Image Flash App

For easy On boarding of the developers for the R-PI Target , image Flashing in SD card , process made easy with Image Flash App.
In an Image flash app , with 3 easy step user can flash an image on SD card.

1) Select an SD card on which user want to flash image.

2) choose default option or upload an image

3) Press 'Flash Image'   button to start image flash on SD card

4) Authentication is needed to flash an image on SD card

On choosing default checkbox in an app , app will downloads the image from RDK server and store it in local host machine and flash it on SD card

Source code setup and Run application

Follow below steps to run application on host pc and create installer package

- **step 1 -** get the image flash app src code (link will be added soon) then run below command

$ npm install

- **step 2 -** Install electron JS

$ npm install --save-dev electron

- **step 3 -** run below command

$npm run start

Create installer package

Follow below steps to create installer package for linux/windows/mac

- Need to install electron-packager and electron-installer-debian globally

$ sudo npm install -g electron-packager

$ sudo npm install -g electron-installer-debian

- Run below commands to make deb file for linux intaller.

$ electron-packager . --platform linux --arch x64 --out dist --overwrite

$ electron-installer-debian --src dist/EMV-linux-x64/ --arch amd64 --config config.json

- Installer package will be created and stored inside the dist folder.

For the complete documentation on electronjs refer link: *https://www.electronjs.org/*.

