### 进入nano

用户名 agilex

密码 agx

安装 nomachine : <https://www.nomachine.com/download/download&id=115&s=ARM>

有线连接地址被配置为了 192.168.1.3, 网关 192.168.1.1

### 工作空间

~/agilex\_ws

### 安装 colcon

sudo apt install python3-colcon-core

在 ~/.bashrc里添加这些内容用于环境配置

## ros2

export RMW\_IMPLEMENTATION=rmw\_fastrtps\_cpp

source /opt/ros/eloquent/setup.bash

source /home/agilex/agilex\_ws/install/setup.bash

export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:${HOME}/agilex\_ws/install/ugv\_sdk/lib/ugv\_sdk/:${HOME}/agilex\_ws/install/async\_port/lib/async\_port:/opt/ros/eloquent/lib/:/usr/local/lib/

echo agx | sudo -S chmod 666 /dev/ttyTHS1

安装RMW ros-eloquent-rmw-fastrtps\*

### 使用cartographer建图：

sudo apt install ros2-eloquent-nav2 ros-eloquent-nav2-amcl ros-eloquent-nav2\*

ros2 launch build\_map\_2d revo\_build\_map\_2d.launch.py

### 保存图片

ros2 run nav2\_map\_server map\_saver -f limo

把yaml 的 free\_thresh 改成 0.196

把保存的图片 limo.pgm, limo.yaml 放到 ~/agilex\_ws/src/drivers/limo\_ros2/limo\_bringup/maps 目录下

colcon build 编译后图片才会生效

### 启动导航

ros2 launch limo\_bringup limo\_navigation.launch.py

### 启动定位

ros2 launch limo\_bringup limo\_localization.launch.py

### 演示时启动步骤

注意按照顺序来，localization放在最后,测试时发现 nav2\_map\_server发送的/map 有时无法keep last, 所以吧 map\_server 的启动放在了最后，如果没有地图，请多次尝试启动limo\_localization.launch.py 来加载 map

#rviz2

rviz2

# 启动底盘

ros2 launch limo\_bringup limo\_start.launch.py

sleep 2

# 启动导航

ros2 launch limo\_bringup limo\_navigation.launch.py

sleep 2

# 启动定位

ros2 launch limo\_bringup limo\_localization.launch.py