

Installation for Realsense Family Devices on Jetson

Installation reference:

<https://github.com/jetsonhacks/installRealSenseSDK>

https://github.com/IntelRealSense/librealsense/blob/v2.50.0/scripts/libuvc_installation.sh

<https://github.com/IntelRealSense/librealsense/blob/v2.50.0/doc/installation.md>

GitHub Repo Install Guide	https://github.com/IntelRealSense/realsense-ros/tree/ros1-legacy
librealsense: Jetson	https://github.com/IntelRealSense/librealsense/blob/master/doc/installation_jetson.md
librealsense: PC	https://github.com/IntelRealSense/librealsense/blob/master/doc/distribution_linux.md#installing-the-packages

Tested on Version (tag): V2.50

The ROS wrapper in branch development : "development", Ensure it is support the correct version of the library as it will change over time.

** using development branch to ensure some additional bug fixes were included.

<https://github.com/IntelRealSense/realsense-ros/tree/development>

```
$ sudo apt-get install git cmake libssl-dev freeglut3-dev libusb-1.0-0-dev pkg-config libgtk-3-dev libudev-dev

$ cd ~/programs
$ git clone https://github.com/IntelRealSense/librealsense.git

## switch to latest tag ( v2.50.0 for ROS1)
$ cd librealsense
$ git checkout v2.50.0

$ sudo cp config/99-realsense-libusb.rules /etc/udev/rules.d/

$ sudo udevadm control --reload-rules && sudo udevadm trigger

## Build librealsense from source
## create "build" directory
$ mkdir build
$ cd build

# replace ${tag_version} with appropriate version
# (at time of writing this is v2.50.0)
#
# NOTE: to build realsense-viewer tool, set -DBUILD_EXAMPLES=true -DBUILD_GRAPHICAL_EXAMPLES=true
#       (realsense-viewer builds to the <build_folder>/tools/realsense-viewer/realsense-viewer)
#
cmake .. -DFORCE_RSUSB_BACKEND=false -DBUILD_WITH_CUDA=true -DCMAKE_BUILD_TYPE=Release -DBUILD_EXAMPLES=false -
DBUILD_GRAPHICAL_EXAMPLES=false -DCMAKE_INSTALL_PREFIX=/usr/local/realsense2_${tag_version}

$ make -j7
$ sudo make install -j7
```

Update firmware Documents:

(This is for updating the firmware running on the realsense devices)

<https://dev.intelrealsense.com/docs/firmware-update-tool>

- EXAMPLE:

Run to list devices \$ rs-fw-update -l

Update firmware \$ rs-fw-update -s 725112060411 -f ./{path_to_firmware}/Signed_Image_UVC_5_11_6_250.bin

** path_to_firmware : should be located in the build folder "realsense build/common/fw/D4XX_FW_Image-xx.xx.xxxx.bin"

Known Potential Issues:

- When devices are connected over USB2, It avoids custom configurations and uses default configurations (VGA mode), ensure the devices are connected over USB3.