Installation

- Installer package will be created for Image flash app: rdk-image-flash_1.0.0_amd64.deb
- Double click on installer deb package, default linux software install window will appear and progress bar will be displayed
- On successful installation user/developer will be able to launch Image flash app
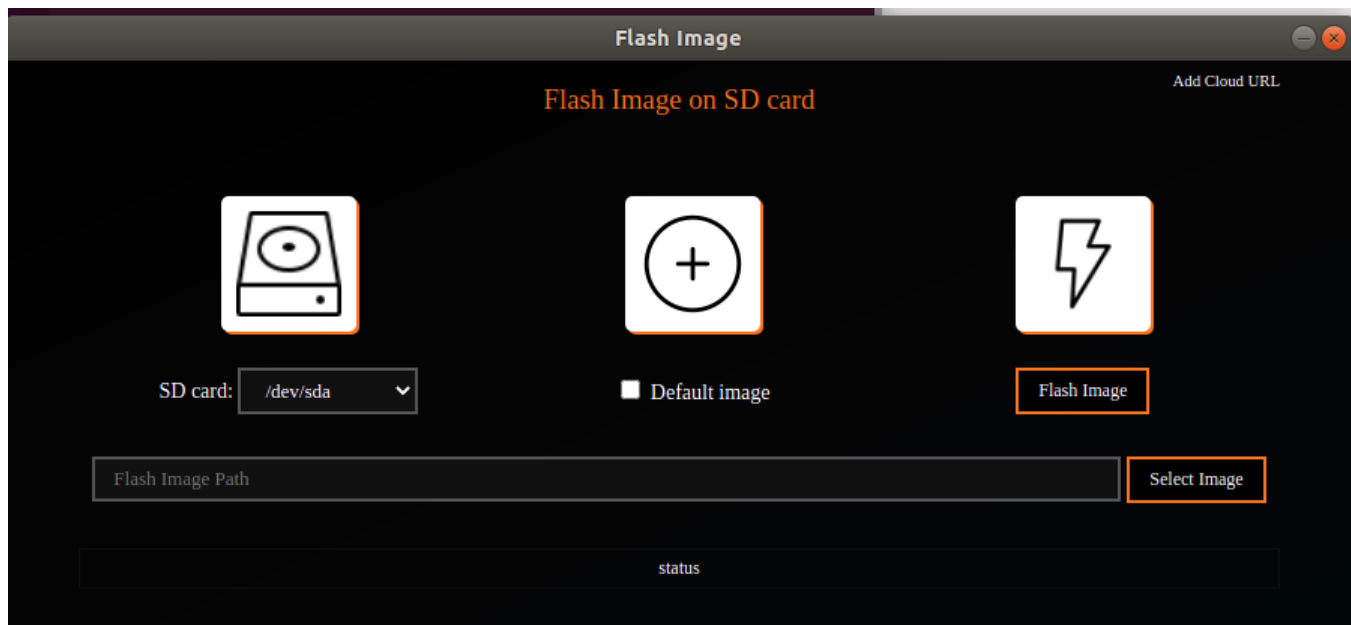
Features
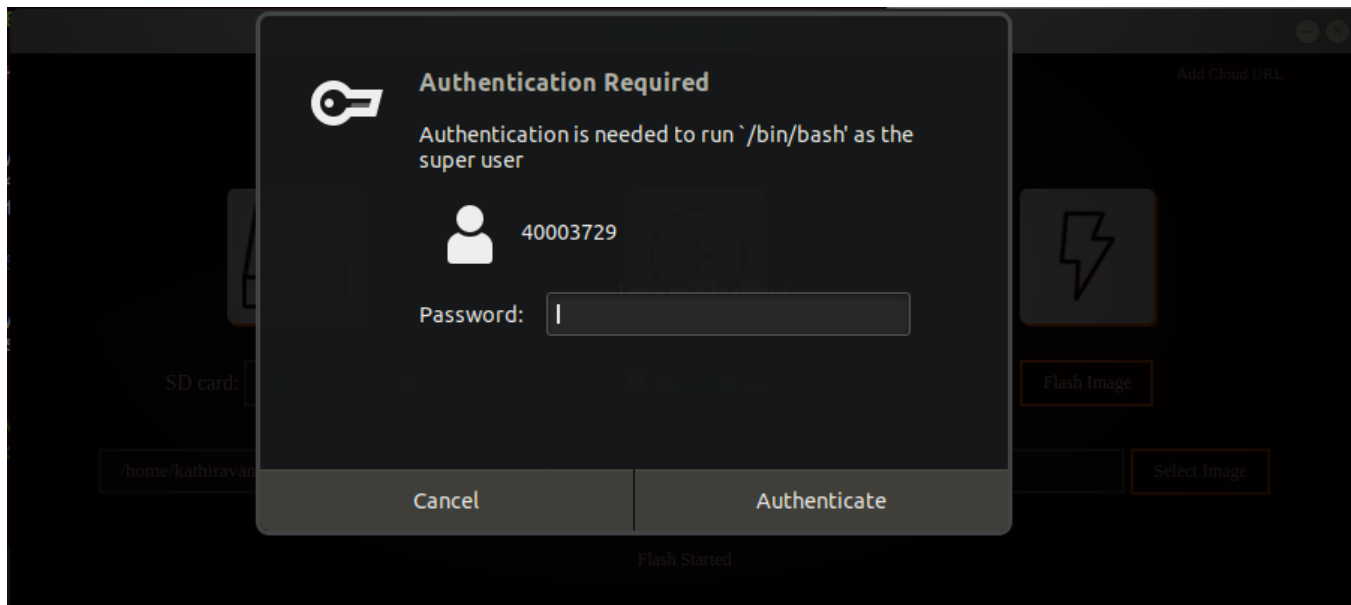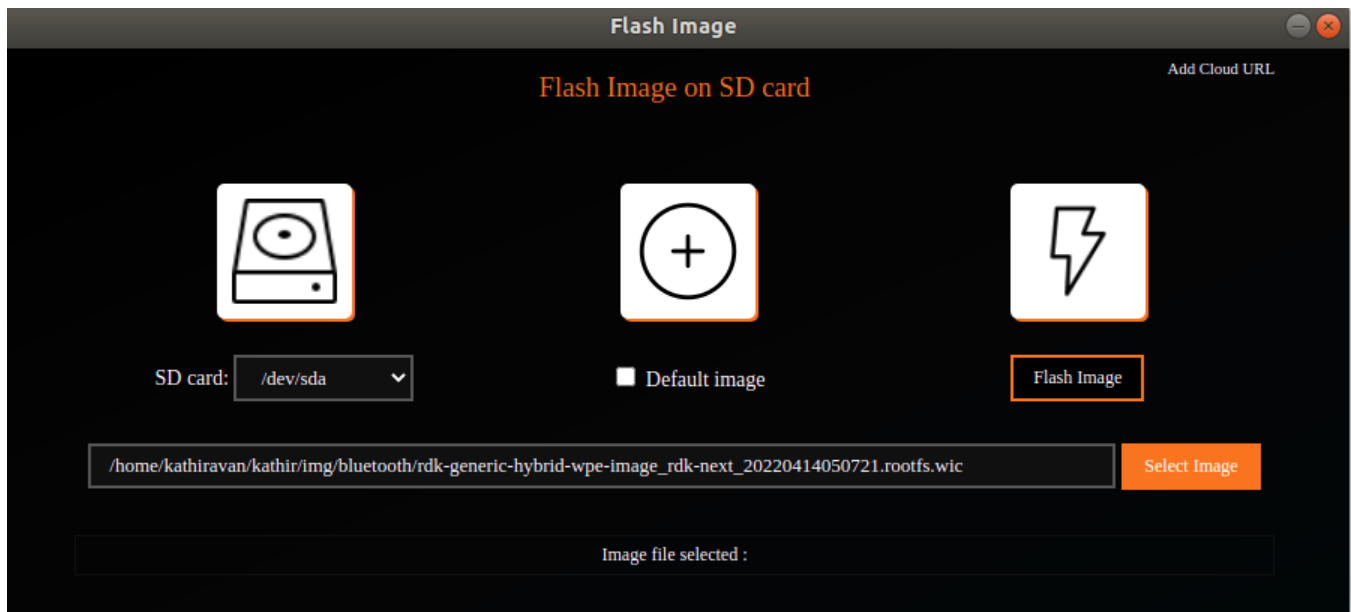
- **Flash selected image on SD card**

