RDK-C : Continuous Video Recording (CVR)

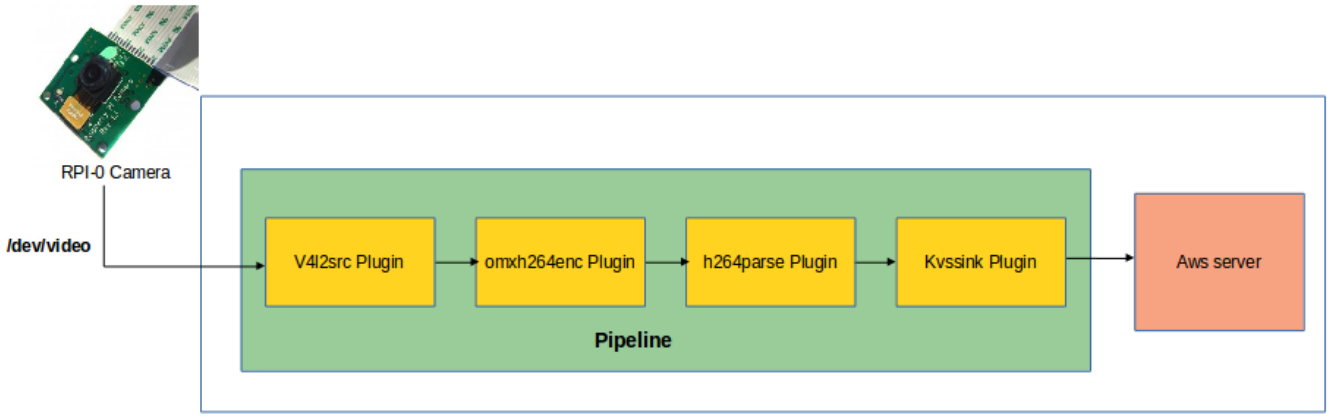
Introduction

This page dedicated to understanding of Gstreamer implementation for Continuous Video Recording in R-Pi Zero.

- CVR uses Kinesis Video Streams and supporting 24/7 video recording support.Allows the feature of storing the recorded content locally or in any AWS server.
- Supported WiFi connection.
- v4l2 Driver is used to capture data from RPI-0 camera Device.
- /dev/video0 is the RPI-0 camera device to capture data.
- Supported Soc level Gstreamer plugins to capture data from camera device.
- Supported H264 encoding format.

Design Considerations

- ### Gstreamer Implementation in CVR



- Enabled V4l2 driver in part of RPI-0 to capture data from /dev/video0 device.
- Implemented soc level gstreamer pipeline with v4l2src plugin,omxh264enc plugin,h264 parser plugin and kvssink plugin.
- V4l2src plugin is used to capture raw data from camera through v4l2 driver and transmitted captured raw data into omxh264enc plugin to encode raw data into h264 encoding format.After that transmitted encoded data into h264parser plugin to parse h264 properties.
- Finally h264 encoded data transmitting to kvssink plugin.
- Kvssink plugin help to stream data into AWS server.