## **Build rosapp operating environment**

### 1. Installation Environment

```
sudo apt-get install ros-melodic-image-transport ros-melodic-image-transport-plugins ros-melodic-async-web-server-cpp ros-melodic-web-video-server ros-melodic-rosbridge-server ros-melodic-unique-id ros-melodic-yocs-math-toolkit ros-melodic-yocs-msgs ros-melodic-joystick-drivers sudo apt install scons python -m install
```

#### 2. install sdk

Copy the mongo-cxx-driver under the folder to your /home directory, and then enter the folder

```
cd mongo-cxx-driver
sudo scons --prefix=/usr/local/ --full --use-system-boost --disable-warnings-as-
errors
```

### 3. compile workspace

Create a new workspace named world\_canvas,

```
mkdir world_canvas
cd world_canvas
mkdir src
cd src
catkin_init_workspace
cd ..
```

Then copy the contents of src under the folder to the world\_canvas/src directory, and then compile,

```
cd world_canvas
catkin_make
```

After the compilation is successful, add the path of the workspace to the environment variable,

```
sudo gedit ~/.bashrc
```

Add the following content to the .bashrc file,

```
source ~/world_canvas/devel/setup.bash --extend
```

Save and exit. Note that my world\_canvas is placed in the home directory, and the path here is modified according to the actual situation.

# 4. Check whether the build is successful

Re-open a terminal and run the following code,

roslauch rosbridge\_server rosbridge\_websocket.launch
rosrun world\_canvas\_server world\_canvas\_server
rosrun world\_canvas\_server map\_manager.py