Insert SD card in to host PC .

Select desired SD card from dropdown list.

Upload image

Press Flash Image button.

Flash Image

Add Cloud URL

Flash Image on SD card

SD card: /dev/sda

☐ Default image

Flash Image

/home/kathiravan/kathir/img/bluetooth/rdk-generic-hybrid-wpe-image_rdk-next_20220414050721.rootfs.wic

Select Image

Image file selected :

Authentication Required

Authentication is needed to run `/bin/bash` as the super user

40003729

Password: |

Cancel   Authenticate

Add Cloud URL

SD card:

/home/kathiravan

Flash Image

Select Image

Flash Started

Add Cloud URL

Flash Image on SD card

Image Flashing

SD card: /dev/sda

☐ Default image

Flash Image

/home/kathiravan/kathir/img/bluetooth/rdk-generic-hybrid-wpe-image_rdk-next_20220414050721.rootfs.wic

Select Image

Flash Started

Add Cloud URL

Flash Image on SD card

SD card: /dev/sda

SD CARD FLASH DONE

OK

Flash Image

/home/kathiravan/kathir/img/bluetooth/rdk-generic-hybrid-wpe-image_rdk-next_20220414050721.rootfs.wic

Select Image

Flash Started

- **Default image flash**

Insert SD card in to host PC .

