Installing RTabMap and ZED Wrapper in Jetson Nano 4GB L4T

Steps to install RTabMap and ZED Wrapper in jetson nano

- Flash a new SD Card with Jetson image
- Follow this [GETTING STARTED WITH NEW JETSION NANO AND HOHW TO WRITE A SD CARD IMAGE FILE](#)
- Follow this [INSTALL ROS IN JETSON NANO](#)

ROS distribution

```
sudo apt install ros-$ROS_DISTRO-rtabmap-ros
```

```
sudo apt install ros-$ROS_DISTRO-rtabmap ros-$ROS_DISTRO-rtabmap-ros
```

Install RTAB-Map standalone libraries. Do not clone in your Catkin workspace.

```
cd ~
git clone https://github.com/introlab/rtabmap.git rtabmap
cd rtabmap/build
cmake ..  [<---double dots included]
```

```
make -j1
sudo make install
```

Install RTAB-Map ros-pkg in your src folder of your Catkin workspace.

```
cd ~/catkin_ws
git clone https://github.com/introlab/rtabmap_ros.git src/rtabmap_ros
catkin_make -j1
```

Clone ZED ROS Wrapper and ZED ROS Interfaces into your catkin workspace

```
 cd ~/catkin_ws/src
git clone --recursive https://github.com/stereolabs/zed-ros-wrapper.git
cd ../
rosdep install --from-paths src --ignore-src -r -y
catkin_make -DCMAKE_BUILD_TYPE=Release
```

Note: If your receive any cmake error related to CV Bridge, refer this REFER OPENCV CV BRIDGE ERROR

This solved for me

```
sudo ln -s /usr/include/opencv4/opencv2/ /usr/include/opencv
```

This both (up and down syntaxes) will solve this issue permanently. Kindly utilize this according to the error arised.

```
sudo apt remove ros-melodic-cv-bridge
```

DOWNLOAD THE VISION OPENCV - MELODIC BRANCH AS ZIP FILE DOWNLOAD THE image_transport_plugins - MELODIC BRANCH AS ZIP FILE

Unzip both above mentioned packaes and keep it inside src folder of your catkin_ws

```
cd catkin_ws/src
catkin_make
```

Clone ZED ROS Exmples into your catkin workspace

```
cd ~/catkin_ws/src
git clone https://github.com/stereolabs/zed-ros-examples.git
```

```
cd ../
rosdep install --from-paths src --ignore-src -r -y
catkin_make -DCMAKE_BUILD_TYPE=Release
```

Now, we shall ready to start rtabmapping