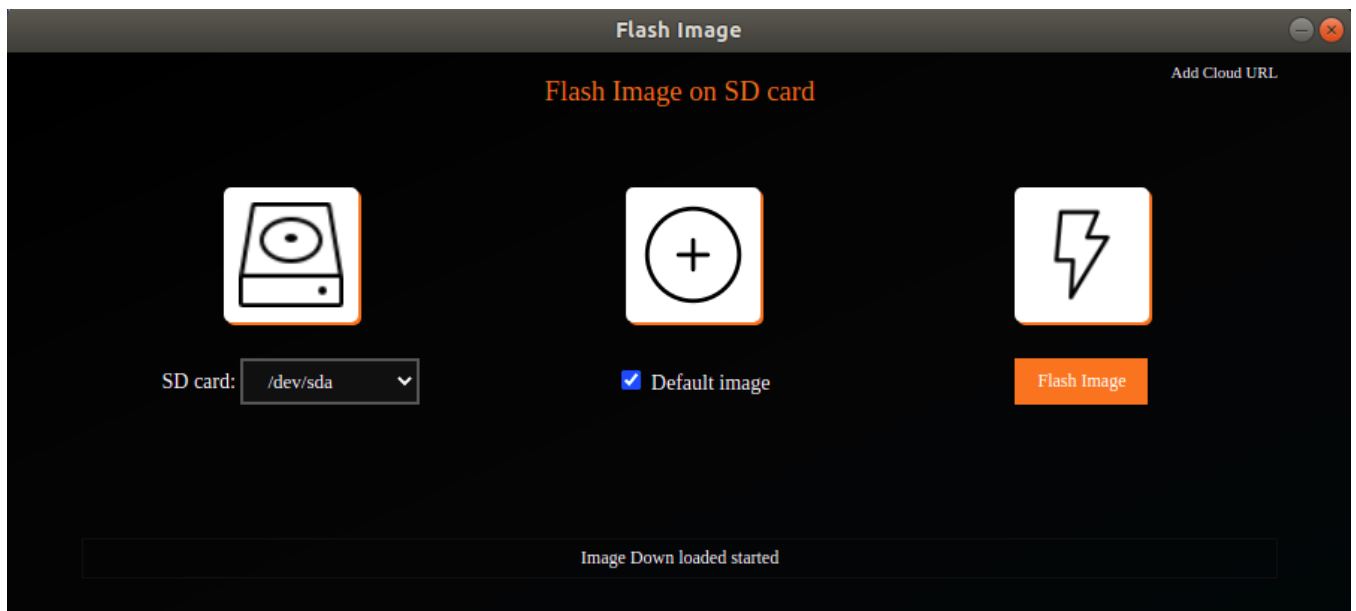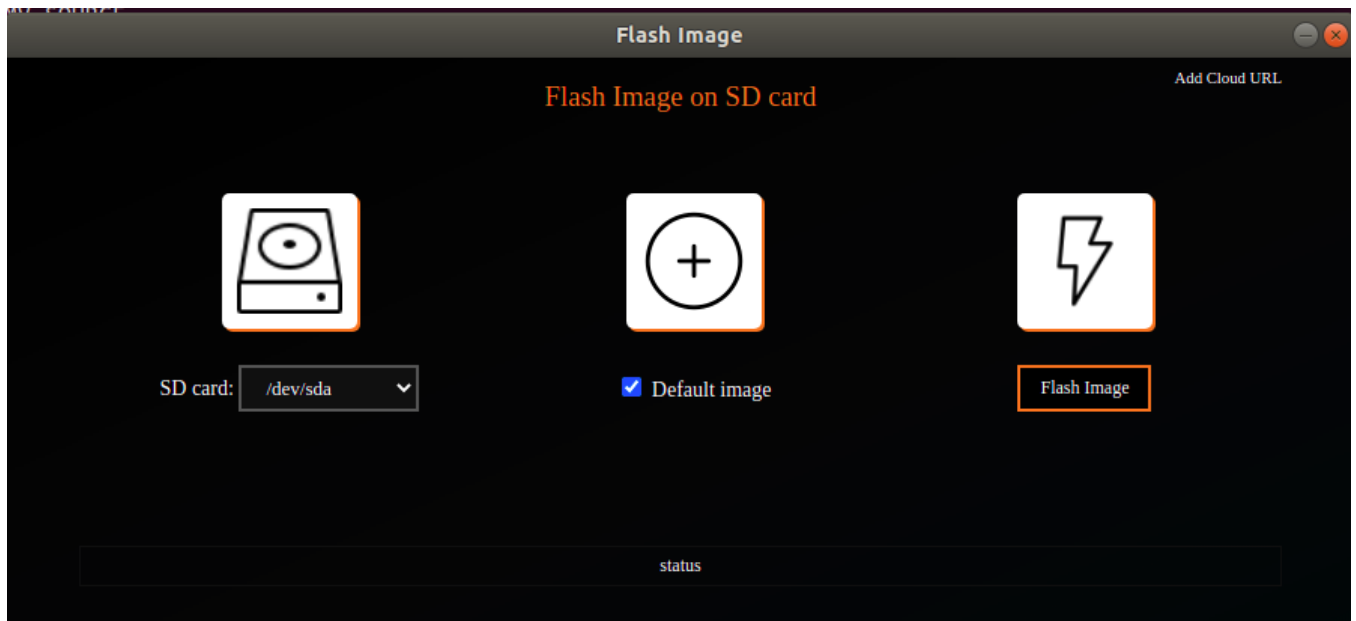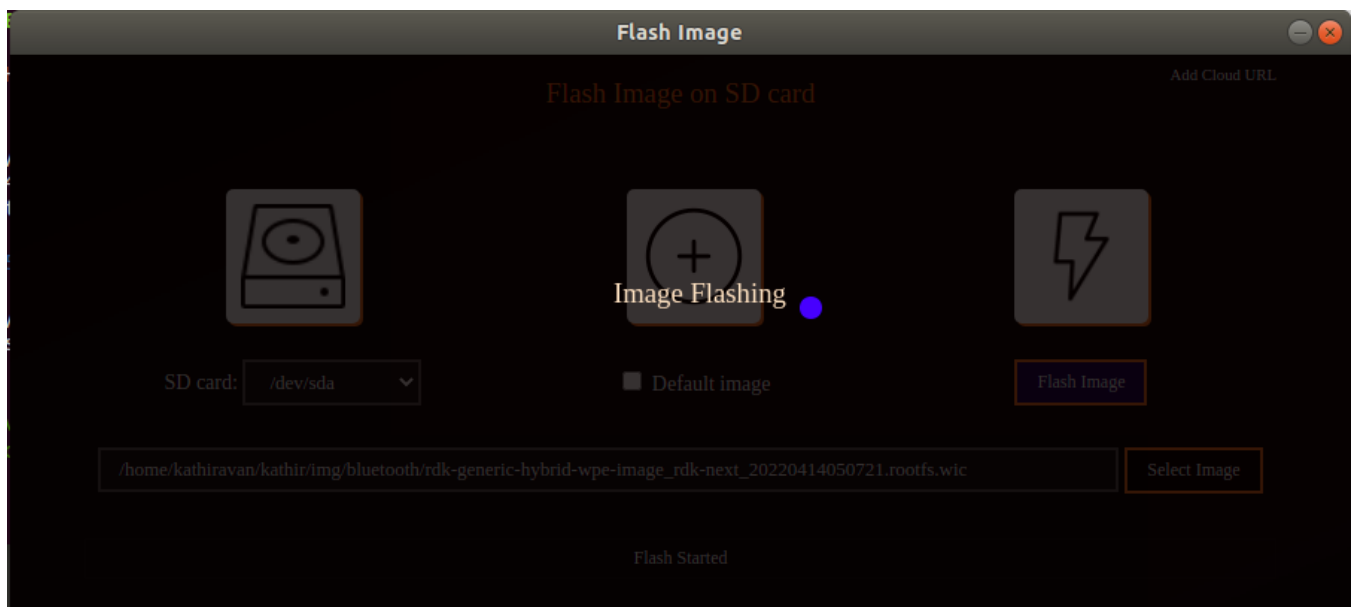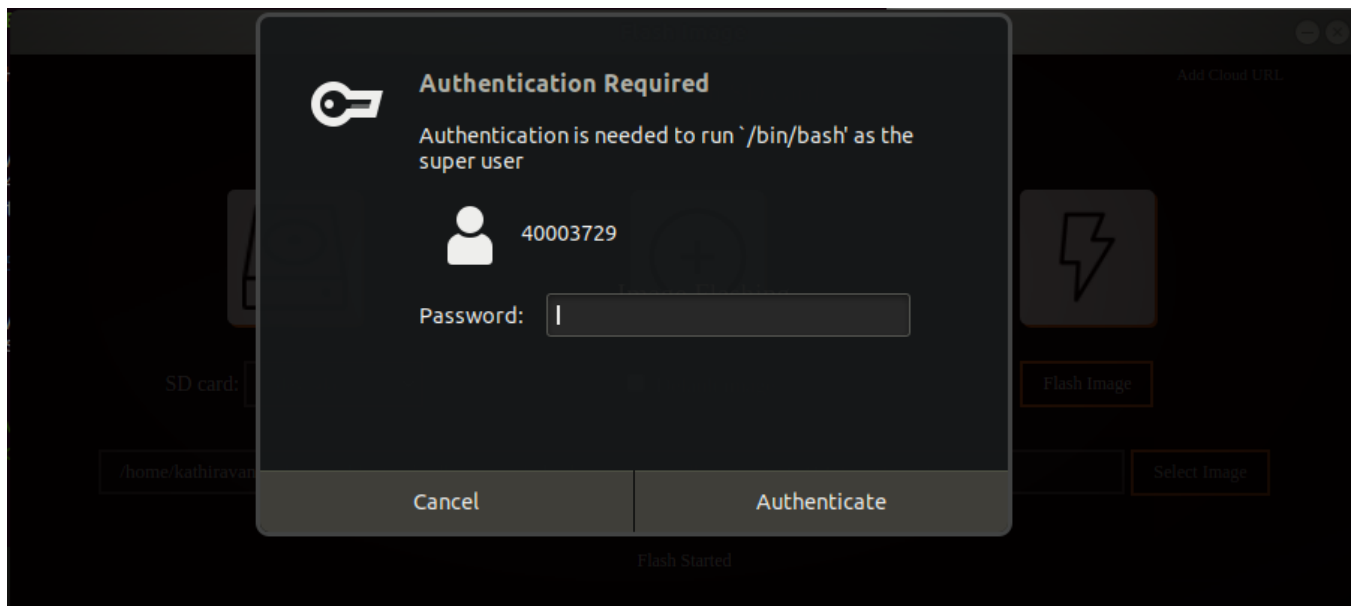Select desired SD card from dropdown list.
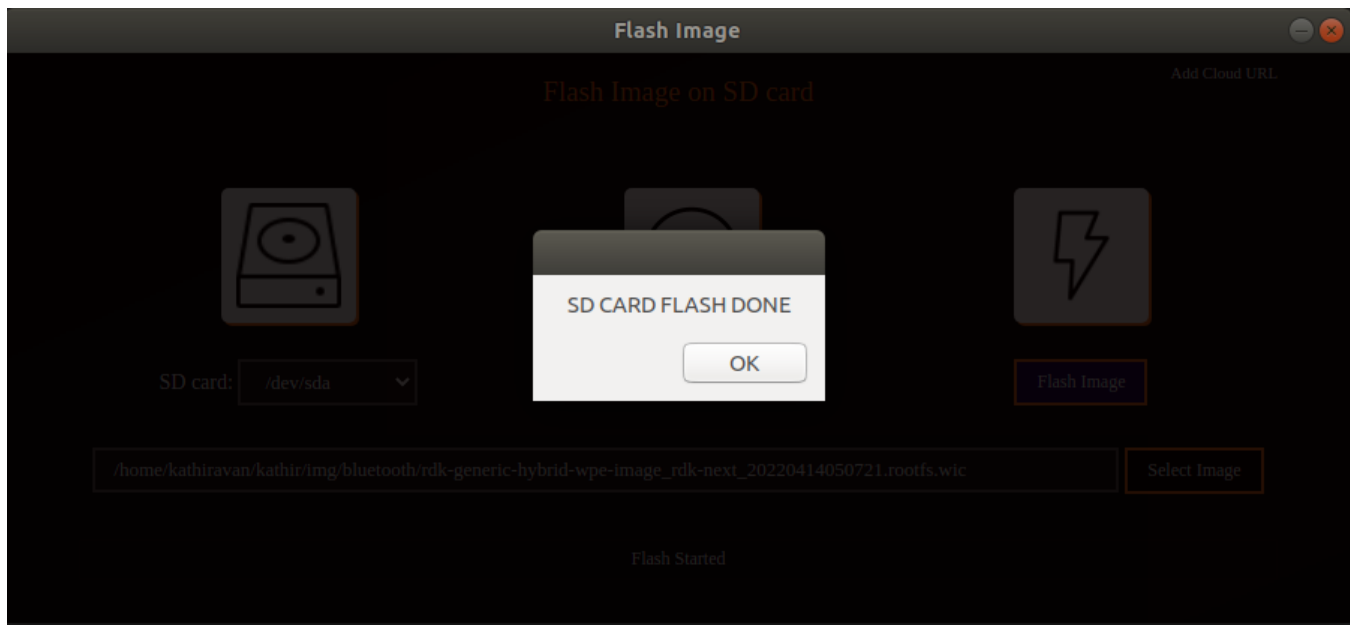
Select Default checkbox.(from RDK central image will be downloaded and flashed on to the card)

Press Flash Image button.

Flash Image

Add Cloud URL

Flash Image on SD card

SD card: /dev/sda

☑ Default image

Flash Image

status

Flash Image

Add Cloud URL

Flash Image on SD card

SD card: /dev/sda

☑ Default image

Flash Image

Image Down loaded started

Authentication Required

Authentication is needed to run `/bin/bash` as the super user

👤 40003729

Password: [   ]

Cancel   **Authenticate**

Flash Started

Flash Image

Add Cloud URL

Flash Image on SD card

Image Flashing •

SD card: /dev/sda ▾   ☐ Default image   Flash Image

/home/kathiravan/kathir/img/bluetooth/rdk-generic-hybrid-wpe-image_rdk-next_20220414050721.rootfs.wic   Select Image

Flash Started

- **Flash image from Cloud URL**

Insert SD card in to host PC .

Select desired SD card from dropdown list.

click on add cloud URL button and enter image url location

Press Flash Image button.